



# PRESIDENCY UNIVERSITY

Established under Section 2(f) of UGC Act, 1956 Approved by AICTE, New Delhi | Approved By BCI | NAAC 'A' Accredited



## **Presidency School of Management**

### **Master of Business Administration**

### **MBA (Business Analytics)**

### **Program Regulations and Curriculum**

**2026-2028**

**Based on Choice Based Credit System (CBCS) and  
Outcome Based Education (OBE)**

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## **PART A – PROGRAM REGULATIONS AND CURRICULUM**

### **1. Vision & Mission of the University and the School / Department:**

#### **1.1. Vision of the University:**

To be a Value-driven Global University, excelling beyond peers and creating professionals of integrity and character, having concern and care for society.

#### **1.2. Mission of the University:**

- Commit to be an innovative and inclusive institution by seeking excellence in teaching, research and knowledge-transfer.
- Pursue Research and Development and its dissemination to the community, at large.
- Create, sustain and apply learning in an interdisciplinary environment with consideration for ethical, ecological and economic aspects of nation building.
- Provide knowledge-based technological support and services to the industry in its growth and development.
- To impart globally-applicable skill-sets to students through flexible course offerings and support industry's requirement and inculcate a spirit of new-venture creation.

#### **1.3. Vision of the School:**

To inspire and develop responsible leaders who generate meaningful and lasting impact on businesses, communities, and society

#### **1.4. Mission of the School:**

Our mission is to provide students with the knowledge, skills, and ethical foundation needed to lead with integrity and drive sustainable change in business and society

### **2. Preamble to the Program Regulations and Curriculum**

This is the subset of Academic Regulations and it is to be followed as a requirement for the award of Master of Business Administration (MBA) Degree.

The Curriculum is designed to take into the factors listed in the Choice Based Credit System (CBCS) with focus on Social Project Based Learning, Industrial Training, and Internship to enable the students to become eligible and fully equipped for employment in industries, choose higher studies or entrepreneurship.

In exercise of the powers conferred by and in discharge of duties assigned under the relevant provision(s) of the Act, Statutes and Academic Regulations of the University, the Academic Council hereby makes the following Regulations.

### **3. Short Title and Commencement:**

- a. These Regulations shall be called the Master of Business Administration (MBA-Business Analytics) Program Regulations and Curriculum 2026-2028.
- b. These Regulations are subject to, and pursuant to the Academic Regulations.
- c. These Regulations shall be applicable to the ongoing Master of Business Administration (MBA-Business Analytics) Programs of the 2026-2028 batch, and to all other Master of Business Administration (MBA-Business Analytics) Programs which may be introduced in future.
- d. These Regulations shall supersede all the earlier Master of Business Administration (MBA-Business Analytics) Program Regulations and Curriculum, along with all the amendments thereto.
- e. These Regulations shall come into force from the Academic Year 2026-2028.

### **4. Definitions**

In these Regulations, unless the context otherwise requires:

- a. *"Academic Calendar"* means the schedule of academic and miscellaneous events as approved by the Vice Chancellor;
- b. *"Academic Council"* means the Academic Council of the University;

- c. *"Academic Regulations" means the Academic Regulations, of the University;*
- d. *"Academic Term" means a Semester or Summer Term;*
- e. *"Act" means the Presidency University Act, 2013;*
- f. *"AICTE" means All India Council for Technical Education;*
- g. *"Basket" means a group of courses bundled together based on the nature/type of the course;*
- h. *"BOE" means the Board of Examinations of the University;*
- i. *"BOG" means the Board of Governors of the University;*
- j. *"BOM" means the Board of Management of the University;*
- k. *"BOS" means the Board of Studies of a particular Department/Program of Study of the University;*
- l. *"CGPA" means Cumulative Grade Point Average as defined in the Academic Regulations;*
- m. *"Clause" means the duly numbered Clause, with Sub-Clauses included, if any, of these Regulations;*
- n. *"COE" means the Controller of Examinations of the University;*
- o. *"Course In Charge" means the teacher/faculty member responsible for developing and organizing the delivery of the Course;*
- p. *"Course Instructor" means the teacher/faculty member responsible for teaching and evaluation of a Course;*
- q. *"Course" means a specific subject usually identified by its Course-code and Course-title, with specified credits and syllabus/course-description, a set of references, taught by some teacher(s)/course-instructor(s) to a specific class (group of students) during a specific Academic Term;*
- r. *"Curriculum Structure" means the Curriculum governing a specific Degree Program offered by the University, and, includes the set of Baskets of Courses along with minimum credit requirements to be earned under each basket for a degree/degree with specialization/minor/honors in addition to the relevant details of the Courses and Course catalogues (which describes the Course content and other important information about the Course). Any specific requirements for a particular program may be brought into the Curriculum structure of the specific program and relevant approvals should be taken from the BOS and Academic Council at that time.*
- s. *"DAC" means the Departmental Academic Committee of a concerned Department/Program of Study of the University;*
- t. *"Dean" means the Dean / Director of the concerned School;*
- u. *"Degree Program" includes all Degree Programs;*
- v. *"Department" means the Department offering the degree Program(s) / Course(s) / School offering the concerned Degree Programs / other Administrative Offices;*
- w. *"Discipline" means specialization or program of MBA Degree Program;*
- x. *"HOD" means the Head of the concerned Department;*
- y. *"L-T-P-C" means Lecture-Tutorial-Practical-Credit – refers to the teaching – learning periods and the credit associated;*
- z. *"MOOC" means Massive Open Online Courses;*
- aa. *"MOU" means the Memorandum of Understanding;*
- bb. *"NPTEL" means National Program on Technology Enhanced Learning;*
- cc. *"Parent Department" means the department that offers the Degree Program that a student undergoes;*
- dd. *"Program Head" means the administrative head of a particular Degree Program/s;*
- ee. *"Program Regulations" means the Master of Business Administration (MBA) Degree Program Regulations and Curriculum, 2026-2028;*
- ff. *"Program" means the Master of Business Administration (MBA) Degree Program;*
- gg. *"PSOM" means the Presidency School of Management;*
- hh. *"Registrar" means the Registrar of the University;*

- ii. "School" means a constituent institution of the University established for monitoring, supervising and guiding, teaching, training and research activities in broadly related fields of studies;
- jj. "Section" means the duly numbered Section, with Clauses included in that Section, of these Regulations;
- kk. "SGPA" means the Semester Grade Point Average as defined in the Academic Regulations;
- ll. "Statutes" means the Statutes of Presidency University;
- mm. "Sub-Clause" means the duly numbered Sub-Clause of these Program Regulations;
- nn. "Summer Term" means an additional Academic Term conducted during the summer break (typically in June-July) for a duration of about eight (08) calendar weeks, with a minimum of thirty (30) University teaching days;
- oo. "SWAYAM" means Study Webs of Active Learning for Young Aspiring Minds.
- pp. "UGC" means University Grants Commission;
- qq. "University" means Presidency University, Bengaluru; and
- rr. "Vice Chancellor" means the Vice Chancellor of the University.

## **5. Program Description:**

The Master of Business Administration (MBA-Business Analytics) Program Regulations and Curriculum 2026-2028 are subject to, and, pursuant to the Academic Regulations. These Program Regulations shall be applicable to the following ongoing Master of Business Administration (MBA-Business Analytics) Programs of 2026-2028 offered by the Presidency School of Management (PSOM):

1. Master of Business Administration (MBA)
  - 1.1 Master of Business Administration (FinTech)
  - 1.2 Master of Business Administration (Applied Artificial Intelligence)
2. Master of Business Administration (Business Analytics)
3. Master of Business Administration (Digital Marketing)
4. Master of Business Administration (Marketing & Finance)
5. Master of Business Administration (Banking & Finance Management)

- 5.1** These Program Regulations shall be applicable to other similar programs, which may be introduced in future.
- 5.2** These Regulations may evolve and get amended or modified or changed through appropriate approvals from the Academic Council, from time to time, and shall be binding on all concerned.
- 5.3** The effect of periodic amendments or changes in the Program Regulations, on the students admitted in earlier years, shall be dealt with appropriately and carefully, so as to ensure that those students are not subjected to any unfair situation whatsoever, although they are required to conform to these revised Program Regulations, without any undue favor or considerations:

## **6. Minimum and Maximum Duration:**

- 6.1** Master of Business Administration (MBA-Business Analytics) Degree Program is a Two-Year, Full-Time Semester based program. The minimum duration of the MBA-Business Analytics Program is two (02) years and each year comprises of two academic Semesters (Odd and Even Semesters) and hence the duration of the MBA-Business Analytics program is four (04) Semesters.

- 6.2** A student who for whatever reason is not able to complete the Program within the normal period or the minimum duration (number of years) prescribed for the Program, may be allowed a period of two years beyond the normal period to complete the mandatory minimum credits requirement as prescribed by the concerned Program Regulations and Curriculum. In general, the permissible maximum duration (number of years) for completion of Program is 'N' + 2 years, where 'N' stands for the normal or minimum duration (number of years) for completion of the concerned Program as prescribed by the concerned Program Regulations and Curriculum
- 6.3** The time taken by the student to improve Grades/CGPA, and in case of temporary withdrawal/re-joining (Refer to Clause 16.1 of Academic Regulations), shall be counted in the permissible maximum duration for completion of a Program.
- 6.4** In exceptional circumstances, such as temporary withdrawal for medical exigencies where there is a prolonged hospitalization and/or treatment, as certified through hospital/medical records, women students requiring extended maternity break (certified by registered medical practitioner), and, outstanding sportspersons representing the University/State/India requiring extended time to participate in National/International sports events, a further extension of one (01) year may be granted on the approval of the Academic Council.
- 6.5** The enrolment of the student who fails to complete the mandatory requirements for the award of the concerned Degree (refer Section 19.0 of Academic Regulations) in the prescribed maximum duration (Sub-Clauses 18.1 and 18.2 of Academic Regulations), shall stand terminated and no Degree shall be awarded.

## **7. Program Educational Objectives (PEO)**

After two years of successful completion of the program, the graduates shall be:

**PEO1:** Industry ready graduates having high integrity, social responsibility & leadership capabilities.

**PEO2:** Enhanced with analytical skills and design thinking approach to solve business problems.

**PEO3:** Able to foster entrepreneurial mind set through creativity and innovation.

**PEO4:** Enabled graduates to engage in and benefit from lifelong learning.

## **8. Program Outcomes (PO) and Program Specific Outcomes (PSO)**

### **8.1 Program Outcomes (PO)**

On successful completion of the Program, the students shall be able to:

**PO1:** An ability to lead themselves and others to achieve organizational goals contributing effectively to a team environment.

**PO2:** An ability to integrate functional knowledge and apply managerial skills in changing business environment.

**PO3:** An ability to identify real life problems in different management functions and solve them through strategic planning, critical thinking and innovation.

**PO4:** An ability to identify and evaluate business ideas and opportunities.

**PO5:** An ability to make data driven decisions and effectively communicate to different stakeholders.

**PO6:** An ability to evaluate and integrate ethical and societal considerations when making business decisions.

**PO7:** An ability to demonstrate commitment to continuous learning.

### **8.2 Program Specific Outcomes [PSOs]:**

On successful completion of the Program, the students shall be able to:

On successful completion of the Master of Business Administration (MBA-Business Analytics) program from Presidency University, the student shall possess:

**PSO1** Analyze and interpret complex data sets to inform strategic business decisions.

**PSO2** Apply quantitative techniques to analyze business problems, predict trends, and derive actionable insights.

**PSO3** Utilize predictive and prescriptive analytics to forecast future business outcomes and recommend actions that optimize business processes and outcomes.

**PSO4** Integrate analytics into business strategies to drive innovation, improve customer experiences, and optimize operational performance.

**PSO5** Apply ethical principles in the collection, analysis, and use of data, ensuring compliance with legal and regulatory standards.

### **9. Admission Criteria (as per the concerned Statutory Body)**

The University admissions shall be open to all persons irrespective of caste, class, creed, gender or nation. All admissions shall be made on the basis of merit in the qualifying examinations; provided that forty percent of the admissions in all Programs of the University shall be reserved for the students of Karnataka State and admissions shall be made through a Common Entrance Examination conducted by the State Government or its agency and seats shall be allotted as per the merit and reservation policy of the State Government from time to time. The admission criteria to the MBA Program is listed in the following Sub-Clauses:

**9.1** An applicant must have a graduation degree in any field from a recognized university with a minimum of 50% marks in the qualifying examination for the general category or 45% marks for SC/ST and other reserved categories and must have appeared in any national or state-level entrance examination such as CAT, XAT, MAT, CMAT, ATMA, or KMAT.

**9.2** Reservation for the SC / ST and other backward classes shall be made in accordance with the directives issued by the Government of Karnataka from time to time.

**9.3** Admissions are offered to Foreign Nationals and Indians living abroad in accordance with the rules applicable for such admission, issued from time to time, by the Government of India.

**9.4** Candidates must fulfil the medical standards required for admission as prescribed by the University.

**9.5** If, at any time after admission, it is found that a candidate had not in fact fulfilled all the requirements stipulated in the offer of admission, in any form whatsoever, including possible misinformation and any other falsification, the Registrar shall report the matter to the Board of Management (BOM), recommending revoking the admission of the candidate.

**9.6** The decision of the BOM regarding the admissions is final and binding.

### **10. Transfer of student(s) from another recognized University to the 2<sup>nd</sup> year (3<sup>rd</sup> Semester) of the MBA-Business Analytics Program of the University**

A student who has completed the 1<sup>st</sup> Year (i.e., passed in all the Courses / Subjects prescribed for the 1<sup>st</sup> Year) of the MBA-Business Analytics Two-Year Degree Program from

another recognized University, may be permitted to transfer to the 2<sup>nd</sup> Year (3<sup>rd</sup> Semester) of the MBA-Business Analytics Program of the University as per the rules and guidelines prescribed in the following Sub-Clauses

- 10.1.1** The student shall submit the Application for Transfer along with a non-refundable Application Fee (as prescribed by the University from time to time) to the University no later than July of the concerned year for admission to the 2<sup>nd</sup> Year (3<sup>rd</sup> Semester) MBA-Business Analytics Program commencing on August on the year concerned.
- 10.1.2** The student shall submit copies of the respective Marks Cards / Grade Sheets / Certificates along with the Application for Transfer.
- 10.1.3** The transfer may be provided on the condition that the Courses and Credits completed by the concerned student in the 1<sup>st</sup> Year of the MBA-Business Analytics Two Degree Program from the concerned University, are declared equivalent and acceptable by the Equivalence Committee constituted by the Vice Chancellor for this purpose. Further, the Equivalence Committee may also prescribe the Courses and Credits the concerned students shall have to mandatorily complete, if admitted to the 2<sup>nd</sup> Year of the MBA Program of the University.
- 10.1.4** The Program allotted to the student concerned shall be the decision of the University and binding on the student.

## **11.Change of Program**

A student admitted to a particular Program of the MBA Business Analytics Program will normally continue studying in that Program till the completion of the program. However, the University reserves the right to provide the option for a change of Program, or not to provide the option for a change of Program, at the end of 1<sup>st</sup> Semester of the MBA Program to eligible students in accordance with the following rules and guidelines: framed by the University from time to time.

- 11.1** Normally, only those students, who have passed all the Courses prescribed for the 1<sup>st</sup> Semester of the MBA.
- 11.2** Change of Program, if provided, shall be made effective from the commencement of the 2<sup>nd</sup> Semester of the MBA Program. There shall be no provision for change of Program thereafter under any circumstances whatsoever.
- 11.3** The student provided with the change of Program shall fully adhere to and comply with the Program Regulations of the concerned Program of the MBA Business Analytics Program, the Fee Policy pertaining to that Program of the MBA Business Analytics Program, and, all other rules pertaining to the changed Program existing at the time.
- 11.4** Change of Program once made shall be final and binding on the student. No student shall be permitted, under any circumstances, to refuse the change of Program offered.
- 11.5** The eligible student may be allowed a change in Program, strictly in order of *inter se* merit, subject to the conditions given below:
  - 11.5.1** The actual number of students in the 2<sup>nd</sup> Semester in any particular Program to which the transfer is to be made, should not exceed the intake fixed by the University for the concerned Program;
  - 11.5.2** The actual number of students in any Program from which transfer is being sought does not fall below 75% of the total intake fixed by the University for the concerned Program.
  - 11.5.3** The process of change of Program shall be completed within the first five days of Registration for the 2<sup>nd</sup> Semester of the MBA Business Analytics Program.

## 12. Specific Regulations regarding Assessment and Evaluation – including the Assessment Details of NTCC Courses, Weightages of Continuous Assessment and End Term Examination for various Course Categories

- 12.1** The academic performance evaluation of a student in a Course shall be according to the University Letter Grading System based on the class performance distribution in the Course.
- 12.2** Academic performance evaluation of every registered student in every Course registered by the student is carried out through various components of Assessments spread across the Semester. The nature of components of Continuous Assessments and the weightage given to each component of Continuous Assessments (refer Clause 0) shall be clearly defined in the Course Plan for every Course, and approved by the DAC.
- 12.3** Format of the End-Term examination shall be specified in the Course Plan.
- 12.4** Grading is the process of rewarding the students for their overall performance in each Course. The University follows the system of Relative Grading with statistical approach to classify the students based on the relative performance of the students registered in the concerned Course except in the following cases:
- Non-Teaching Credit Courses (NTCC)
  - Courses with a class strength less than 30

Absolute grading method may be adopted, where necessary with prior approval of concerned DAC.

Grading shall be done at the end of the Academic Term by considering the aggregate performance of the student in all components of Assessments prescribed for the Course. Letter Grades (Clause 8.10 of Academic Regulations) shall be awarded to a student based on her/his overall performance relative to the class performance distribution in the concerned Course. These Letter Grades not only indicate a qualitative assessment of the student's performance but also carry a quantitative (numeric) equivalent called the Grade Point.

### 12.5 Assessment Components and Weightage

**Table 12.5.1: Assessment Components and Weightage for different category of Courses**

| Theory Courses - Weightage - 60: 40 |              |              |              |         |          |       |
|-------------------------------------|--------------|--------------|--------------|---------|----------|-------|
| Continuous Assessment* - 35%        |              |              |              | Midterm | End term | Total |
| Assessment 1                        | Assessment 2 | Assessment 3 | Assessment 4 | 25%     | 40%      | 100%  |

  

| Lab/CA Courses - Weightage - 75: 25 |                       |                       |                       |                       |  |       |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|-------|
| Continuous Assessment* - 75%        |                       |                       |                       | End term              |  | Total |
| Practice Assessment 1               | Practice Assessment 2 | Practice Assessment 3 | Practice Assessment 4 | Assessment & Viva 25% |  | 100%  |

**\*Minimum 03 assessments.**

**Skill based Courses** like Industry Internship, Capstone project, Research Dissertation, Integrative Studio, Interdisciplinary Project, Summer / Short Internship, Social

Engagement / Field Projects, Portfolio, and such similar Non-Teaching Credit Courses, where the pedagogy does not lend itself to a typical L-T-P-C structure.

Guidelines for the assessment components for the various types of Courses, with recommended weightages, shall be specified in the concerned Program Regulations and Curriculum / Course Plans, as applicable.

The exact weightages of Evaluation Components shall be clearly specified in the concerned PRC and respective Course Plan.

Normally, for Practice/Skill based Courses, without a defined credit structure (L-T-P-C) [NTCC], but with assigned Credits (as defined in Clause 5.2 of the Academic Regulations), the method of evaluation shall be based only on Continuous Assessments. The various components of Continuous Assessments, the distribution of weightage among such components, and the method of evaluation/assessment, shall be as decided and indicated in the Course Plan/PRC. The same shall be approved by the respective DAC.

## **12.6 Minimum Performance Criteria:**

### **12.6.1 Theory only Course and Lab/Practice Embedded Theory Course**

A student shall satisfy the following minimum performance criteria to be eligible to earn the credits towards the concerned Course:

- a. A student must obtain a minimum of 30% of the total marks/weightage assigned to the End Term Examinations in the concerned Course.
- b. The student must obtain a minimum of 40% of the AGGREGATE of the marks/weightage of the components of Continuous Assessments, Mid Term Examinations and End Term Examinations in the concerned Course.

### **12.6.2 Lab/Practice only Course and Project Based Courses**

The student must obtain a minimum of 40% of the AGGREGATE of the marks/weightage of all assessment components in the concerned Course.

- 12.6.2.1** A student who fails to meet the minimum performance criteria listed above in a Course shall be declared as "Fail" and given "F" Grade in the concerned Course. For theory Courses, the student shall have to re-appear in the "Make-Up Examinations" as scheduled by the University in any subsequent semester, or, re-appear in the End Term Examinations of the same Course when it is scheduled at the end of the following Semester or Summer Term, if offered. The marks obtained in the Continuous Assessments (other than the End Term Examination) shall be carried forward and be included in computing the final grade, if the student secures the minimum requirements (as per Clause 12.6.1, 12.6.2 of Academic Regulations in the "Make-Up Examinations" of the concerned Course. Further, the student has an option to re-register for the Course and clear the same in the summer term/ subsequent semester if he/she wishes to do so, provided the Course is offered.

## **13 Additional clarifications - Rules and Guidelines for Transfer of Credits from MOOC, etc. – Note: These are covered in Academic Regulations.**

The University allows students to acquire credits from other Indian or foreign institutions and/or Massive Open Online Course (MOOC) platforms, subject to prior approval. These credits may be transferred and counted toward fulfilling the minimum credit

requirements for the award of a degree. The process of transfer of credits is governed by the following rules and guidelines:

- 13.1** The transfer of credits shall be examined and recommended by the Equivalence Committee (Refer ANNEXURE B of Academic Regulations) and approved by the Dean - Academics.
- 13.2** Students may earn credits from other Indian or foreign Universities/Institutions with which the University has an MOU, and that MOU shall have specific provisions, rules and guidelines for transfer of credits. These transferred credits shall be counted towards the minimum credit requirements for the award of the degree.
- 13.3** Students may earn credits by registering for Online Courses offered by *Study Web of Active Learning by Young and Aspiring Minds* (SWAYAM) and *National Program on Technology Enhanced Learning* (NPTEL), or other such recognized Bodies/ Universities/Institutions as approved by the concerned BOS and Academic Council from time to time. The concerned School/Parent Department shall publish/include the approved list of Courses and the rules and guidelines governing such transfer of credits of the concerned Program from time to time. The Rules and Guidelines for the transfer of credits specifically from the Online Courses conducted by SWAYAM/ NPTEL are as stated in the following Sub-Clauses:
  - 13.3.1** A student may complete SWAYAM/NPTEL/other approved MOOCs as mentioned in Clause (as per academic regulations) and transfer equivalent credits to partially or fully complete the mandatory credit requirements of Discipline Elective Courses and/or the mandatory credit requirements of Open Elective Courses as prescribed in the concerned Curriculum Structure. However, it is the sole responsibility of the student to complete the mandatory credit requirements of the Discipline Elective Courses and the Open Elective Courses as prescribed by the Curriculum Structure of the concerned Program.
  - 13.3.2** SWAYAM/NPTEL/ other approved MOOCs as mentioned in Clause (as per academic regulations) shall be approved by the concerned Board of Studies and placed.
  - 13.3.3** Parent Departments may release a list of SWAYAM/NPTEL/other approved MOOCs for Pre-Registration as per schedule in the Academic Calendar or through University Notification to this effect.
  - 13.3.4** Students may Pre-Register for the SWAYAM/NPTEL/other approved MOOCs in the respective Departments and register for the same Courses as per the schedule announced by respective Online Course Offering body/institute/ university.
  - 13.3.5** A student shall request for transfer of credits only from such approved Courses as mentioned in Sub-Clause, 13.3.2 above.
  - 13.3.6** SWAYAM/NPTEL/other approved MOOCs Courses are considered for transfer of credits only if the concerned student has successfully completed the SWAYAM/NPTEL/other approved MOOCs and obtained a certificate of successful/satisfactory completion.
  - 13.3.7** A student who has successfully completed the approved SWAYAM/NPTEL/ other approved MOOCs and wants to avail the provision of transfer of equivalent credits, must submit the original Certificate of Completion, or such similar authorized documents to the HOD concerned, with a written request for the transfer of the equivalent credits. On verification of the Certificates/Documents and approval by the HOD concerned, the Course(s) and equivalent Credits shall

have forwarded to the COE for processing of results of the concerned Academic Term.

- 13.3.8** The credit equivalence of the SWAYAM/NPTEL/other approved MOOCs are based on Course durations and/or as recommended by the Course offering body/institute/university. The Credit Equivalence mapped to SWAYAM/ NPTEL approved Courses based on Course durations for transfer of credits is summarized in Table shown below. The Grade will be calculated from the marks received by the Absolute Grading Table in the academic regulations

| <b>Table 13.3.2: Durations and Credit Equivalence for Transfer of Credits from SWAYAM-NPTEL/ other approved MOOC Courses</b> |                        |                           |
|------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|
| <b>Sl. No.</b>                                                                                                               | <b>Course Duration</b> | <b>Credit Equivalence</b> |
| 1                                                                                                                            | 4 Weeks                | 1 Credit                  |
| 2                                                                                                                            | 8 Weeks                | 2 Credits                 |
| 3                                                                                                                            | 12 Weeks               | 3 Credits                 |

- 13.3.9** The maximum permissible number of credits that a student may request for credit transfer from MOOCs shall not exceed 20% of the mandatory minimum credit requirements specified by the concerned Program Regulations and Curriculum for the award of the concerned Degree.

- 13.3.10** The University shall not reimburse any fees/expense; a student may incur for the SWAYAM/NPTEL/other approved MOOCs.

- 13.4** The maximum number of credits that can be transferred by a student shall be limited to forty percent (40%) of the mandatory minimum credit requirements specified by the concerned Program Regulations and Curriculum for the award of the concerned Degree. However, the grades obtained in the Courses transferred from other Institutions/MOOCs, as mentioned in this Section, shall not be included in the calculation of the CGPA.

## PART B - PROGRAM STRUCTURE

### 14 Structure/Component with Credit Requirements Course Baskets and Minimum Basket Wise Credit Requirements:

**MBA (Business Analytics)** Program Structure (2026-2028) totalling to 102 credits. Table 14.1.3 summarizes the type of baskets, number of courses under each basket and the associated credits that are mandatorily required for the completion of the Degree.

| Table 14.1.3: MBA (Marketing and Finance) Dual Specialization Program Structure 2026-2028: Summary of Mandatory Courses and Minimum Credit Contribution from various Baskets |                           |    |                       |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----|-----------------------|---------------------|
| Sl. No.                                                                                                                                                                      | Baskets                   |    |                       | Credit Contribution |
| 1                                                                                                                                                                            | PROGRAM CORE (PC)         |    |                       | 56                  |
| 2                                                                                                                                                                            | SPECIALIZATION TRACK (ST) | ST | TRACK-CORE (STC1)     | 12                  |
|                                                                                                                                                                              |                           |    | TRACK-ELECTIVE (STE1) | 24                  |
| 3                                                                                                                                                                            | PRACTICE (PR)             |    |                       | 10                  |
|                                                                                                                                                                              | Total Credits             |    |                       | 102 (Minimum)       |

### 15. Minimum Total Credit Requirements of Award of Degree:

As per the AICTE guidelines, a minimum of 102 credits is required for the award of a Master of Business Administration (MBA-Business Analytics) degree.

### 16. Other Specific Requirements for Award of Degree, if any, as prescribed by the Statutory Bodies.

**16.1** The award of the Degree shall be recommended by the Board of Examinations and approved by the Academic Council and Board of Management of the University.

**16.2** A student shall be declared to be eligible for the award of the concerned Degree if she/he:

- a. Fulfilled the Minimum Credit Requirements and the Minimum Credits requirements under various baskets;
- b. Secure a minimum CGPA of 5.00 in the concerned Program at the end of the Semester/Academic Term in which she/he completes all the requirements for the award of the Degree as specified in Sub-Clause a of Academic Regulations;
- c. No dues to the University, Departments, Hostels, Library, and any other such Centers/ Departments of the University; and
- d. No disciplinary action is pending against her/him.

## PART C - CURRICULUM STRUCTURE/LIST

**17. Curriculum Structure – Basket Wise Course List (not Semester Wise) List of Courses Tabled – aligned to the Program Structure (Course Code, Course Name, Credit Structure (LTPC), Contact Sessions, Course Basket, Type of Skills etc., as applicable).**

\*Mandatory Non Credit Course

| <b>Table 17.1: Master of Business Administration (MBA) Program Structure 2026-2028: Program Core (PC)</b> |                |                    |                                                       |          |          |          |           |
|-----------------------------------------------------------------------------------------------------------|----------------|--------------------|-------------------------------------------------------|----------|----------|----------|-----------|
| <b>Sl. NO</b>                                                                                             | <b>BASKE T</b> | <b>COURSE CODE</b> | <b>COURSE NAME</b>                                    | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                                                                                         | PC             | MBA4002            | Financial Accounting and Reporting                    | 3        | 1        | 0        | 4         |
| 2                                                                                                         | PC             | MBA4011            | Corporate Finance                                     | 3        | 0        | 0        | 3         |
| 3                                                                                                         | PC             | MBA4004            | Managerial Economics                                  | 3        | 0        | 0        | 3         |
| 4                                                                                                         | PC             | ENG4001            | Global Business Communication                         | 2        | 0        | 2        | 3         |
| 5                                                                                                         | PC             | MBA4014            | Business Strategy and Corporate Transformation        | 2        | 1        | 0        | 3         |
| 6                                                                                                         | PC             | MBA4015            | Business Law and Regulatory Compliance                | 3        | 0        | 0        | 3         |
| 7                                                                                                         | PC             | MBA4016            | Governance, Business Ethics and Social ESG Management | 2        | 1        | 0        | 3         |
| 8                                                                                                         | PC             | MBA4017            | Entrepreneurship and Innovation Management            | 2        | 1        | 0        | 3         |
| 9                                                                                                         | PC             | MBA4006            | Marketing Management - Theories and Practices         | 3        | 0        | 0        | 3         |
| 10                                                                                                        | PC             | MBA4010            | Digital Marketing                                     | 2        | 1        | 0        | 3         |
| 11                                                                                                        | PC             | MBA4003            | Human Behaviour in Organizations                      | 3        | 0        | 0        | 3         |
| 12                                                                                                        | PC             | MBA4012            | Human Capital Management                              | 3        | 0        | 0        | 3         |
| 13                                                                                                        | PC             | MBA4005            | Production, Operations and Logistics Management       | 3        | 0        | 0        | 3         |
| 14                                                                                                        | PC             | MBA4001            | Business Statistics                                   | 3        | 1        | 0        | 4         |
| 15                                                                                                        | PC             | MBA4009            | Applied Data Analysis and Visualization               | 1        | 0        | 2        | 2         |
| 16                                                                                                        | PC             | MBA4008            | Business Research Methods                             | 3        | 0        | 0        | 3         |
| 17                                                                                                        | PC             | MBA4013            | Fundamentals of Business Analytics                    | 1        | 0        | 2        | 2         |
| 18                                                                                                        | PC             | MBA4007            | AI for Managers                                       | 2        | 0        | 0        | 2         |
| 19                                                                                                        | PC             | ENG4002            | Applied English Communication                         | 2        | 0        | 2        | 3         |
| 19                                                                                                        | PC             | PPS4010            | Corporate Readiness Program-I*                        | 0        | 0        | 2        | 0         |
| 20                                                                                                        | PC             | PPS4011            | Corporate Readiness Program-II*                       | 0        | 0        | 2        | 0         |
| <b>Total</b>                                                                                              |                |                    |                                                       |          |          |          | <b>56</b> |

**Table 17.1: List of Elective Courses under various Specializations/Stream**

| <b>SPECIALIZATION TRACK</b>                                                                                                     |                       |                    |                                                  |          |          |          |           |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|--------------------------------------------------|----------|----------|----------|-----------|
| <b>TRACK CORE – BUSINESS ANALYTICS</b>                                                                                          |                       |                    |                                                  |          |          |          |           |
| <b>Sl. No .</b>                                                                                                                 | <b>Cours e Basket</b> | <b>Course Code</b> | <b>Course Name</b>                               | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                                                                                                               | STC                   | BAL4507            | Business Intelligence and Data Visualization     | 1        | 1        | 2        | 3         |
| 2                                                                                                                               | STC                   | BAL4504            | Python for Business Analytics                    | 1        | 1        | 2        | 3         |
| 3                                                                                                                               | STC                   | BAL4525            | Machine Learning for Business                    | 1        | 1        | 2        | 3         |
| 4                                                                                                                               | STC                   | BAL4506            | Strategic Business Analytics                     | 1        | 1        | 2        | 3         |
| <b>Total</b>                                                                                                                    |                       |                    |                                                  |          |          |          | <b>12</b> |
| <b>TRACK ELECTIVE – BUSINESS ANALYTICS</b>                                                                                      |                       |                    |                                                  |          |          |          |           |
| <b>List of Specialization Track Electives Courses- Minimum of 24 credits is to be earned by the student in particular track</b> |                       |                    |                                                  |          |          |          |           |
| <b>Sl. No .</b>                                                                                                                 | <b>Cours e Basket</b> | <b>Course Code</b> | <b>Course Name</b>                               | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                                                                                                               | STE                   | BAL 4527           | AI for Business Innovation                       | 1        | 1        | 2        | 3         |
| 2                                                                                                                               | STE                   | BAL4516            | Deep Learning Techniques and Applications        | 1        | 1        | 2        | 3         |
| 3                                                                                                                               | STE                   | BAL4506            | AI-Driven Operations and Supply Chain Management | 1        | 1        | 2        | 3         |
| 4                                                                                                                               | STE                   | BAL4528            | Text Analytics and Natural Language Processing   | 1        | 1        | 2        | 3         |
| 5                                                                                                                               | STE                   | BAL4529            | BFSI Analytics                                   | 1        | 1        | 2        | 3         |
| 6                                                                                                                               | STE                   | BAL4530            | Retail Marketing Analytics                       | 1        | 1        | 2        | 3         |
| 7                                                                                                                               | STE                   | BAL4531            | FinTech and Blockchain Analytics                 | 1        | 1        | 2        | 3         |
| 8                                                                                                                               | STE                   | BAL4532            | Strategic HR Analytics                           | 1        | 1        | 2        | 3         |
| 9                                                                                                                               | STE                   | BAL4533            | Digital and Social Media Analytics               | 1        | 1        | 2        | 3         |
| 10                                                                                                                              | STE                   | BAL4509            | AI Ethics, Governance and Responsible AI         | 1        | 1        | 2        | 3         |

**18 Practical/Skill based Courses-Internships/Thesis/Dissertation/Capstone**

| <b>Table 18.1: MBA-(Business Analytics) Program Structure 2026-2028:</b> |               |                    |                           |          |          |          |           |
|--------------------------------------------------------------------------|---------------|--------------------|---------------------------|----------|----------|----------|-----------|
| <b>Practice (PR)</b>                                                     |               |                    |                           |          |          |          |           |
| <b>S. NO.</b>                                                            | <b>BASKET</b> | <b>COURSE CODE</b> | <b>COURSE NAME</b>        | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                                                        | PR            | MBA8001            | Summer Internship Project | -        | -        | -        | 4         |
| 2                                                                        | PR            | MBA8301            | Capstone Research Project | -        | -        | -        | 6         |
| <b>Total</b>                                                             |               |                    |                           |          |          |          | <b>10</b> |

**Project Work/Portfolio/Mini project:**

Practical / Skill based Courses like internship, project work, capstone project, research project / dissertation, and such similar courses, where the pedagogy does not lend itself to a typical L-T-P-C Structure as defined in Clause 5.1 of the Academic Regulations, are simply assigned the number of Credits based on the quantum of work / effort required to fulfill the learning objectives and outcomes prescribed for the concerned Courses. Such courses are referred to as Non-Teaching Credit Courses (NTCC). These Courses are designed to provide students with hands-on experience and skills essential for their professional development. These courses aim to equip students with abilities in problem identification, root cause analysis, problem-solving, innovation, and design thinking through industry exposure and project-based learning. The expected outcomes are first level proficiency in problem solving and design thinking skills to better equip MBA post graduates for their professional careers. The method of evaluation and grading for the Practical / Skill based Courses shall be prescribed and approved by the concerned Departmental Academic Committee (refer Annexure A of the Academic Regulations). The same shall be prescribed in the Course Handout.

**19. Internship**

A student may undergo an internship for a period of 4-6 weeks in an industry / company or academic / research institution during the Semester Break between 2<sup>nd</sup> and 3<sup>rd</sup> Semesters, subject to the following conditions:

**19.1** The Internship shall be conducted in accordance with the Internship Policy prescribed by the University from time to time.

**19.2** The number of Internships available for the concerned Academic Term. Further, the available number of internships shall be awarded to the students by the University on the basis of merit using the CGPA secured by the student. Provided further, the student fulfils the criteria, as applicable, specified by the Industry / Company / research institution providing the Internship, as stated in Sub-Clause 2.6.1.2 above.

**19.3** A student may opt for Internship in an Industry / Company / research institution of her / his choice, subject to the condition that the concerned student takes the responsibility to arrange the Internship on her / his own. Provided further, that the Industry / Company or academic / research institution offering such Internship confirms to the University that the Internship shall be conducted in accordance with the Program Regulations.

**19.4** A student selected for an Internship in an industry / company or academic / research institution shall adhere to all the rules and guidelines prescribed in the Internship Policy of the University.

**20. Dissertation**

A student may opt to do a Research Project / Dissertation for a period of 6-8 weeks in an Industry / Company or academic / research institution or the University Department(s) as an equivalence of Capstone Project, subject to the following conditions:

**20.1** The Research Project / Dissertation shall be approved by the concerned HOD and be carried out under the guidance of a faculty member.

The student may do the Research Project / Dissertation in an Industry / Company or academic / research institution of her / his choice subject to the above-mentioned

condition (Sub-Clause 2.6.4.1). Provided further, that the Industry / Company or academic / research institution offering such Research Project / Dissertation confirms to the University that the Research Project / Dissertation work will be conducted in accordance with the Program Regulations and requirements of the University.

## 21. List of Elective Courses under various Specializations/Stream Basket:

**Table 21.1: List of Elective Courses under various Specializations/Stream Basket:**

| <b>SPECIALIZATION TRACK</b>                                                                                                     |                      |                    |                                                  |          |          |          |           |
|---------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------|--------------------------------------------------|----------|----------|----------|-----------|
| <b>TRACK CORE – BUSINESS ANALYTICS</b>                                                                                          |                      |                    |                                                  |          |          |          |           |
| <b>Sl. No.</b>                                                                                                                  | <b>Course Basket</b> | <b>Course Code</b> | <b>Course Name</b>                               | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                                                                                                               | STC                  | BAL4507            | Business Intelligence and Data Visualization     | 1        | 1        | 2        | 3         |
| 2                                                                                                                               | STC                  | BAL4504            | Python for Business Analytics                    | 1        | 1        | 2        | 3         |
| 3                                                                                                                               | STC                  | BAL4525            | Machine Learning for Business                    | 1        | 1        | 2        | 3         |
| 4                                                                                                                               | STC                  | BAL4506            | Strategic Business Analytics                     | 1        | 1        | 2        | 3         |
| <b>Total</b>                                                                                                                    |                      |                    |                                                  |          |          |          | <b>12</b> |
| <b>TRACK ELECTIVE – BUSINESS ANALYTICS</b>                                                                                      |                      |                    |                                                  |          |          |          |           |
| <b>List of Specialization Track Electives Courses- Minimum of 24 credits is to be earned by the student in particular track</b> |                      |                    |                                                  |          |          |          |           |
| <b>Sl. No.</b>                                                                                                                  | <b>Course Basket</b> | <b>Course Code</b> | <b>Course Name</b>                               | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                                                                                                               | STE                  | BAL4527            | AI for Business Innovation                       | 1        | 1        | 2        | 3         |
| 2                                                                                                                               | STE                  | BAL4516            | Deep Learning Techniques and Applications        | 1        | 1        | 2        | 3         |
| 3                                                                                                                               | STE                  | BAL4506            | AI-Driven Operations and Supply Chain Management | 1        | 1        | 2        | 3         |
| 4                                                                                                                               | STE                  | BAL4528            | Text Analytics and Natural Language Processing   | 1        | 1        | 2        | 3         |
| 5                                                                                                                               | STE                  | BAL4529            | BFSI Analytics                                   | 1        | 1        | 2        | 3         |
| 6                                                                                                                               | STE                  | BAL4530            | Retail Marketing Analytics                       | 1        | 1        | 2        | 3         |
| 7                                                                                                                               | STE                  | BAL4531            | FinTech and Blockchain Analytics                 | 1        | 1        | 2        | 3         |
| 8                                                                                                                               | STE                  | BAL4532            | Strategic HR Analytics                           | 1        | 1        | 2        | 3         |
| 9                                                                                                                               | STE                  | BAL4533            | Digital and Social Media Analytics               | 1        | 1        | 2        | 3         |
| 10                                                                                                                              | STE                  | BAL4509            | AI Ethics, Governance and Responsible AI         | 1        | 1        | 2        | 3         |

**22. Recommended Semester Wise Course Structure / Flow including the Program / Discipline Elective Paths / Option**

| <b>Proposed Semester Grid</b>                 |               |                    |                                                |          |          |          |           |
|-----------------------------------------------|---------------|--------------------|------------------------------------------------|----------|----------|----------|-----------|
| <b>MBA (Business Analytics) Batch 2026-28</b> |               |                    |                                                |          |          |          |           |
| <b>S.NO</b>                                   | <b>BASKET</b> | <b>COURSE CODE</b> | <b>SEMESTER I</b>                              | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                             | PC            | MBA4001            | Business Statistics                            | 3        | 1        | 0        | 4         |
| 2                                             | PC            | ENG4002            | Applied English Communication                  | 2        | 0        | 2        | 3         |
| 3                                             | PC            | MBA4002            | Financial Accounting and Reporting             | 3        | 1        | 0        | 4         |
| 4                                             | PC            | MBA4003            | Human Behaviour in Organizations               | 3        | 0        | 0        | 3         |
| 5                                             | PC            | MBA4004            | Managerial Economics                           | 3        | 0        | 0        | 3         |
| 6                                             | PC            | MBA4005            | AI for Managers                                | 2        | 0        | 0        | 2         |
| 7                                             | PC            | MBA4006            | Marketing Management - Theories and Practices  | 3        | 0        | 0        | 3         |
| 8                                             | PC            | MBA4007            | Production Operations and Logistics Management | 3        | 0        | 0        | 3         |
| 9                                             | PC            | PPS4015            | Corporate Readiness Program- I                 | 0        | 0        | 2        | 0         |
|                                               |               |                    | <b>Total Credits (9 Courses)</b>               |          |          |          | <b>25</b> |
| <b>S.NO</b>                                   | <b>BASKET</b> | <b>COURSE CODE</b> | <b>SEMESTER II</b>                             | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                             | PC            | MBA4008            | Business Research Methods                      | 3        | 0        | 0        | 3         |
| 2                                             | PC            | MBA4009            | Applied Data Analysis and Visualization        | 1        | 0        | 2        | 2         |
| 3                                             | PC            | MBA4010            | Digital Marketing                              | 2        | 1        | 0        | 3         |
| 4                                             | PC            | MBA4011            | Corporate Finance                              | 3        | 0        | 0        | 3         |
| 5                                             | PC            | MBA4012            | Human Capital Management                       | 3        | 0        | 0        | 3         |
| 6                                             | PC            | MBA4013            | Fundamentals of Business Analytics             | 1        | 0        | 2        | 2         |
| 7                                             | PC            | ENG4001            | Global Business Communication                  | 2        | 0        | 2        | 3         |
| 8                                             | STC           | BAL4507            | Business Intelligence and Data Visualisation   | 1        | 1        | 2        | 3         |
| 9                                             | STC           | BAL4504            | Python for Business Analytics                  | 1        | 1        | 2        | 3         |
| 10                                            | PC            | PPS4010            | Corporate Readiness Program – II               | 0        | 0        | 2        | 0         |
| 11                                            | PC            | APT4027            | Aptitude for Employability – I                 | 0        | 0        | 2        | 0         |
|                                               |               |                    | <b>Total Credits (11 Courses)</b>              |          |          |          | <b>25</b> |
| <b>S.NO</b>                                   | <b>BASKET</b> | <b>COURSE CODE</b> | <b>SEMESTER III</b>                            | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                                             | PC            | GMM4113            | Business Strategy and Corporate Transformation | 2        | 1        | 0        | 3         |

|                    |               |                    |                                                      |          |          |          |           |
|--------------------|---------------|--------------------|------------------------------------------------------|----------|----------|----------|-----------|
| 2                  | PC            | GMM4114            | Business Law and Regulatory Compliance               | 3        | 0        | 0        | 3         |
| 3                  | STC3          | BAL4525            | Machine Learning for Business                        | 1        | 1        | 2        | 3         |
| 4                  | STC4          | BAL4506            | Strategic Business Analytics                         | 1        | 1        | 2        | 3         |
| 5                  | STE           |                    | STE – 1                                              | 1        | 1        | 2        | 3         |
| 6                  | STE           |                    | STE – 2                                              | 1        | 1        | 2        | 3         |
| 7                  | STE           |                    | STE – 3                                              | 1        | 1        | 2        | 3         |
| 8                  | STE           |                    | STE - 4                                              | 1        | 1        | 2        | 3         |
| 9                  | PR            | MBA8001            | Summer Internship Project                            | -        | -        | -        | 4         |
| 10                 | PC            | PPS4011            | Corporate Readiness Program – III                    | 0        | 0        | 2        | 0         |
| 11                 | PC            | APT4028            | Aptitude for Employability – II                      | 0        | 0        | 2        | 0         |
|                    |               |                    | <b>Total Credits (11 Courses)</b>                    |          |          |          | <b>28</b> |
| <b>S.NO</b>        | <b>BASKET</b> | <b>COURSE CODE</b> | <b>SEMESTER IV</b>                                   | <b>L</b> | <b>T</b> | <b>P</b> | <b>C</b>  |
| 1                  | PC            | MBA4016            | Corporate Governance, Ethics, ESG and Sustainability | 2        | 1        | 0        | 3         |
| 2                  | PC            | MBA4017            | Entrepreneurship and Innovation Management           | 2        | 1        | 0        | 3         |
| 3                  | STE           |                    | STE– 5                                               | 2        | 1        | 0        | 3         |
| 4                  | STE           |                    | STE – 6                                              | 2        | 1        | 0        | 3         |
| 5                  | STE           |                    | STE – 7                                              | 2        | 1        | 0        | 3         |
| 6                  | STE           |                    | STE - 8                                              | 2        | 1        | 0        | 3         |
| 7                  | PR            | MBA8301            | Capstone Project                                     | -        | -        | -        | 6         |
|                    |               |                    | <b>Total Credits (7 Courses)</b>                     |          |          |          | <b>24</b> |
| <b>Grand Total</b> |               |                    | <b>102 Credits</b>                                   |          |          |          |           |

- **Mandatory Non Credit Course**

**23. Course Catalogue of all Courses Listed including the Courses Offered by other School / Department and Discipline / Program Electives**  
**Course Catalogues of MBA (Business Analytics) Program**  
**1<sup>st</sup> Semester**

|                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                                          |   |   |                  |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------|---|---|------------------|---|
| Course Code:<br>MBA4007                                                                                                                                                                                                                                                                                                                                            | <b>Course name:</b> AI for Managers<br><b>Course Specialization Elective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>type:</b> Track      | L- T - P- C                              | 2 | 0 | 0                | 2 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                                          |   |   |                  |   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"><li>• Applied Business Statistics</li><li>• Applied Data Analysis and Visualization</li><li>• Fundamentals of Business Analytics</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |                                          |   |   |                  |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                             | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                                          |   |   |                  |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                          | This course provides MBA students with a managerial understanding of Artificial Intelligence (AI) and its strategic role in modern organizations. The course focuses on AI concepts, business applications, decision-making support, organizational transformation, and responsible AI adoption. Emphasis is placed on understanding AI from a business and managerial perspective rather than technical implementation.                                                                                                                                                                                                                                                                                                                                                                      |                         |                                          |   |   |                  |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                            | This course is designed to enhance managerial competencies by developing students' understanding of Artificial Intelligence concepts and business applications through experiential and participative learning.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                                          |   |   |                  |   |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                            | Upon successful completion of the course, students shall be able to:<br><b>CO1:</b> Explain the fundamental concepts, evolution, and strategic significance of Artificial Intelligence in contemporary business organizations.<br><b>CO2:</b> Analyse the application of AI technologies across major business functions to enhance decision-making, operational efficiency, and customer value.<br><b>CO3:</b> Analyze the role of Artificial Intelligence in driving digital transformation, business innovation, strategic decision-making, and sustainable competitive advantage across organizations.<br><b>CO4:</b> Assess AI adoption strategies, ethical considerations, governance frameworks, and future trends for responsible and sustainable AI implementation in organizations. |                         |                                          |   |   |                  |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                                          |   |   |                  |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                    | <b>Introduction to AI and Managerial Decision Making</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Group Assignment</b> | <b>Participative Learning</b>            |   |   | <b>(6 Hours)</b> |   |
| <b>Topics:</b> Introduction to Artificial Intelligence, Evolution of AI, Types of AI, AI Ecosystem, AI versus Traditional Analytics, Role of AI in Business Decision-Making, Data-Driven Organizations, AI and Competitive Advantage, AI Adoption Trends, Business Opportunities Created by AI, AI Value Creation Frameworks, and Challenges in AI Implementation. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                                          |   |   |                  |   |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                    | <b>AI Applications Across</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Case Discussion:</b> | <b>AI-Driven Business Transformation</b> |   |   | <b>(8 Hours)</b> |   |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Business Functions</b>                               |                            |                                               |                  |
| <b>Topics:</b> AI in Marketing and Customer Analytics, AI in Human Resource Management, AI in Operations and Supply Chain Management, AI in Finance and Risk Management, AI in Sales and Revenue Optimization, Customer Experience Management, Business Process Automation, Intelligent Decision Support Systems.                                                                                                                                                                                                                                                   |                                                         |                            |                                               |                  |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>AI-Driven Innovation and Business Transformation</b> | <b>Group Presentation:</b> | <b>AI Applications in Business Innovation</b> | <b>(8 Hours)</b> |
| <b>Topics:</b> AI and Digital Transformation, AI for Business Innovation, Intelligent Automation, AI in Customer Experience Management, AI for Product and Service Innovation, AI in Strategic Decision-Making, Predictive Analytics for Business Growth, AI-Enabled Business Models, AI and Competitive Advantage, Organizational Transformation through AI, AI for Sustainability and Social Impact.                                                                                                                                                              |                                                         |                            |                                               |                  |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | AI Strategy, Ethics and Future of Business              | <b>Group Discussion:</b>   | <b>Responsible AI and Business Leadership</b> | <b>(8 Hours)</b> |
| <b>Topics:</b> AI Strategy Formulation, Organizational Readiness for AI Adoption, AI Leadership and Change Management, AI Governance Frameworks, Responsible AI Principles, Ethics and Fairness in AI Systems, Explainable AI, Data Privacy and Security, Future Trends in AI, and AI for Sustainable Business Innovation.                                                                                                                                                                                                                                          |                                                         |                            |                                               |                  |
| <b>Targeted Application &amp; Tools that can be used:</b> PPT, Videos and board & Chalk Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                         |                            |                                               |                  |
| <b>Assignments:</b><br><b>A1:</b> Module 1 – Assignment<br><b>A2:</b> Module 2 – Case Study Analysis<br><b>A3:</b> Module 3 – Group Presentation<br><b>A4:</b> Module 4 – Group Discussion                                                                                                                                                                                                                                                                                                                                                                          |                                                         |                            |                                               |                  |
| <b>Text Book:</b><br><b>T1</b> – Artificial Intelligence for Managers. (2020). BPB Publications.<br><b>T2</b> – Marr, B. (2021). <i>Artificial Intelligence in Practice: How 50 Successful Companies Used AI and Machine Learning to Solve Problems</i> . Wiley.                                                                                                                                                                                                                                                                                                    |                                                         |                            |                                               |                  |
| <b>Reference books</b><br>R1 – Russell, S., & Norvig, P. (2021). <i>Artificial Intelligence: A Modern Approach</i> (4th Edition). Pearson.<br>R2 – Davenport, T. H., & Ronanki, R. (2019). <i>The AI Advantage: How to Put the Artificial Intelligence Revolution to Work</i> . MIT Press.<br>R3 – Marr, B. (2019). <i>Artificial Intelligence in Practice</i> . Wiley.<br>R4 – Shrestha, Y. R., Ben-Menahem, S. M., & Von Krogh, G. (2019). <i>Organizational Decision-Making Structures in the Age of Artificial Intelligence</i> . California Management Review. |                                                         |                            |                                               |                  |
| <b>Case studies</b><br>1. <a href="https://www.researchgate.net/publication/385137928">https://www.researchgate.net/publication/385137928</a> <b>The Impact of Artificial Intelligence on Business Strategy Case Studies Competitive Advantages and Strategic Implications</b><br>2. <a href="https://www.researchgate.net/publication/392470720">https://www.researchgate.net/publication/392470720</a> <b>Harnessing Artificial Intelligence for Business Intelligence A Case Study on Transforming Data-Driven Decision-Making</b>                               |                                                         |                            |                                               |                  |

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|-------------------------------------------------|------------------------------------------------------|
| <b>Catalogue prepared by</b>                    | Faculty<br>School of Management – PG- Dr P.Sudarkodi |
| <b>Recommended by the Board of Studies on</b>   |                                                      |
| <b>Date of Approval by the Academic Council</b> |                                                      |

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| Course Code:<br>MBA4001                                                                                                                                                                                                                                                                                                                                                                                   | <b>Course name: Business Statistics</b><br><b>Course type: Program Core</b>                                                                                                                                                                                                                                                                                                   |                                                                  | L- T - P- C  | 3 | 1             | 0 | 4 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                               |                                                                  |              |   |               |   |   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                              | NIL                                                                                                                                                                                                                                                                                                                                                                           |                                                                  |              |   |               |   |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                    | NIL                                                                                                                                                                                                                                                                                                                                                                           |                                                                  |              |   |               |   |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                 | Business statistics course helps students to analyze and interpret data, which aids them in managerial decision-making. The course contains descriptive statistics, probability and probability distributions and tests of hypotheses. The course is analytical in nature and enables the students to apply various statistical tools to solve business problems effectively. |                                                                  |              |   |               |   |   |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                   | CO1                                                                                                                                                                                                                                                                                                                                                                           | Describe the data using descriptive statistics.                  |              |   | Understand    |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                           | CO2                                                                                                                                                                                                                                                                                                                                                                           | Solve business related problems involving probabilities          |              |   | Apply         |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                           | CO3                                                                                                                                                                                                                                                                                                                                                                           | Solve business related problems using probability distributions. |              |   | Apply         |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                           | CO4                                                                                                                                                                                                                                                                                                                                                                           | Test hypotheses using relevant testing procedures.               |              |   | Analyse       |   |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                   | The course aims at SKILL DEVELOPMENT with experiential problem-solving activities.                                                                                                                                                                                                                                                                                            |                                                                  |              |   |               |   |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                               |                                                                  |              |   |               |   |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                           | <b>Measures of Location and Variation</b>                                                                                                                                                                                                                                                                                                                                     | <b>Experiential learning</b>                                     | Quiz         |   | <b>12L+4T</b> |   |   |
| Measures of Location – mean, median and mode for grouped and ungrouped data, weighted mean and geometric mean for ungrouped data, quartiles and percentiles for grouped and ungrouped data, their relative merits and demerits. Measures of variation – range, interquartile range for grouped and ungrouped data Standard deviation, variance and coefficient of variation (grouped and ungrouped data). |                                                                                                                                                                                                                                                                                                                                                                               |                                                                  |              |   |               |   |   |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                           | <b>Correlation, Regression and Probability</b>                                                                                                                                                                                                                                                                                                                                | <b>Experiential learning</b>                                     | Mini Project |   | <b>12L+4T</b> |   |   |

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| <p>Correlation – Scatter plot, Karl Pearson and Spearman’s rank correlation. Simple linear regression.</p> <p>Random experiment, sample space, event, equally likely events, mutually exclusive events and complement of an event. Classical approach to probability, simple probability, joint probability and marginal probability Addition and multiplication rules of probability, independence of events. Conditional probability and Bayes theorem.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                      |                              |                        |               |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Random Variable and Probability Distributions</b> | <b>Experiential learning</b> | <b>Problem Solving</b> | <b>14L+4T</b> |
| <p>Random variable – Discrete and Continuous random variable. Expected value and variance of a discrete random variable. Covariance, Portfolio expected return and portfolio risk. Probability distributions – discrete and continuous. Probability mass function and probability density functions. Discrete distributions – Binomial distribution, Poisson distribution – mean, variance and computation of probabilities. Continuous distributions -normal distribution – properties and computation of probabilities. Introduction to uniform and exponential distributions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                      |                              |                        |               |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Introduction to Testing of Hypothesis</b>         | <b>Experiential learning</b> | <b>Problem Solving</b> | <b>7L+3T</b>  |
| <p>Concept of population, sample, parameter and statistic. Introduction to sampling distributions. Hypothesis - Null and alternative hypothesis. Type I and Type II errors, level of significance. Test for single mean – known and unknown variance. Test for single proportion.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                      |                              |                        |               |
| <b>Targeted Application &amp; Tools that can be used:</b> Microsoft Excel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                      |                              |                        |               |
| <p><b>Reference books</b></p> <p><b>T1.</b> Anderson D R, Sweeny D J, Williams T A, Camm J D, Cochran J J, Fry M J and Ohlmann JW (2019), Statistics for Business and Economics,14<sup>th</sup> edition Cengage learning, New Delhi.</p> <p><b>Reference books:</b></p> <p><b>R1.</b> Levine D M, Stephan D F, Szabat K A (2016) Statistics for Managers, 7<sup>th</sup> edition, New Delhi</p> <p><b>R2.</b> Ken Black (2010) Business Statistics for Contemporary Decision Making, 6<sup>th</sup> ed. John Wiley and sons, New Delhi</p> <p><b>Online Resources:</b></p> <p><b>E- resources</b></p> <p><b>1.</b> <a href="https://datahub.io/core/oil-prices#resource-brent-daily">https://datahub.io/core/oil-prices#resource-brent-daily</a></p> <p><b>2.</b> <a href="https://datahub.io/core/bond-yields-us-10y#resource-bond-yields-us-10y_zip">https://datahub.io/core/bond-yields-us-10y#resource-bond-yields-us-10y_zip</a></p> <p><b>3.</b> <a href="https://datahub.io/core/finance-vix#resource-vix-daily">https://datahub.io/core/finance-vix#resource-vix-daily</a></p> |                                                      |                              |                        |               |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Dr. Jayakrishna Udupa H<br>School of Management – PG |                              |                        |               |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                      |                              |                        |               |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                      |                              |                        |               |

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| Course Code: MBA4004                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Course name: Managerial Economics</b><br><b>Course type:</b> School Core                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                              | L- T - P- C               | 3           | 0 | 0 | 3 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                              |                           |             |   |   |   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | NIL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                              |                           |             |   |   |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                              |                           |             |   |   |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | This course explores the application of economic principles to managerial decision-making in a business context. By blending microeconomic theory with practical tools, students learn how to analyze demand, production, costs, pricing, and market structures. The course also addresses the influence of macroeconomic conditions, risk, and government policies on managerial decisions. Through case studies and applications, students gain the ability to apply economic reasoning to real-world business challenges.                                                                                                                                                |                                                              |                           |             |   |   |   |
| <b>Course Outcomes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CO1: Understand the principles of managerial economics and the economic behavior demand and supply of individuals in the market. (Understand)<br>CO2: Apply production and cost relationships to recommend strategies in business decision-making for efficiency and profitability (Apply)<br>CO3: Analyze pricing and output decisions across different market structures, considering risks, uncertainties, and government interventions (Analyze)<br>CO4: Evaluate economic growth, consumption, savings, and the impact of fiscal and monetary instruments to formulate judgments on their effectiveness in addressing contemporary macroeconomic challenges (Evaluate) |                                                              |                           |             |   |   |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | This course is designed to improve the learners' <b>EMPLOYABILITY SKILLS</b> by using <b>PARTICIPATIVE LEARNING</b> techniques                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                              |                           |             |   |   |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                              |                           |             |   |   |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Introduction to Managerial Economics and Consumption Decision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Assignment 1: Participatory Learning from research paper     | Assessment 1 – Case Study | 12 Sessions |   |   |   |
| Nature, scope, and significance of managerial economics in decision-making. Relationship of managerial economics with microeconomics, macroeconomics, and functional areas of management, Role of managerial economics in modern business strategy, Factors of production and circular flow of economy, Fundamental economic concepts: scarcity, choice, opportunity cost, marginal analysis, PPF. Demand analysis: law of demand, determinants of demand, exceptions to the law of demand. Elasticity of demand: price, income, and cross elasticity – managerial uses and applications. Demand forecasting: qualitative and quantitative techniques. Supply Analysis: Law of Supply – Price elasticity of supply Price Equilibrium. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                              |                           |             |   |   |   |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Theory of Production and Costs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Assignment 2: Participatory learning from E Library resource | Assessment 2 – Quiz       | 8 Sessions  |   |   |   |

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| Defining production- The production function: short vs long run – Average, marginal and total product, Three stages of production- concept of isoquant. Defining costs and various cost concepts – Fixed and variable costs - Average, marginal and total costs, equation, schedule and diagram – Cost curves and their shapes in short and long runs, Economies and diseconomies of scale at firm level, Applications of cost analysis in managerial decision-making (Break-even analysis).                                                                                      |                                                      |                                                   |                                                                 |             |
| Module 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Market Structure and Price-output Decisions          | Assignment 3: Participatory Learning and teamwork | Assessment 3- Mini Project on varied sectors and report writing | 10 Sessions |
| Perfect competition – equilibrium in short run and long run. Monopoly – price discrimination, profit maximization. Monopolistic competition – product differentiation, selling costs. Oligopoly – collusive and non-collusive models (Cournot, Bertrand, Kinked Demand Curve). Pricing practices: Cost-plus pricing, transfer pricing, penetration pricing, skimming strategy, pricing in the digital economy. Government intervention and regulation in pricing and competition. Decision-making under risk and uncertainty.                                                     |                                                      |                                                   |                                                                 |             |
| Module 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Macroeconomics Concepts & Fiscal and Monetary policy | Assignment 4: Participatory Learning              | Assessment 4 – Case Study – Macro scenario Analysis             | 15 Sessions |
| Macroeconomic issues and concepts –The Circular flow of income in different sectors of economy, concepts and measurement of National Income, Business Cycle Indicators, Say's law, Keynesian theory of income determination (MPC, MPS). Aggregate Supply-Aggregate demand- The multiplier. Objectives and instruments of fiscal and monetary policy. The union budget process, Functions of Central Bank, Inflation & Deflation: meaning, Types - Consumer Price Index – Wholesale Price Index – impact on purchasing power and economic stability.                               |                                                      |                                                   |                                                                 |             |
| <b>Targeted Application &amp; Tools that can be used:</b><br>Case Study Analysis – Application of demand forecasting, pricing strategies, and production decisions in real companies.<br>Quantitative Tools – Regression analysis, elasticity measurement, break-even analysis, cost-volume-profit analysis, decision trees, and elasticity measurement.<br>Software / Tools – Excel for data analysis for mini projects<br>Business Reports & Presentations – Students prepare decision-focused reports analyzing cost structures, pricing policies, or market entry strategies. |                                                      |                                                   |                                                                 |             |
| <b>Text Books:</b> T1: Kaur, S., & McEachern, W. A. (2022). <i>Microeconomics: A South Asian perspective</i> . Cengage Learning<br>T2: Kaur, S., & McEachern, W. A. (2018). <i>Macroeconomics: A South Asian perspective</i> . Cengage Learning                                                                                                                                                                                                                                                                                                                                   |                                                      |                                                   |                                                                 |             |
| <b>Reference books:</b> R1: Salvatore, D., & Rastogi, K. R. (2020). <i>Managerial economics: Principles and worldwide applications</i> (9th Indian ed.). Oxford University Press.<br>R2: Mankiw, N. G., & Taylor, M. P. (2023). <i>Macroeconomics</i> . Cengage Learning.                                                                                                                                                                                                                                                                                                         |                                                      |                                                   |                                                                 |             |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Dr. Bipasha Maity                                    |                                                   |                                                                 |             |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                      |                                                   |                                                                 |             |

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| <b>Date of Approval by the Academic Council</b> |  |
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| <b>Course Code:</b><br>MBA4005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Course Title: Production Operations and Logistics Management</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>L</b><br><b>2</b> | <b>T</b><br><b>1</b>      | <b>P</b><br><b>0</b> | <b>C</b><br><b>3</b> |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      |                           |                      |                      |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      |                           |                      |                      |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                      |                           |                      |                      |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | This course provides an in-depth understanding of production operations and logistics management in business environments. Students will explore core operational processes, supply chain strategies, inventory management, and logistics optimization to enhance efficiency and profitability. Through real-world case studies and interactive learning methods, students will gain practical insights into managing production systems and designing effective logistics solutions, preparing them for strategic roles in operations management. |                      |                           |                      |                      |
| <b>Course Objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | This course is designed for <b>SKILL DEVELOPMENT</b> of the learner by using <b>PROBLEM SOLVING</b> techniques.                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                           |                      |                      |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Upon completing this course, students will be able to:<br>1. <b>Analyze</b> production and logistics challenges using key operational theories.<br>2. <b>Evaluate</b> supply chain performance with industry-specific metrics.<br>3. <b>Develop</b> efficient logistics solutions that optimize cost and resources.<br>4. <b>Apply</b> problem-solving strategies to improve production workflows.                                                                                                                                                 |                      |                           |                      |                      |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                           |                      |                      |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Introduction to Production Operations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                      | Assessment 1 - Quiz       | 11 Hours             |                      |
| This module lays the foundation for understanding production systems and operations management. Students will explore: <ul style="list-style-type: none"><li>Types of Production Systems – Job production, batch production, mass production, and continuous production.</li><li>Operations Strategy – Aligning production processes with business goals.</li><li>Productivity and Efficiency – Techniques to measure and improve performance.</li><li>Technology in Operations – Role of automation, robotics, and AI in modern production.</li></ul>                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                           |                      |                      |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Supply Chain and Inventory Management</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                      | Assessment 2 – Case Study | 11 Hours             |                      |
| This module delves into supply chain dynamics and inventory control methods to optimize operations. Topics include: <ul style="list-style-type: none"><li>- Demand Forecasting – Methods like time series analysis and regression models.</li><li>- Inventory Management – Economic Order Quantity (EOQ), Just-In-Time (JIT), and Vendor-Managed Inventory (VMI).</li><li>- Lean &amp; Agile Supply Chains – Strategies for minimizing waste and improving responsiveness.</li><li>- Supply Chain Risk Management – Handling disruptions and building resilient networks.</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                           |                      |                      |

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| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Logistics and Distribution Strategies</b>               |  | Assessment 3 – Case Analysis                                                                                                                                               | 11 Hours |
| <p>In this module, students will explore efficient logistics models to ensure seamless flow of goods and services. Key areas include:</p> <ul style="list-style-type: none"> <li>- Transportation Modes – Road, rail, air, and sea; comparative advantages.</li> <li>- Network Optimization – Designing distribution channels for cost and service efficiency.</li> <li>- Warehouse Management – Layout design, automation, and performance metrics.</li> <li>- Technological Advancements – Blockchain, IoT, and AI-driven logistics solutions.</li> </ul>       |                                                            |  |                                                                                                                                                                            |          |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Optimization in Production and Logistics</b>            |  | Assessment 4 – Mini Project<br>Students will work on a mini-project, applying optimization techniques to solve a production or logistics problem in a real-world scenario. | 12 Hours |
| <p>This module focuses on improving operations using analytical tools and emerging trends. Topics covered:</p> <ul style="list-style-type: none"> <li>• Process Improvement Methodologies – Six Sigma, Kaizen, and Total Quality Management (TQM).</li> <li>• Data-Driven Decision Making – Using analytics for production planning.</li> <li>• Sustainability in Logistics – Green supply chain initiatives and carbon footprint reduction.</li> <li>• Future of Operations Management – AI, predictive modelling, and smart factories.</li> </ul>               |                                                            |  |                                                                                                                                                                            |          |
| <p><b>Targeted Application &amp; Tools that can be used:</b><br/>Project work/Assignment: Students will develop a logistics optimization model for a real-world business case, integrating production efficiency techniques</p>                                                                                                                                                                                                                                                                                                                                   |                                                            |  |                                                                                                                                                                            |          |
| <p><b>Project work/Assignment: Mention the Type of Project /Assignment proposed for this course</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                            |  |                                                                                                                                                                            |          |
| <p><b>Web Resources:</b></p> <ul style="list-style-type: none"> <li>• Supply Chain Digital: <a href="http://www.supplychaindigital.com">www.supplychaindigital.com</a></li> <li>• Logistics Management Magazine: <a href="http://www.logisticsmgmt.com">www.logisticsmgmt.com</a></li> <li>• MIT Supply Chain Research: <a href="http://www.mit.edu/supplychain">www.mit.edu/supplychain</a></li> </ul> <p><b>Sample Data Set:</b><br/>Real-time industry data on supply chain optimization and logistics modelling will be provided for case study analysis.</p> |                                                            |  |                                                                                                                                                                            |          |
| <ul style="list-style-type: none"> <li>• <b>Text Book:</b> Chopra, S., &amp; Meindl, P. (2021). <i>Supply Chain Management: Strategy, Planning, and Operations</i>. Pearson.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                           |                                                            |  |                                                                                                                                                                            |          |
| <p><b>References:</b></p> <ul style="list-style-type: none"> <li>• Russell, R.S., &amp; Taylor, B.W. (2020). <i>Operations Management: Creating Value Along the Supply Chain</i>. Wiley.</li> <li>• Christopher, M. (2016). <i>Logistics and Supply Chain Management</i>. Pearson.</li> </ul>                                                                                                                                                                                                                                                                     |                                                            |  |                                                                                                                                                                            |          |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Shivaprasad S                                              |  |                                                                                                                                                                            |          |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | BOS NO: 18 <sup>th</sup> held on 6 <sup>th</sup> June 2025 |  |                                                                                                                                                                            |          |

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| <b>Date of Approval by the Academic Council</b> | 26 <sup>th</sup> Academic Council Meeting held on 25 <sup>th</sup> July 2025 |
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| Course Code:<br>ENG4002                                                                                                                                                                                                                                                       | Applied English Communication                                                                                                                                                                                                                                                                                                                                                                               | L- T- P- C | 1                                               | 12         | 3 |
| Version No.                                                                                                                                                                                                                                                                   | 1.0                                                                                                                                                                                                                                                                                                                                                                                                         |            |                                                 |            |   |
| Course Pre-requisites                                                                                                                                                                                                                                                         | NIL                                                                                                                                                                                                                                                                                                                                                                                                         |            |                                                 |            |   |
| Anti-requisites                                                                                                                                                                                                                                                               | NIL                                                                                                                                                                                                                                                                                                                                                                                                         |            |                                                 |            |   |
| Course Description                                                                                                                                                                                                                                                            | The course prioritizes communication skills through LSRW across four modules. Students develop fluency in different scenarios via interactive role-plays and peer discussions, covering communication basics, active listening, everyday professional speaking, and presentation skills. The curriculum builds in English Language communication.                                                           |            |                                                 |            |   |
| Course Out Come                                                                                                                                                                                                                                                               | On successful completion of the course the students shall be able to:<br>1. Interpret communication barriers for effective strategies in professional contexts.<br>2. Practice communication by critiquing and justifying responses.<br>3. Employ communication strategies.<br>4. Prepare structured presentations.<br>5. Analyze integrated communication skills through simulated professional scenarios. |            |                                                 |            |   |
| Course Content: Theory                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                             |            |                                                 |            |   |
| Module 1                                                                                                                                                                                                                                                                      | Overcoming Communication Barriers                                                                                                                                                                                                                                                                                                                                                                           | Assignment | Barrier Hunt (Case-Study/ Real-life situations) | 4 sessions |   |
| Topics: <ul style="list-style-type: none"><li>Identifying Listening Barriers</li><li>Practicing Active Listening using Case Studies.</li><li>Confirming Understanding in Discussions</li><li>Breaking Noise and Distraction Barriers</li></ul> Focus: Listening and Speaking) |                                                                                                                                                                                                                                                                                                                                                                                                             |            |                                                 |            |   |
| Module 2                                                                                                                                                                                                                                                                      | Building Response Competence                                                                                                                                                                                                                                                                                                                                                                                | Assignment | Justification Debate                            | 4 sessions |   |
| Topics: <ul style="list-style-type: none"><li>Paraphrasing Key Messages</li><li>Summarizing Complex Inputs</li><li>Crafting Emotionally Appropriate Replies</li><li>Justifying Response Choices</li></ul> (Focus: Speaking and Reading)                                       |                                                                                                                                                                                                                                                                                                                                                                                                             |            |                                                 |            |   |

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| Module 3                                                                                                                                                                                                                      | Everyday Business Speaking        | Assignment | Style Switch Exercise                  | 4 sessions |
| Topics: <ul style="list-style-type: none"><li>Developing Situational Strategies</li><li>Adapting Message Styles</li><li>Reading Audience Cues</li></ul> (Focus: Reading, Writing, and Speaking)                               |                                   |            |                                        |            |
| Module 4                                                                                                                                                                                                                      | Mastering Presentations           | Assignment | Presentation/Team Talks/Q&A Simulation | 4 sessions |
| Topics: <ul style="list-style-type: none"><li>Structuring Oral Deliveries</li><li>Engaging Audiences Effectively</li><li>Handling Spontaneous Questions</li><li>Summarizing Presentation Insights</li></ul> (LSRW Integrated) |                                   |            |                                        |            |
| Course Content: Tutorial Sessions                                                                                                                                                                                             |                                   |            |                                        |            |
| Module 1                                                                                                                                                                                                                      | Overcoming Communication Barriers |            |                                        | 3 sessions |
| <ul style="list-style-type: none"><li>Breaking Noise and Distraction Barriers</li><li>Practicing Active Listening using Case Studies.</li></ul>                                                                               |                                   |            |                                        |            |
| Module 2                                                                                                                                                                                                                      | Building Response Competence      |            |                                        | 3 sessions |
| <ul style="list-style-type: none"><li>Paraphrasing Key Messages</li><li>Crafting Emotionally Appropriate Replies</li></ul>                                                                                                    |                                   |            |                                        |            |
| Module 3                                                                                                                                                                                                                      | Everyday Business Speaking        |            |                                        | 3 sessions |
| <ul style="list-style-type: none"><li>Developing Situational Strategies</li><li>Reading Audience Cues</li></ul>                                                                                                               |                                   |            |                                        |            |
| Module 4                                                                                                                                                                                                                      | Mastering Presentations           |            |                                        | 3 sessions |
| <ul style="list-style-type: none"><li>Structuring Oral Deliveries</li><li>Engaging Audiences Effectively</li></ul>                                                                                                            |                                   |            |                                        |            |
| Course Content: Practical Sessions                                                                                                                                                                                            |                                   |            |                                        |            |
| Module 1                                                                                                                                                                                                                      | Overcoming Communication Barriers |            |                                        | 8 sessions |
| <div>1. Barrier Hunt- Identifying Listening Barriers</div> <div>2. Confirming Understanding</div> <div>3. Breaking Noise and Distraction Barriers</div>                                                                       |                                   |            |                                        |            |
| Module 2                                                                                                                                                                                                                      | Building Response Competence      |            |                                        | 8 sessions |

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| 4. Story Circle- Response Simulation<br>5. Paraphrasing Key Messages<br>6. Crafting Emotionally Appropriate Replies<br>7. Justifying Response Debate                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |            |
| Module 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Everyday Business Speaking | 8 sessions |
| 8. Developing Strategies<br>9. Style Switch- Adapting Message Styles<br>10. Audience Cues<br>11. Role-play                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                            |            |
| Module 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mastering Presentations    | 8 sessions |
| 12. Presentations<br>13. Presentations<br>14. Q & A Simulation<br>15. Engaging Audience Effectively.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |            |
| Targeted Application & Tools that can be used: Microsoft Word, Google Docs, Microsoft Powerpoint, ChatGPT, Grammarly, Quillbot, ProWritingAid, LanguageTool.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |            |
| Project work/Assignment:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |            |
| 1. Barrier identification from audio clips<br>2. Justification Debate<br>3. Style Switch Exercise<br>4. Presentation/Team Talks/Q&A Simulation<br>5. Case Study Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |            |
| <a href="#">References</a><br>1. Keyton, JoAnn. <i>Communication and Organizational Culture: A Key to Understanding Work Experiences</i> . 3rd ed., Sage Publications, 2011. (Module 2)<br>2. Adler, Ronald B., and Jeanne Marquardt Elmhorst. <i>Communicating at Work: Strategies for Success in Business and the Professions</i> . 12th ed., McGraw-Hill Education, 2020. (Module 3)<br>3. Bovee, Courtland L., and John V. Thill. <i>Business Communication Essentials</i> . 9th ed., Pearson India, 2022. (Module 4)<br>4. Wolvin, Andrew D., and Carolyn Coakley. <i>Listening</i> . 8th ed., McGraw-Hill, 1995. (Module 1) |                            |            |

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| Topics Relevant to "employability": Communication, Reasoning, Active Listening, Barriers to Communication, Presentation Skills.<br>Topics Relevant to "Human Values and Professional Ethics": Reasoning. |                |
| Catalogue prepared by                                                                                                                                                                                    | Dr. Shivani S. |
| Recommended by the Board of Studies on                                                                                                                                                                   |                |
| Date of Approval by the Academic Council                                                                                                                                                                 |                |

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| Course Code: MBA4003         | Course name: Human Behaviour in Organizations<br>Course type : PC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | L- T - P- C | 3 | 0 | 0 | 3 |
| <b>Version No.</b>           | 3.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |   |   |   |   |
| <b>Course Pre-requisites</b> | A Bachelor's degree in any discipline and basic awareness of Human behavior.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |   |   |   |   |
| <b>Anti-requisites</b>       | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |   |   |   |   |
| <b>Course Description</b>    | This course examines the impact of individual, team, and organizational factors on workplace behavior and performance. Tailored for MBA students, it integrates foundational theories with practical applications to develop key competencies in motivation, perception, leadership, communication, decision-making, and change management. Through case analyses, interactive discussions, and applied projects, students gain actionable insights into managing people, enhancing collaboration, and leveraging behavioral principles to address complex business challenges. The course equips future leaders with the knowledge and skills to navigate organizational dynamics effectively, drive meaningful change, and create strategic value with empathy and professionalism.                                            |             |   |   |   |   |
| <b>Course Out Comes</b>      | On completion of this course, the student will be able to:<br><b>CO1: Understand</b> the fundamental concepts of individual and group behavior within organizations, including motivation, perception, and attitude formation, and their influence on workplace outcomes.<br><b>CO2: Apply</b> behavioral theories and frameworks to analyze workplace situations and recommend effective strategies for enhancing team dynamics, communication, and leadership effectiveness.<br><b>CO3: Analyze</b> behavioral challenges in organizational settings by integrating concepts related to decision-making, conflict resolution, and change management to develop informed managerial insights.<br><b>CO4: Evaluate</b> organizational practices and culture through case-based assessments to determine their impact on employee |             |   |   |   |   |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | performance, readiness for change, and overall organizational effectiveness                                                    |  |                                                    |             |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | This course is designed to improve the learners' <b>EMPLOYABILITY SKILLS</b> by using <b>PARTICIPATIVE LEARNING</b> techniques |  |                                                    |             |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                |  |                                                    |             |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Introduction to Human Behavior in Organization (OB)                                                                            |  | Assessment 1 - Quiz                                | 9 sessions  |
| Importance, Nature and scope of Organization Behavior, Managers' Roles & Skills, Discipline that contribute to OB.; Challenges and Opportunities of OB - Workforce Diversity, Inclusion, Benefits and Challenges of DEI, Managing Virtual Workforce, Ethical Behaviors in organizations, Workplace Happiness.                                                                                                                                                                                                                                                                                 |                                                                                                                                |  |                                                    |             |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Individual Behaviours- Perceptions, Attitudes Personality & Learning                                                           |  | Assessment 2 - Case Analysis                       | 12 sessions |
| <b>Perception:</b> Meaning, Factors affecting Perceptions, Perception process & errors.<br>Attitudes – Definition, Components of attitudes, Dual Continuum, Characteristics of attitudes.<br><b>Personality:</b> Meaning, its Determinants, Theories - The Myers-Briggs Type Indicator, The Big Five Personality Model.<br><b>Learning Theories:</b> Classical & Operant conditioning, Social Learning theories. (Application)                                                                                                                                                                |                                                                                                                                |  |                                                    |             |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Motivation Concepts and its Applications                                                                                       |  | Assessment 3 - Group Presentation/ Assignment      | 12 sessions |
| <b>Motivation:</b> Meaning, Motivation process, Needs, Drives & incentives for motivation.<br>Classic & Contemporary Theories of Motivation: Hierarchy of Needs Theory, Herzberg's Two-Factor Theory, McClelland's Theory of Needs, Expectancy theory, Extrinsic & Intrinsic Rewards to Motivate Employees.<br>Applications of Motivation in Organizational Behavior: Meaning of Job design, job enrichment & Employee empowerment. (Analyze)                                                                                                                                                 |                                                                                                                                |  |                                                    |             |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Group Behaviour and Leadership                                                                                                 |  | Assessment 4 - Mini Project/Team Building Activity | 12 sessions |
| <b>Group Behavior:</b> Definition of Groups, Stages of Group Development.<br>Group Decision Making: Groups Versus the Individual, Group Decision-Making Techniques. Differences Between Groups and Teams, Types of Teams, Creating Effective Teams.<br><b>Leadership:</b> Concept, Blake and Mouton's Managerial Grid Theory, Situational Theory, Leadership Styles: Charismatic leadership, Transactional and Transformational leadership, Servant Leadership, Meaning: Organization Development and Organization Change, Role of change agent, Lewin's three-step model <b>(Evaluate)</b> . |                                                                                                                                |  |                                                    |             |
| <b>Targeted Application &amp; Tools that can be used:</b><br>Role Plays, Psychometric tests and analysis, personality tests, Leadership quizzes, Team Building games.                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                |  |                                                    |             |
| <b>Text Book:</b><br>T1- Robbins, S. P., & Judge, T. A. (2025). Organizational behavior (19th ed.). Pearson Education.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                |  |                                                    |             |
| <b>Reference books</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                |  |                                                    |             |

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| <ul style="list-style-type: none"> <li>R1 – <a href="#">Luthans</a>, F., Luthans, B. C., &amp; Luthans, K. W. (2021). <i>Organizational behavior: An evidence-based approach</i> (14th ed.). Information Age Publishing. <a href="#">VitalSource</a>.</li> <li>R2- Sanket Sunand Dash (2021). <i>Organizational Behavior</i>, Thirteenth Edition, Willey India Pvt. Ltd.</li> </ul> |                                           |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                        | Dr.A.ABIRAMI<br>School of Management – PG |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                       |                                           |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                     |                                           |

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| Course Code: MBA4002                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Course Name: Financial Accounting and Reporting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | L-T-P-C        | 3          | 1           | 0 | 4 |
| Version No.                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |            |             |   |   |
| Course Pre-requisites                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |            |             |   |   |
| Anti-requisites                                                                                                                                                                                                                                                                                                                                                                                                                                                          | NIL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |            |             |   |   |
| Course Description                                                                                                                                                                                                                                                                                                                                                                                                                                                       | This course provides comprehensive knowledge of financial accounting, corporate reporting, financial analytics, budgeting, and contemporary accounting practices using digital tools and technologies. It emphasizes practical application through Excel-based problem solving, annual report analysis, budgeting techniques, cloud accounting, AI-driven accounting systems, and sustainability reporting for effective managerial decision-making                                                                                                                                                                                                                                                                                                                                                                                           |                |            |             |   |   |
| Course Outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>CO1:</b> Understand accounting foundations, GAAP, IND-AS/IFRS, ethics, depreciation, accounting entries, trial balance, BRS, Tally Prime, and Google Sheets <b>(Understanding)</b><br><b>CO2:</b> Apply financial reporting principles to prepare statements and analyze annual reports for corporate decisions. <b>(Applying)</b><br><b>CO3:</b> Analyse financial statements using ratio analysis, DuPont analysis, and forecasting for business intelligence and decision-making. <b>(Analyzing)</b><br><b>CO4:</b> Apply strategic cost and budgetary techniques to prepare budgets and support managerial financial decision-making. <b>(Applying)</b><br><b>CO5:</b> Analyze contemporary accounting practices using digital systems, AI, sustainability reporting, and startup budgeting techniques effectively. <b>(Analyzing)</b> |                |            |             |   |   |
| Course Objectives:                                                                                                                                                                                                                                                                                                                                                                                                                                                       | This course is aimed at <b>Skill Development</b> , in Financial Accounting and Reporting, by using <b>Participative Learning</b> activities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |            |             |   |   |
| Module 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Foundations of Financial & Digital Accounting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Lecture Method | Understand | 13 Sessions |   |   |
| Introduction to Accounting, Branches of Accounting, Generally Accepted Accounting Principles, Accounting Entries, Accounting equation, Recording and processing of financial transactions, Preparation of Trial Balance, Introduction to IND-AS and IFRS, Accounting ethics and transparency, BRS, Depreciation Accounting– Causes – Methods of Calculating Depreciation – Straight Line Method, Diminishing Balance Method , (Use the excel sheet for problem solving). |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |            |             |   |   |

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| Practical Problem:- Accounting Entries, Ledger, Trial Balance, BRS, Depreciation, <b>Tally Prime overview/demo, Google Sheets for accounting</b>                                                                                                                                                                                                                                                                                                                                                                                         |                                                        |                         |              |             |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Corporate Financial Reporting &amp; Disclosure</b>  | Participative Learning  | Apply        | 13 Sessions |
| Financial Statements, its components, Preparation of Corporate Financial Statements (IND-AS-1) - Statement of Profit and Loss, and Balance sheet with basic adjustments, Notes to Accounts, Statement of changes in equity, Statement of Cash Flow by indirect method (IND-AS-7). Annual Report Analysis, Practical Problem:- Statement of Profit and Loss, and Balance sheet with basic adjustments, Notes to Accounts, Cash Flow Statement, Analysis of listed company annual reports, Preparation of financial statements using Excel |                                                        |                         |              |             |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Financial Analytics &amp; Business Intelligence</b> | Group Discussion        | Analyze      | 11 Sessions |
| Horizontal and Vertical Analysis of Balance sheet and income statement, Ratio analysis- Liquidity, Profitability, Solvency, Turnover and Market test ratios, DuPont Analysis, Financial forecasting, Business analytics in accounting (Use the excel sheet for problem solving). Practical Problem:- Analysis of Balance sheet and income statement, Common Size, Trend and Comparative Analysis, Excel ratio analysis automation, Financial forecasting models.                                                                         |                                                        |                         |              |             |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Strategic Cost &amp; Budgetary Management</b>       | Skill based Learning    | Apply        | 13 Sessions |
| Cost and its classification, budgetary control- preparation of Cash budget and Flexible budget, Zero-Based Budgeting, Performance Budgeting, Budgeting for startups, Practical Problem:- Cash budget and Flexible budget, Budget preparation in Excel.                                                                                                                                                                                                                                                                                   |                                                        |                         |              |             |
| <b>Module 5</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Contemporary issues in Accounting</b>               | Experiential Learning   | Mini Project | 10 Sessions |
| Digital Accounting Systems, Cloud Accounting concepts, AI and Automation in Accounting, Integrated Reporting, Sustainability reporting basics, Segment reporting. Budgeting for startups.                                                                                                                                                                                                                                                                                                                                                |                                                        |                         |              |             |
| <b>Targeted Application &amp; Tools that can be used:</b> This course equips MBA students with practical knowledge and skills required for careers as financial analyst, Accounts officer, credit risk analyst, corporate accounting analyst.<br><b>Microsoft Excel:</b> Financial statement analysis, Ratio analysis, Cash flow forecasting, Credit scoring models, Sensitivity and scenario analysis<br><b>Microsoft Power BI:</b> Growth analysis, Data visualization<br><b>Tableau:</b> Presenting accounting and financial insights |                                                        |                         |              |             |
| <b>Textbook (T1)</b><br>1. Weygandt, J. J., Kimmel, P. D., & Mitchell, J. E. (2024). Accounting principles (15th ed.). Wiley. ISBN-13: 978-1-394-24349-5<br><b>Reference Books</b><br>1. Dhamija, S. (2023). Financial accounting for managers (4th ed.). Pearson India. <a href="https://link.ebrpl.com/portal/2On1dr-Vbrg">https://link.ebrpl.com/portal/2On1dr-Vbrg</a><br>2. Atrill, P., & McLaney, E. J. (n.d.). Accounting and finance for non-specialists (11th ed.). Pearson.                                                    |                                                        |                         |              |             |
| Catalogue prepared by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                        | Dr. Pramod Kumar Pandey |              |             |
| Recommended by the Board of Studies on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                        | BOS NO:                 |              |             |
| Date of Approval by the Academic Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                        |                         |              |             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                       |                           |   |             |   |   |
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| Course Code:<br>MBA4006                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Course Name:</b> Marketing Management - Theories and Practices<br><b>Course Type:</b> Theory                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                       | L - T - P - C             | 3 | 0           | 0 | 3 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                       |                           |   |             |   |   |
| <b>Course pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                       |                           |   |             |   |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                       |                           |   |             |   |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              | This course introduces students to the principles and practices of contemporary marketing management. It focuses on understanding customer needs, creating customer value, developing marketing strategies, and making decisions related to product, pricing, distribution, and promotion. The course integrates traditional marketing concepts with emerging trends such as digital marketing, customer experience management, and technology-enabled marketing. Through case studies, projects, and participative learning activities, students will develop analytical and managerial skills required to address real-world marketing challenges. On completion of this course students would have acquired the capacity to critically think, identify marketing issues, draft marketing plans, draw data-driven decisions. |                                       |                           |   |             |   |   |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>On successful completion of the course the students shall be able to:</b><br><b>CO 1: Explain</b> fundamental marketing concepts and consumer behaviour influencing marketing decisions. (Understanding)<br><b>CO 2: Develop</b> product and branding strategies for competitive advantage. (Applying)<br><b>CO 3: Analyze</b> pricing and distribution decisions in diverse market contexts. (Analyzing)<br><b>CO 4: Evaluate</b> integrated marketing communication campaigns using traditional and digital media. (Evaluating)                                                                                                                                                                                                                                                                                           |                                       |                           |   |             |   |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                | This course is aimed at <b>SKILL DEVELOPMENT</b> , in Marketing Management, by using <b>PARTICIPATIVE LEARNING</b> activities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                       |                           |   |             |   |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                       |                           |   |             |   |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Concepts of Marketing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Case Study (Participative Learning)   | Assessment 1 – Quiz       |   | 12 Sessions |   |   |
| <b>Topics:</b> Concept of Marketing, Needs, Wants and Demand, Nature & Importance of Marketing, 5 Philosophies of Marketing Management, Green Marketing. Marketing Mix, Marketing Environment – Macro and Micro Environment.<br>Factors influencing Consumer Behaviour, Consumer Buying Decision Process, Market Segmentation and Bases of segmentation, Targeting Strategies, Concept of Positioning. Customer Value & Satisfaction, Customer Lifetime value, Relationship Marketing. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                       |                           |   |             |   |   |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Product</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Presentation (Participative Learning) | Assessment 2 – Assignment |   | 11 Sessions |   |   |

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| <b>Topics:</b> Product – Meaning, Product Mix – Product Line, Length and Depth, Product Line Analysis & Decisions, Product Innovation, New Product Development - Product Life Cycle (PLC) – PLC Strategies, Product vs. Brand, Benefits of Branding, Brand Positioning, Brand Equity, Fifth 'P' - Packaging and Labelling.                                                                                                                                                                                              |                                                     |                                           |                              |             |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Price &amp; Place</b>                            | Case study (Participative Learning)       | Assessment 3 – Case Analysis | 11 Sessions |
| <b>Topics:</b><br>Pricing – Importance of Pricing, Setting the Price, Pricing Objectives, and Steps in Pricing, Types of Pricing – Dynamic Pricing, Psychological Pricing. Practice exercises in pricing.<br>Place - Marketing Channels and their roles, Functions of a channel partner, Types of channels, Levels, Channel Design decisions, Channel Conflict: Reasons and resolution. Omnichannel Marketing, E-Commerce Distribution, Organized Retail.                                                               |                                                     |                                           |                              |             |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Promotion &amp; Technology-Enabled Marketing</b> | Group Discussion (Participative Learning) | Assessment 4 – Mini Project  | 11 Sessions |
| <b>Topics:</b><br>Promotion Mix - Advertising, Sales Promotion, Events & Experiences, Direct Marketing and Public Relations & Publicity, Personal Selling – Pros & Cons. Integrated Marketing Communications (IMC) – Traditional & Digital Marketing, social media - Steps in Promotional Planning - Media Planning, Budgeting, Ad Campaign development.<br>Managing consumer journey & experiences using technology – concepts & use cases, AI in Marketing, CRM, Marketing Automation, Marketing Metrics & Analytics. |                                                     |                                           |                              |             |
| <b>Targeted Application &amp; Tools that can be used:</b><br>Canva, Google Forms, ChatGPT, Gemini, Claude, Meta Business Suite, Google Trends, HubSpot CRM & all social media Platforms (Instagram, Facebook, LinkedIn, X, YouTube).                                                                                                                                                                                                                                                                                    |                                                     |                                           |                              |             |
| <b>Reference books</b><br><b>Text Book</b><br><b>T1:</b> Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2020). Marketing Management: A South Asian Perspective (15th ed.). Pearson Education.<br><b>References</b><br><b>R1:</b> Aaker, D. A., & Moorman, C. (2023). Strategic Market Management (12th ed.). Wiley.<br><b>R2:</b> Kotler, P., Kartajaya, H., & Setiawan, I. (2021). Marketing 5.0: Technology for Humanity. Wiley.                                                                                    |                                                     |                                           |                              |             |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Dr. Chithambar Gupta V<br>School of Management      |                                           |                              |             |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | BOS NO:                                             |                                           |                              |             |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 27 <sup>th</sup> Academic Council Meeting held on   |                                           |                              |             |

## Semester 2:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                      |                             |   |                 |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------|---|-----------------|---|---|
| Course Code:<br>MBA4008                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Course name: Business Research Methods</b><br><b>Course type: Program Core</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                      | L- T - P- C                 | 3 | 0               | 0 | 3 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                      |                             |   |                 |   |   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Business Statistics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                      |                             |   |                 |   |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                      |                             |   |                 |   |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Business Research Methods provides the theoretical and practical base for a straightforward research project such as a term paper in any of the elective courses. It consists of modules, which cover the fundamentals of the research proposal, literature review, and qualitative and quantitative methods. The course first emphasizes the research process and the importance of the literature review. It then focuses upon the appropriateness of specific research methods, sources of business information, methods of data capture, questionnaire design, types of sampling, introduction to qualitative methods of research, preparation of project proposal. Elements of statistical inference, hypothesis testing, introduction to multivariate statistics, parametric & non- parametric tests. Students are encouraged to critically evaluate different strategies and methods by identifying both the strengths and weaknesses of qualitative and quantitative methods. |                                                                                      |                             |   |                 |   |   |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CO1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Apply the relevant business research methods for solving business research problems. |                             |   | Apply           |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CO2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Use appropriate data collection methods to carry out business research.              |                             |   | Apply           |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CO3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Employ suitable measurement techniques and sampling designs to elicit data.          |                             |   | Apply           |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CO4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Analyse the data using appropriate statistical tools.                                |                             |   | Analyse         |   |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The course aims at SKILL DEVELOPMENT with experiential problem-solving activities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                      |                             |   |                 |   |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                      |                             |   |                 |   |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Introduction to Business Research Methods</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Experiential learning</b>                                                         | <b>Review of Literature</b> |   | <b>12 hours</b> |   |   |
| Role of business research – applied and basic business research – managerial value of business research. Theory building – research concepts, constructs, propositions, variables and hypotheses – the scientific method of conducting research. The business research process – types of business research – exploratory, descriptive and causal. Stages in the research process. Review of literature. Problem definition process, research objectives, questions and hypotheses. The research proposal |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                      |                             |   |                 |   |   |

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| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Data Collection Methods and Qualitative Research</b>        | <b>Experiential learning</b> | <b>Quiz</b>            | <b>12 hours</b> |
| Primary data – survey research – errors in survey research – survey research methods. Personal interviews – telephone interviews – self-administered questionnaires. Observation methods. Secondary data – advantages, disadvantages and sources. Qualitative research – uses, orientations to qualitative research. Techniques in qualitative research – Focus group interview, depth interviews.                                                                                                                                                                                                                                                                           |                                                                |                              |                        |                 |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Measurement Concepts, Questionnaire design and Sampling</b> | <b>Experiential learning</b> | <b>Mini Project</b>    | <b>12 hours</b> |
| Introduction – variables – constructs – measurement scales – nominal, ordinal, interval and ratio. Criteria for good measurement – reliability and validity. Attitude measurement – attitude rating scales – Likert scale, semantic differential scale. Questionnaire design – Basic considerations – wording questions – guidelines for constructing questions – questionnaire layout. Sampling – population, sample, sampling frame, sampling units, sampling and non – sampling errors. Non – probability sampling – convenience, judgment, quota and snowball sampling. Probability sampling – simple random sampling, systematic sampling, stratified sampling methods. |                                                                |                              |                        |                 |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Hypothesis Testing, Data Analysis and report writing</b>    | <b>Experiential learning</b> | <b>Problem solving</b> | <b>9 hours</b>  |
| Testing of hypothesis – test for two means – known variances and unknown but equal variances, paired t test, test for two proportions. Chi square test for independence of attributes. Introduction to multivariate data analysis. Report writing – report format – parts of the report.                                                                                                                                                                                                                                                                                                                                                                                     |                                                                |                              |                        |                 |
| <b>Targeted Application &amp; Tools that can be used:</b> Microsoft Excel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                |                              |                        |                 |
| <b>Reference books</b><br><b>Text Book(s):</b><br><b>T 1: Zikmund, W. G., Babin, B. J., Carr, J.C. &amp; Griffin, M. Business Research Methods: A South Asian Perspective. Delhi: Cengage Learning. 2019</b><br><b>Reference Book(s):</b><br><b>R 1: Anderson, Sweeney, Williams, Camm and Cochran. Statistics for Business and Economics. Delhi: Cengage</b><br><b>R2: Naresh K Malhotra and Satyabhushan Das. Marketing Research – An Applied Orientation, 7<sup>th</sup> edition, Pearson.2025</b>                                                                                                                                                                        |                                                                |                              |                        |                 |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Dr. Jayakrishna Udupa H<br>School of Management – PG           |                              |                        |                 |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                |                              |                        |                 |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                |                              |                        |                 |

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| Course Code:<br>MBA4010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Course Name: Digital Marketing<br>Course Type: Theory                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | L-T-P -C                            | 2          | 1                      | 0 | 3 |
| Version No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |            |                        |   |   |
| Course pre-requisites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Marketing Management                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                     |            |                        |   |   |
| Anti-requisites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |            |                        |   |   |
| Course Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | This course provides a hands-on introduction to the field of digital marketing. Students will learn to build digital infrastructure (web and social), plan and implement paid and owned media strategies, and apply contemporary tools like Search Engine, mobile, email, and AI-based marketing. Designed with a progressive structure, learners begin by creating a brand website, then enhance discoverability using SEO, SEM and organic tools, followed by campaign execution via paid media and finally, integrating cutting-edge direct and AI-led marketing innovations. |                                     |            |                        |   |   |
| Course Out Comes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>On successful completion of the course the students shall be able to:</b><br><b>CO 1: Apply</b> Digital Marketing core concepts, significance of digital presence, digital tools, platforms and best practices. (Applying)<br><b>CO 2: Apply</b> SEO and content strategies to enhance online discoverability. (Applying)<br><b>CO 3: Analyze</b> different paid media platforms and cross-channel ad campaigns. (Analyzing)<br><b>CO 4: Create</b> mobile, email, affiliate campaigns using AI-based tools as unified marketing strategy. (Creating)                         |                                     |            |                        |   |   |
| Course objective                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | This course is aimed at <b>SKILL DEVELOPMENT</b> , in Digital Marketing, by using <b>PARTICIPATIVE LEARNING</b> activities.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |            |                        |   |   |
| Course Content:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                     |            |                        |   |   |
| Module 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Fundamentals of Digital Marketing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Assignment (Participative Learning) | Case Study | 12 Sessions (8L + 4T ) |   |   |
| <b>Topics:</b> Introduction to Digital Marketing-Traditional Vs Digital Marketing, Digital Marketing Framework, Inbound, Outbound and Interactive Digital Marketing. SEO Fundamentals: Importance of Search Engine, Keyword Research & Planning, Keyword Research Tools, Types of Keywords and match types, SEO Classification - On-page, Off-page, Technical SEO, Link Building, Crawling, Indexing. Page Ranking - Page Rank Algorithm, Search Behavior, Search Engine Result Page (SERP), Persona Building, Key Performance Indicators, Introduction to Wordpress and its applications |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                     |            |                        |   |   |
| Module 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Search Engine Marketing (SEM) and DDA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Assignment (Participative Learning) | Article    | 11 Sessions (8L + 3T)  |   |   |
| <b>Topics:</b> Introduction to Search Engine Marketing (SEM), Pay per Click (PPC) – Key Concepts, Benefits, Goals, and Google Ad Words ranking formula, Cookies – Legal Aspects, CTA, Google Display Network (GDN), Factors contributing quality score, PPC Process, SEO vs. SEM, Google Ad Words Account & Campaign, Types of Digital Display Ads - Search, Display and Video, Allocating Budgets, Types of Remarketing, Real Time Bidding , Ad Scheduling.                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                     |            |                        |   |   |

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| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Social Media Marketing</b>                     | Assignment using E Library (Participative Learning) | Analyze and evaluate a brand's organic and paid digital strategies. | <b>11 Sessions (8L + 3T)</b> |
| <b>Topics:</b> Social Media Marketing – Introduction, Classification of Social Media Tools, Importance, Media Types and three key players, Social Media Channels and Tactics - (Whatsapp, Facebook, Instagram, LinkedIn, X, YouTube), Create a Business Page / Company Page, Organic Reach Vs. Paid Advertisements, Social Media tactics, Plug-ins, Social Media Tools, Blogs, Social Media goals, Whatsapp Business, ORM (Online Reputation Management).                                                                                                            |                                                   |                                                     |                                                                     |                              |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>AI-Driven Digital Marketing</b>                | Project (Experiential Learning)                     | Design and execute a multi-platform campaign.                       | <b>11 Sessions (8L + 3T)</b> |
| <b>Topics:</b> AI in Marketing: ChatGPT Applications, Canva AI, Chatbots, Predictive Content, Personalization, Voice Assistants, Mobile Marketing – Types, Tools and Techniques, SMS- Push notifications - Email Marketing – Tools and Techniques, Introduction to Content Marketing, Influencer Marketing and Affiliate Marketing, AR/VR Marketing Trends, Final Campaign Showcase & Reflection.                                                                                                                                                                    |                                                   |                                                     |                                                                     |                              |
| <b>Targeted Application &amp; Tools that can be used:</b> Social Media Platforms - Facebook, Instagram, LinkedIn, Twitter, YouTube. Tools – Wordpress, Asharefs, Mailchimp, SEMrush, UberSuggest, Google Trends, ChatGPT, Gemini, Perplexity, Grok, Meta AI, Canva, Lumen 5, Copy.ai, CoPilot, Jasper                                                                                                                                                                                                                                                                |                                                   |                                                     |                                                                     |                              |
| Text Book:<br><b>T1:</b> Gupta, Seema. <i>Digital Marketing</i> (3rd Edition, 2022). McGraw Hill Education. ISBN: 9789355320483<br><b>T2:</b> Bhatia, Puneet Singh. <i>Fundamentals of digital marketing (3rd ed.)</i> . Pearson. ISBN: 9789357054928<br><b>References</b><br><b>R1:</b> Sachdev, Raj. (2024). <i>Digital marketing</i> . McGraw Hill Education. ISBN: 9781264608690<br><b>R2:</b> Chaffey, Dave, & Ellis-Chadwick, Fiona. (2022). <i>Digital marketing: Strategy, implementation and practice</i> (8th ed.). Pearson Education. ISBN: 9781292400969 |                                                   |                                                     |                                                                     |                              |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Dr. Chithambar Gupta V<br>School of Management    |                                                     |                                                                     |                              |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | BOS NO:                                           |                                                     |                                                                     |                              |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 27 <sup>th</sup> Academic Council Meeting held on |                                                     |                                                                     |                              |

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| Course Code:<br>MBA4011      | <b>Course name: Corporate Finance</b><br><b>Course type: PC</b>                                                                                                                                                     | L- T - P- C | 2 | 1 | 0 | 3 |
| <b>Version No.</b>           | 1.0                                                                                                                                                                                                                 |             |   |   |   |   |
| <b>Course Pre-requisites</b> | Nil                                                                                                                                                                                                                 |             |   |   |   |   |
| <b>Anti-requisites</b>       | Nil                                                                                                                                                                                                                 |             |   |   |   |   |
| <b>Course Description</b>    | This course introduces the core concepts of corporate finance, focusing on financial decision-making related to investment, financing, and dividend policies. It develops analytical skills in time value of money, |             |   |   |   |   |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | cost of capital, capital budgeting, capital structure, and working capital management using numerical problems and case studies. The course enables students to evaluate financial alternatives and make value-maximizing decisions in organizations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |                   |                    |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                               | <ol style="list-style-type: none"> <li>1. Explain objectives of finance, agency issues and time value of money. (L2 <b>Understanding</b>)</li> <li>2. Demonstrate the application of cost of capital concepts and EBIT–EPS analysis in making capital structure decisions. (L3 <b>Applying</b>)</li> <li>3. Analyze capital investment alternatives by applying capital budgeting techniques, including PBP, NPV, IRR, ARR, and PI, to assess project feasibility and make informed investment decisions (L4 <b>Analyzing</b>)</li> <li>4. Analyze working capital concepts and their role in maintaining organizational liquidity, and estimate working capital requirements for effective financial management (L4 <b>Analyzing</b>)</li> </ol> |                   |                   |                    |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                               | The course aims at <b>Skill Development</b> with respect to Corporate Finance with <b>Participative learning</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   |                   |                    |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                   |                    |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Introduction to Finance and Time Value of Money</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Assignment</b> | <b>Case study</b> | <b>10 Sessions</b> |
| (Definition and Scope of Finance, Financial Manager's role, Financial Goal: Profit Maximization Vs Wealth Maximization, Agency Problems: Managers' Vs Shareholders' Goal, Ethics in Finance, Time Value of Money Future Value of a single cash flow, Present value of a single cash flow, Present value of an annuity due, Present value of a perpetuity, Loan amortization schedule, Problems on each sub topics. Case Study                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                   |                    |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Cost of Capital and capital structure planning</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Assignment</b> | <b>Case study</b> | <b>13 Sessions</b> |
| Long-term sources of finance: Bonds, Debentures, Preference shares and Equity shares. Cost of Capital – Meaning, Capital Asset Pricing Model, Weighted Average Cost of Capital (WACC) Factors Determining Capital Structure, EBIT-EPS Analysis, Leverages - Operating Leverage, Financial Leverage, Combined Leverage; Concept and Significance of Dividend Decision, Forms of Dividends: Cash Dividend, Bonus Shares, Share Split, Reverse Split, Buyback of Shares. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                   |                    |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Capital Budgeting</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Quiz</b>       | <b>Case study</b> | <b>12 Sessions</b> |
| Meaning and nature, Process of capital budgeting, kinds of capital budgeting decisions, Cash flow for investment analysis, Evaluation Techniques - Pay Back Period, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index, NPV vs IRR,                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                   |                    |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------|-------------------|--------------------|
| Reinvestment Assumption and Modified Internal Rate of Return (MIRR), NPV vs PI, Mutually Exclusive projects Case study.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                           |                     |                   |                    |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Working Capital Management</b>                         | <b>Presentation</b> | <b>Case study</b> | <b>10 Sessions</b> |
| Working Capital Management – Concepts, Kinds of working capital, Sources of Financing, Commercial Paper, Letter of Credit, Bill Discounting, Factoring, Factors determining working capital, Working capital policies – Conservative, Moderate, Aggressive. Working Capital Estimation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                           |                     |                   |                    |
| <p><b>Targeted Application &amp; Tools that can be used:</b> This course equips students with essential corporate finance concepts that are highly relevant for careers such as <b>Financial Analyst, Corporate Finance Executive</b>, and <b>Cash/Treasury Manager</b>. Students gain practical exposure to financial decision-making processes, including loan EMI calculations, debt-equity mix evaluation, capital budgeting, and cost of capital estimation.</p> <p>To enhance analytical and decision-making skills, students can utilize tools such as <b>MS Excel</b> for financial modelling, EMI computation, ratio analysis, and capital structure evaluation, while <b>Power BI</b> can be used for financial data visualization, dashboard creation, and performance analysis. These tools enrich learning by enabling students to apply theoretical concepts to real-world financial scenarios</p> |                                                           |                     |                   |                    |
| <p><b>Text books:</b><br/> T1: Pandey, I. M. (2025). Financial management (13th ed.). Pearson India Education Services. ISBN 978-9367134092.<br/> T2: Chandra, P. (2022). Financial management: Theory and practice (11th ed.). McGraw-Hill Education. ISBN 978-9355322203.</p> <p><b>Reference Books:</b><br/> R1: Damodaran, A. (2001). Corporate finance: Theory and practice (2nd ed.). John Wiley &amp; Sons.<br/> R2: Brealey, R. A., Myers, S. C., Allen, F., &amp; Edmans, A. (2023). Principles of corporate finance (14th ed.). McGraw-Hill Education. ISBN 9781265074159.</p>                                                                                                                                                                                                                                                                                                                         |                                                           |                     |                   |                    |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Dr. Anitha. S. Yadav, Professor.<br>School of Management. |                     |                   |                    |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                           |                     |                   |                    |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                           |                     |                   |                    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |              |             |          |
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| <b>Course Code:</b><br>MBA4012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Course Title: Human Capital Management</b><br><b>Type of Course: Program Core</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>L</b>       | <b>T</b>     | <b>P</b>    | <b>C</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>3</b>       | <b>0</b>     | <b>0</b>    | <b>3</b> |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |              |             |          |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A Bachelor’s degree in any discipline and basic awareness of Human behavior.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |              |             |          |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |              |             |          |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | This course provides a comprehensive understanding of Human Capital Management with a strategic and practical orientation. It examines the evolution from traditional HRM to HCM, emphasizing workforce planning, talent acquisition, and the use of digital HR technologies. The course covers training and development, performance and potential management, and career growth practices to enhance employee capability. It also focuses on compensation management, employee retention, and attrition management in the Indian context. The course further introduces industrial relations, labour codes, dispute resolution mechanisms, and collective bargaining, enabling learners to manage employment relations effectively in contemporary organizations. |                |              |             |          |
| <b>Course Objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | This course is designed to improve the learners' EMPLOYABILITY SKILLS by using PARTICIPATIVE LEARNING techniques.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |              |             |          |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | On completion of this course, the student will be able to:<br><b>CO1:</b> Explain Human Capital Management concepts and digital HR practices to workforce planning and talent acquisition. (Blooms Level: Understand)<br><b>CO2:</b> Apply training, development, and performance management systems to improve employee capability. (Blooms Level: Apply)<br><b>CO3:</b> Implement compensation planning and retention strategies to reduce employee attrition. (Blooms Level: Apply)<br><b>CO4:</b> Examine labour laws and industrial relations mechanisms in managing employment relations. (Blooms Level: Analyse)                                                                                                                                             |                |              |             |          |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |              |             |          |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Introduction to HCM and Procuring Human Capital</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Assess<br>ment | Quiz<br>Test | 12 Sessions |          |
| <b>Introduction to Human Capital Management:</b><br>Meaning, Scope, Importance, and Functions of HCM; Evolution from HRM to HCM; David Ulrich Model, Contemporary Trends – Workforce Diversity, Hybrid Work, Gig Workforce; Role of Digital HR – Social Media, Artificial Intelligence, Machine Learning, People Analytics, Metaverse, and Robotic Process Automation in HCM.<br><b>Procuring Human Capital:</b><br>Job Analysis – Meaning and Importance; Job Description and Job Specification; Human Resource Planning – Importance and Process; Talent Acquisition and Recruitment – Sources; Selection – Methods, Interviews, Tests, and Test Validity; Employee Orientation and Socialization. (Blooms Level: Understand) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |              |             |          |

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| <p><b>Training and Development:</b> Concept and Types of Training; Training Need Assessment; On-the-Job and Off-the-Job Training Methods; Executive Development; Job Crafting and Career Development.</p> <p><b>Performance and Potential Management:</b> Objectives of Performance Management; Methods of Performance and Potential Appraisal; Post-Appraisal Feedback; Issues and Challenges in Performance Appraisal. [ Blooms level :Apply]</p>                                                                                                                                                                                                                                                                                                                                                         |                                                       |            |                     |             |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Compensation Management and Employee Retention</b> | Assessment | Case Study Analysis | 11 Sessions |
| <p><b>Compensation Administration:</b> Concept and Objectives of Compensation Planning; Strategic Role of Compensation in Human Capital Management; Job Evaluation Methods; Wage and Salary Surveys; Pay Structure and Compensation Components in India; Factors Influencing Compensation; Incentives and Variable Pay; Fringe Benefits.</p> <p><b>Employees' Retention:</b> Concept and Importance of Employee Retention; Employee Attrition – Meaning, Types, and Causes; Calculation of Attrition Rate; Impact of Attrition on Organizational Performance; Role of Engagement, Career Growth, Compensation, and Work-Life Balance in Managing Attrition; Retention Strategies. (Blooms Level: Apply)</p>                                                                                                 |                                                       |            |                     |             |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Industrial Relations and Labour Codes</b>          | Assessment | Group Presentation  | 10 Sessions |
| <p>Concept, objectives, industrial disputes, and changing employment relations in India. Labour Code framework with emphasis on the Industrial Relations Code—trade union recognition, strikes and lockouts, standing orders, and workforce flexibility. Industrial disputes settlement machinery: bipartite, conciliation, and adjudicatory mechanisms. Collective bargaining process and the evolving role of trade unions in the post-Labour Code environment. [ Blooms level: Analyse]</p>                                                                                                                                                                                                                                                                                                              |                                                       |            |                     |             |
| <p><b>Targeted Application &amp; Tools that can be used:</b></p> <ul style="list-style-type: none"> <li>Fundamental exposure to the qualitative and quantitative surveys techniques in: <b>People, Performance and HR Strategy.</b></li> <li>Professionally Used Software: Microsoft excel, SPSS, R software, and qualitative techniques, Tableau, Microsoft Power BI, Skill Assessment Platforms.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                               |                                                       |            |                     |             |
| <p><b>Project work/Assignment: Mention the Type of Project /Assignment proposed for this course:</b></p> <p>Assessment 1 – Quiz - Quiz related to the basic concepts HCM and Procuring Human Capital</p> <p>Assessment 2 – Complete one online course given in the certification section of course plan and submit the certificate.</p> <p>Assessment 3 - Case Study Analysis - Students to submit the case study analysis by selecting any one case out of 5 cases and answer the questions specific to that case and submit a poster presentation.</p> <p>Assessment 4 – Group Presentation</p> <p>Prepare a group presentation on the topic "Evaluating the Implications of the Industrial Relations Code, 2020 on Employer–Employee Relationships and Human Capital Management Practices in India."</p> |                                                       |            |                     |             |
| <p><b>Text Books</b></p> <p>T1: Dessler, G. (2023). Human resource management (17th ed.). Pearson Education. – Comprehensive coverage of HCM foundations, talent acquisition, training, performance, compensation, and digital HR trends.</p> <p>T2: Noe, R. A., Hollenbeck, J. R., Gerhart, B., &amp; Wright, P. M. (2023). Human resource management: Gaining a competitive advantage (13th ed.). McGraw-Hill Education.</p>                                                                                                                                                                                                                                                                                                                                                                              |                                                       |            |                     |             |

– Strategic HCM perspective covering performance management, development, retention, and competitive talent practices.

T3: Sengupta, A. (2024). Human resource management: Concepts, practices, and new paradigms (2nd ed.). Cengage Learning India.

– Indian context, updated with new HR paradigms, recruitment, performance, career management, diversity, and retention.

### Reference Books

R1: Sharma, R. C., & Sharma, N. (2025). Human resource management: Concepts, theories and contemporary practices. Routledge India.

– Up-to-date theory and practices across HR functions, including workforce trends, acquisition, training, performance, compensation, and employee relations. (Routledge)

R2: Milkovich, G. T., Newman, J. M., Gerhart, B., & Nyberg, A. J. (2023). Compensation (14th ed.). McGraw-Hill Education.

– In-depth reference on compensation strategy, incentives, pay structures, and benefits aligned with Module 3.

R3: Monappa, A., Batra, G. S., & Chandra, P. (2023). Industrial relations and labour laws (6th ed.). McGraw-Hill Education India.

– Focused on India's Labour Codes, industrial relations, dispute settlement, collective bargaining, and trade unions.

R4: Srivastava, S. C. (2026). Industrial relations and labour laws (9th ed.). Vikas Publishing House.

R5: Government of India. (2020). Industrial Relations Code, 2020 (updated ed. 2026). Taxmann.

### Web Resources:

#### Web Links:

1. A review of performance measurement: Towards performance management  
<https://puniversity.informaticsglobal.com:2282/ehost/detail/detail?vid=7&sid=41ff6170-e9b6-4fdc-bd4a-bb122d67f0f7%40redis&bdata=JnNpdGU9ZWWhvc3QtbGl2ZQ%3d%3d#AN=18259872&db=i>  
h

2. <https://ocw.mit.edu/courses/15-660-strategic-hr-management-spring-2003/g/>

### Related Articles:

1. **Impact of e-leadership and team dynamics on virtual team performance in a public organization** <https://www.emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/IJPSM-08-2020-0218/full/html>

2. **Managing Diversity In The Workplace: Age, Language And Culture**

<https://www.forbes.com/sites/forbesbusinesscouncil/2021/08/12/managing-diversity-in-the-workplace-age-language-and-culture/?sh=32d35341e954>

3. Case Study: Apigee; People Management Practices and Challenge of growth. (Ivey Publishing-ISBN-H)

### Book - References:

- Becker, B. E., & Huselid, M. A. (2021). High performance work systems and firm performance: A synthesis of research and managerial implications. In The strategic human resource management sourcebook (pp. 123–140). Oxford University Press.

- Schmidt, L. (2021). Redefining HR: Transforming people teams to drive business performance. Kogan Page.

- Madhani, P. M. (2024). Strategic HR analytics: Driving business performance. *ResearchGate*.

[https://www.researchgate.net/publication/377208077 Strategic HR Analytics Drivin  
g Business Performance](https://www.researchgate.net/publication/377208077_Strategic_HR_Analytics_Driving_Business_Performance)

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| <ul style="list-style-type: none"> <li>People Strong. (2023). <i>Performance insights handbook</i>.<br/> <a href="https://www.peoplestrong.com/sg/white_paper/performance-insights-handbook">https://www.peoplestrong.com/sg/white_paper/performance-insights-handbook</a> </li> </ul> |                   |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                           | Dr. Jagdeep Singh |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                          |                   |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                        |                   |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------|---|---|-------------------|
| <b>Course Code: MBA4013</b>                                                                                                                                                                                                                                                                                                         | <b>Course Title: Fundamentals of Business Analytics</b><br><b>Type of Course: Program Core</b><br><b>Theory &amp; Practical Course</b>                                                                                                                                                                                                                                                                                                       |                                                                                | L                                       | T | P | C                 |
|                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                | 1                                       | 0 | 2 | 2                 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                  | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                |                                         |   |   |                   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                        | QNT4111AppliedBusinessStatistics                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                |                                         |   |   |                   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                |                                         |   |   |                   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                           | This course introduces students to the fundamentals of Business Analytics and its role in data-driven decision making. It covers key analytics concepts, types of analytics, business data and metrics, descriptive, diagnostic, and introductory predictive analytics, along with practical applications across business functions. The course emphasizes real-world business problem solving using analytical thinking and interpretation. |                                                                                |                                         |   |   |                   |
| <b>Course Outcomes</b>                                                                                                                                                                                                                                                                                                              | CO1                                                                                                                                                                                                                                                                                                                                                                                                                                          | Explain the fundamentals, types, and lifecycle of Business Analytics           |                                         |   |   |                   |
|                                                                                                                                                                                                                                                                                                                                     | CO2                                                                                                                                                                                                                                                                                                                                                                                                                                          | Identify and classify business problems using appropriate analytics approaches |                                         |   |   |                   |
|                                                                                                                                                                                                                                                                                                                                     | CO3                                                                                                                                                                                                                                                                                                                                                                                                                                          | Analyze business data using various types of analytics techniques              |                                         |   |   |                   |
| <b>Course Objective</b>                                                                                                                                                                                                                                                                                                             | The course aims to develop students’ ability to apply descriptive and diagnostic analytics techniques to real-world business problems while providing conceptual exposure to predictive analytics and forecasting methods. Additionally, it demonstrates how analytics is applied across major business functions such as marketing, finance, human resources, and operations to support data-driven managerial decisions.                   |                                                                                |                                         |   |   |                   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                     | Introduction to Business Analytics                                                                                                                                                                                                                                                                                                                                                                                                           | Assignment using E Library (Participative Learning)                            |                                         |   |   | 9 Hours(3 L +6 P) |
| Evolution of data-driven decision making, What is Business Analytics?, Difference between Business Intelligence and Business Analytics, Types of Analytics, Descriptive Analytics, Diagnostic Analytics, Predictive Analytics, Prescriptive Analytics, Analytics lifecycle and workflow, Role of analytics in competitive advantage |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                |                                         |   |   |                   |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                     | Data, Types,                                                                                                                                                                                                                                                                                                                                                                                                                                 | Data and                                                                       | Class Activity (Participative Learning) |   |   | 9 Hours(3 L +6 P) |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Business Metrics |                                 |                   |
| Understanding business data, Types of data: Structured, semi-structured, unstructured, Qualitative vs quantitative data, Scales of measurement, Data quality issues and data preparation basics, Introduction to Key Performance Indicators (KPIs), Business metrics and dashboards                                                                                                                                                                                                                                                                           |                  |                                 |                   |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                  | Project (Experiential Learning) | 9 Hours(3 L +6 P) |
| Descriptive analytics techniques, Summary statistics for business data, Data aggregation and comparison, Trend and variance analysis, Root cause analysis, Introduction to exploratory data analysis (EDA)                                                                                                                                                                                                                                                                                                                                                    |                  |                                 |                   |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                  | Hands-on with Tools             | 9 Hours(3 L +6 P) |
| What is predictive analytics?, Predictive modeling concepts, Correlation and regression (conceptual understanding), Forecasting fundamentals, Assumptions and limitations of predictive analytics                                                                                                                                                                                                                                                                                                                                                             |                  |                                 |                   |
| <b>Module 5</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                  | Class activity + Quiz           | 9 Hours(3 L +6 P) |
| Marketing analytics (customer segmentation, churn, campaign analysis), Financial analytics (profitability, budgeting, risk basics), Operations and supply chain analytics, Human resource analytics, Ethics and challenges in business analytics                                                                                                                                                                                                                                                                                                              |                  |                                 |                   |
| <b>Targeted Application &amp; Tools that can be used:</b> Microsoft Excel, Google Sheets, Kaggle Datasets                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                                 |                   |
| <b>Project work/Assignment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                  |                                 |                   |
| Assignment 1: Module 1– Quiz<br>Assignment 2: Module 2 - Written Assignment<br>Assignment 3: Module 3 - Case study in<br>Assignment 4: Module 4 - Project Work                                                                                                                                                                                                                                                                                                                                                                                                |                  |                                 |                   |
| <b>Text Book:</b><br>T1:Evans, J. R. (2022). <i>Business Analytics: Methods, Models, and Decisions</i> . Pearson Education.                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                                 |                   |
| <b>Reference Books:</b><br><br><b>R1:</b> Prasad, R. N., & Acharya, S. (2016). <i>Fundamentals of business analytics</i> (2nd ed.). Wiley.<br><br><b>R2:</b> Jaggia, S., Lertwachara, K., Kelly, A., Chen, L., & Guha, A. (2023). <i>Business analytics: Communicating with numbers</i> (2nd ed.). McGraw Hill.<br><b>R3:</b> Albright, S. C., & Winston, W. L. (2015). <i>Business analytics: Data analysis &amp; decision making</i> (7th ed.). Cengage Learning.                                                                                           |                  |                                 |                   |
| <b>Online Resources:</b><br><br><ul style="list-style-type: none"> <li>• Presidency University Digital Library<br/><a href="https://presiuniv.knimbus.com/user#/home">https://presiuniv.knimbus.com/user#/home</a></li> <li>• Kaggle Datasets</li> <li>• IBM Analytics Learning Resources</li> </ul> <b>Research Articles:</b> <ol style="list-style-type: none"> <li>1. Davenport, T. H., &amp; Bean, R. (2023). Big data and AI-driven analytics: Transforming decision-making in organizations. <i>MIT Sloan Management Review</i>, 64(4), 1–9.</li> </ol> |                  |                                 |                   |

2. Sharda, R., Delen, D., & Turban, E. (2024). Business analytics and data-driven decision making: A managerial perspective. *Decision Support Systems*, 176, 114021. <https://doi.org/10.1016/j.dss.2023.114021>.
3. Wamba, S. F., Queiroz, M. M., Trinchera, L., & Fox, G. (2023). Big data analytics capability and business performance: A systematic review and research agenda. *International Journal of Information Management*, 68, 102591. <https://doi.org/10.1016/j.ijinfomgt.2022.102591>

#### **Multimedia (Videos):**

#### **Case Studies:**

- Walmart – Data-driven Inventory Management - <https://superagi.com/real-time-data-enrichment-case-studies-success-stories-from-netflix-uber-and-walmart/>
- Netflix – Analytics-driven Content Recommendation - <https://www.studocu.com/in/document/university-of-mumbai/big-data-analytics/bda-sem-7-tech-neo/108902115>
- Amazon – Customer Analytics and Personalization - <https://www.ithy.com/article/retail-analytics-implementation-case-studies-2693nh4p>
- Uber – Demand Forecasting and Dynamic Pricing - <https://ithy.com/article/analytics-case-studies-9hawx3lg>.

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|------------------------------------------|----------------------------------------------|
| Catalogue prepared by                    | Dr. P. Mary Jeyanthi & Dr. Varalakshmi Dandu |
| Recommended by the Board of Studies on   |                                              |
| Date of Approval by the Academic Council |                                              |

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| <b>Course Code:</b><br><b>MBA4009</b> | <b>Course Title: Applied Data Analysis and Visualization</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>L – T – P – C</b> | <b>1 – 1 – 2 – 3</b> |
| <b>Version No.</b>                    | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                      |
| <b>Course Pre-requisites</b>          | NIL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                      |
| <b>Course Description</b>             | This course introduces students to applied data analysis using spreadsheets and visualization tools to support managerial decision-making. It emphasizes the use of formulae, functions, pivot tables, and dashboards to analyze and interpret business data. Students will learn to apply statistical and financial techniques for forecasting, reporting, and optimization. The course integrates practical lab exercises with real-world datasets to build problem-solving skills. By the end, students will be able to create effective visualizations and analytical models for business impact. |                      |                      |

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| <b>Course Outcomes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | On successful completion of this course the students shall be able to: <ul style="list-style-type: none"> <li>• CO1: <i>Apply</i> spreadsheet operations to manage, format, and organize business datasets for effective analysis.</li> <li>• CO2: <i>Analyze</i> business problems using formulas and functions to derive insights from quantitative and qualitative data.</li> <li>• CO3: <i>Evaluate</i> data through advanced charts, pivot tables, and dashboards to support informed managerial decision-making.</li> <li>• CO4: <i>Create</i> business solutions by integrating advanced Excel tools (Power Query, PowerPivot, VBA) to design models for forecasting and analytics applications.</li> </ul> |                      |                 |               |
| <b>Course Objective:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | To develop students' ability to apply data analysis and visualization techniques using spreadsheets and advanced Excel tools for effective problem-solving and data-driven business decision-making.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      |                 |               |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Introduction to Data Analysis and Spreadsheets</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Lecture , Lab</b> | <b>Apply</b>    | <b>15 hrs</b> |
| Introduction to data analysis, introduction to spreadsheets and excel, entering and editing worksheet data, performing basic worksheet operations, working with excel ranges and tables, formatting worksheets.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 |               |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Formulae and Functions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Lecture , Lab</b> | <b>Analyze</b>  | <b>15 hrs</b> |
| Introducing formulae and functions, formulae for mathematical and text operations, formulae for handling dates and time, formulae for matching and lookup, formulae for statistical analysis, formulae for financial analysis, array formulas, error-free formulae.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 |               |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Data Visualization, Management and Analysis</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Lecture , Lab</b> | <b>Evaluate</b> | <b>15 hrs</b> |
| Getting started with excel charts, creating sparkline graphics, advanced charting techniques, dashboarding and implementing excel dashboarding best practices, introducing pivot tables and pivot charts, analyzing data with pivot tables, analyzing data using goal seeking and solver, analyzing data with the analysis tool pack.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 |               |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Applying analytics to achieve Business impact</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Lecture , Lab</b> | <b>Create</b>   | <b>15 hrs</b> |
| Introduction to PowerPivot and power query, business application of power pivot and query, automating excel using VBA, business application of VBA, business data management applications, customer analytics applications, demand forecasting applications, capstone project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 |               |
| <b>Targeted Application &amp; Tools that can be used:</b> Microsoft Excel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 |               |
| <b>Project work/Assignment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 |               |
| <ul style="list-style-type: none"> <li>• <b>Quiz (Module 1: Introduction to Data Analysis and Spreadsheets)</b><br/>Students will take a quiz on Excel basics, worksheet operations, ranges, and data formatting.</li> <li>• <b>Individual Assignment (Module 2: Formulae and Functions)</b><br/>Apply formulas and functions (mathematical, text, statistical, lookup, financial) on a given dataset to perform meaningful analysis and submit a written assignment with results.</li> <li>• <b>Case Study (Module 3: Data Visualization, Management and Analysis)</b><br/>Analyze a business case dataset using PivotTables, charts, and dashboards. Identify patterns, trends, and provide managerial insights through visualization.</li> <li>• <b>Project / Report Writing (Module 4: Applying Analytics to Achieve Business Impact)</b><br/>Capstone group project: Develop an Excel dashboard integrating Power Query,</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                 |               |

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| PowerPivot, Solver, or VBA. Submit a report demonstrating how the solution can support decision-making in business areas such as sales, HR, marketing, or finance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                              |
| <ul style="list-style-type: none"> <li>Text Books:</li> <li>T1. Mount, G. (2024). <i>Modern data analytics in Excel</i>. Wiley.</li> <li>T2 Fortino, A. (2024). <i>Data visualization for business decisions</i>. Packt Publishing.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                              |
| <b>References:</b> <ol style="list-style-type: none"> <li><b>R1:</b> McKinney, W. (2022). <i>Python for data analysis: Data wrangling with pandas, NumPy, and Jupyter</i> (3rd ed.). O'Reilly Media.</li> <li><b>R2:</b> Gibson, G. (2024). <i>Essential data science and analytics with R and Python</i>. Springer.</li> <li><b>R3:</b> Arab, I. (2024). <i>Marketing analytics dashboards design</i>. Routledge.</li> <li><b>R4:</b> Castro, L. N. de. (2025). <i>Exploratory data analysis: Descriptive analysis, visualization, and dashboard design</i>, Taylor &amp; Francis.</li> <li>Baley, I., &amp; Veldkamp, L. (2025). <i>The data economy: Tools and applications</i>. Princeton University Press.</li> </ol> <b>Web pages</b> <ol style="list-style-type: none"> <li><a href="https://sites.google.com/view/narayanasrikanthreddy/home/student-home-page/mba-1st-sem">https://sites.google.com/view/narayanasrikanthreddy/home/student-home-page/mba-1st-sem</a></li> <li><a href="https://support.microsoft.com/en-gb/office/keyboard-shortcuts-in-excel-1798d9d5-842a-42b8-9c99-9b7213f0040f">https://support.microsoft.com/en-gb/office/keyboard-shortcuts-in-excel-1798d9d5-842a-42b8-9c99-9b7213f0040f</a></li> <li><a href="https://www.linkedin.com/pulse/data-analysis-project-excel-dashboard-anusha-srivastava">https://www.linkedin.com/pulse/data-analysis-project-excel-dashboard-anusha-srivastava</a></li> </ol> <b>PU library E –resource</b> <a href="https://www-sciencedirect-com-presiuniv.knimbus.com/journal/journal-of-computational-mathematics-and-data-science">https://www-sciencedirect-com-presiuniv.knimbus.com/journal/journal-of-computational-mathematics-and-data-science</a> |                                                                              |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Dr. Varalakshmi Dandu</b>                                                 |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | BOS NO: 18 <sup>th</sup> held on 6 <sup>th</sup> June 2025                   |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 26 <sup>th</sup> Academic Council Meeting held on 25 <sup>th</sup> July 2025 |

|                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |   |   |                   |   |
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| Course Code:<br>PPS4010                                                                                                                                                                                                                                                                                                                                                   | <b>Course Title: Corporate Readiness Program – I</b><br>Type of Course: Practical Only Course                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | L- T - P- C | 0 | 0 | 2                 | 0 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                        | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |   |   |                   |   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                              | Students are expected to understand Basic English.<br>Students should have inclination and enthusiasm to involve, participate and learn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |   |   |                   |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                    | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |   |   |                   |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                 | This course is designed to enable students to develop strong behavioural, emotional, and career-readiness capabilities through a structured four-phase journey—Reflect, Innovate, Stimulate, and Elevate. The course focuses on building self-awareness, emotional intelligence, behavioural excellence, career clarity, and professional readiness through experiential learning, self-diagnostic tools (e.g., FIRO-B), simulations, and reflective practices, thereby preparing learners for effective workplace integration and placement success. As a semester-integrated initiative, it bridges academic learning with industry expectations, introducing structured self-awareness early, translating insights into observable behaviours, enabling evidence-based career mapping, and preparing for professional conduct and interviews. |             |   |   |                   |   |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                   | On successful completion of the course the students shall be able to:<br>CO1: Identify career goals using self-diagnostic evidence<br>CO2: Present a professional brand aligned to industry expectations<br>CO3: Demonstrate behavioural excellence in teams, communication, and ethical decision-making                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |   |   |                   |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                   | The objective of the course is to familiarize the learners with the concepts of “Corporate Readiness Program I course” and attain SKILL DEVELOPMENT through PARTICIPATIVE LEARNING techniques, including flipped classroom, activity-based simulations, and real-world applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |   |   |                   |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |   |   |                   |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                           | Reflect                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |   |   | <b>8 Sessions</b> |   |
| Topics: <b>Topics:</b> Strong self-awareness foundation using FIRO-B, Psychological safety and interpersonal needs, Personality, values, and work identity, Emotional intelligence and self-regulation, Resilience, stress management, and professional maturity<br><b>Activity:</b> Self-assessments, guided reflection, facilitated discussions, activities, journaling |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |   |   |                   |   |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                           | <b>Innovate</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |   |   | <b>8 Sessions</b> |   |
| Topics: <b>Topics:</b> Behavioural effectiveness at the workplace, Leadership mind-sets and decision-making, Collaboration, conflict management, and influence skills, Professional ethics and behavioural role modelling<br><b>Activity:</b> Case studies, role plays, group tasks, behavioural simulations                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |   |   |                   |   |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                           | <b>Stimulate</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |   |   | <b>8 Sessions</b> |   |
| Topics: <b>Topics:</b> Career awareness and industry expectations, Career mapping and role targeting, Skill gap analysis and employability alignment, Career action planning<br><br>Activity: Career diagnostics, mapping exercises, mentoring discussions, individual planning                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |   |   |                   |   |

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| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Elevate</b>  |  |  | <b>6 Sessions</b> |
| <p>Topics: <b>Topics:</b> Resume structuring and personal branding, Mock interviews and assessment simulations, Final review, career strategy, and professional closure.</p> <p><b>Activity:</b> Resume labs, mock interviews, assessment center simulations, expert feedback</p> <p><b>Targeted Application &amp; Tools that can be used:</b></p> <p>Interactive Quiz<br/>TED Talks<br/>You Tube Links<br/>Activities<br/>FIRO-B Diagnostic Tool<br/>Reflection Journals<br/>Career Mapping Templates<br/>Resume Builders<br/>STAR Method Guides</p> |                 |  |  |                   |
| <p><b>Project work/Assignment: Mention the Type of Project /Assignment proposed for this course:</b></p> <p><u>Assignment 1:</u> Profile Presentation (e.g., present self-insights from FIRO-B and personal values aligned to career goals).</p> <p><u>Assignment 2:</u> Career Roadmap and Professional Portfolio (e.g., 3-Year Career Map, Skill Action Plan, Updated Resume, and Brand Statement).</p>                                                                                                                                             |                 |  |  |                   |
| <p><b>The topics related to skill development:</b></p> <p>The topics related to soft skills, behavioral skills, emotional intelligence, career readiness, and employability skills for Skill Development through Participative Learning Techniques. This is attained through assessment Component mentioned in course handout.</p>                                                                                                                                                                                                                    |                 |  |  |                   |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Ms. Nirmal Kaur |  |  |                   |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |  |  |                   |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |  |  |                   |

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| Course Code:<br>ENG4001      | Course Title: Global Business Communication<br>Type of Course: Program Core                                                                                                                                                                                                                                                                                                                                                                                        | <b>L</b> | <b>TP</b> | <b>C</b> |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>2</b> | <b>02</b> | <b>3</b> |
| <b>Version No.</b>           | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |           |          |
| <b>Course Pre-requisites</b> | None                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |           |          |
| <b>Anti-requisites</b>       | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |           |          |
| <b>Course Description</b>    | This course equips the business graduates/ students with advanced communication competencies necessary for impactful business presence. It focuses on strategic business communication, cultural awareness, active listening, persuasive writing, personal branding, and business presentation skills. Through experiential activities, case-based learning, and digital tools, learners develop the confidence and executive presence to lead in diverse business |          |           |          |

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| <b>Course Objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <ol style="list-style-type: none"><li>1. Integrate DEI principles and intercultural competencies into leadership and organizational communication to build inclusive practice.</li><li>2. Apply strategic listening, writing, and speaking techniques to produce clear, purpose-fit messages across channels.</li><li>3. Analyze communication processes and cultural/contextual factors to diagnose barriers and select evidence-based remedies.</li><li>4. Create a distinctive personal brand and digital presence aligned with career goals using visual and narrative tools.</li><li>5. Deliver structured, engaging, audience-centred business presentations in in-person and virtual settings.</li></ol> |                                  |                                                    |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>On successful completion of the course the students shall be able to:</p> <ul style="list-style-type: none"><li>• CO1 Apply cross cultural and DEI frameworks to real workplace scenarios.</li><li>• CO2 - Evaluate the clarity, tone, and effectiveness of emails, memos, and minutes, and justify revisions with evidence.</li><li>• CO3 - Develop a coherent personal-brand portfolio that includes a clear branding statement and an optimised digital profile.</li><li>• CO4 - Deliver audience-specific business presentations with logical structure, sound visual design, and confident Q&amp;A.</li></ul>                                                                                           |                                  |                                                    |
| <b>Course Content</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                  |                                                    |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Foundations of Business Communication</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Assessment 1 - Quiz              | Analyze 15 Sessions (Theory and Practice included) |
| <p>Role of communication in an organization – Components – Process – Direction<br/>Diversity, Equity, and Inclusion: Concepts &amp; Challenges - Hofstede’s theory<br/>Cultural Capital and Communication Barriers: Language, Accent, Cultural Codes, Diversity and impediments to cross-cultural Communication<br/>Media Choices, and social media communication</p> <p><b>Activities:</b><br/>Communication Audit: Analyse communication flow and barriers in organizations using case study.<br/>Cultural Simulation Exercise: Role-play scenarios demonstrating communication challenges across different cultural dimensions (Hofstede framework).<br/>Media Choice Matrix: Students evaluate different media for business communication situations and justify their choices.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                  |                                                    |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Strategic Listening and Writing for Business Impact</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Assessment 2 Business Email, MoM | Apply 12 Sessions (Theory and Practice included)   |

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| <p>Listening in Business Contexts- As a strategic tool - Emotional Intelligence and Listening</p> <p>Business Writing Essentials - Principles of Effective Writing (Based on Harvard Business Essentials) - Planning and Drafting Techniques - Business emails, memos, circulars and MoM</p> <p>AI and Business Writing</p> <p><b>Activities:</b></p> <p>Listening Lab: Peer-reviewed listening journals based on simulated team meetings or client interactions.</p> <p>Writing Clinic: Rewrite poorly written emails and memos with justification based on Harvard principles.</p> <p>AI Integration Task: Use AI tools (e.g., Grammarly, ChatGPT, or MS Editor) to revise and optimize business writing, followed by reflection on the role of AI.</p> |                                   |                                            |                                                  |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Personal Brand Development</b> | Assessment 3 – Personal Branding Portfolio | Apply 15 Sessions (Theory and Practice included) |
| <p>Need and Power of Personal Branding - Know Thyself – Crafting Your Brand Core</p> <p>Building a Digital Presence – LinkedIn and Beyond - Managing Your Online Reputation</p> <p>Living the Brand – Resume, Interviews, and Networking</p> <p>Visual Identity and Personal Branding Design</p> <p><b>Activities</b></p> <p>Brand Core Workshop: Create a personal branding statement and vision board.</p> <p>LinkedIn Sprint: Optimize LinkedIn profiles, active engagement and solicit feedback.</p> <p>Mock Networking Event: Simulated interviews and elevator pitches with branding feedback.</p>                                                                                                                                                  |                                   |                                            |                                                  |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Business Presentation             | Assessment 4 – Elevator Pitch              | Apply 18 Sessions (Theory and Practice included) |
| <p>Foundations of Business Presentations - Structuring for Impact – Inclusion of Visual Aids and Slide Design - Handling Q&amp;A and Audience Engagement</p> <p>Types of Business Presentations - Elevator Pitches and Investor Pitches -Sales Presentations and Product Launches, Strategic and Boardroom Presentations - Virtual and Hybrid Presentation Skills</p> <p><b>Activities</b></p> <p>Mini Project: Students choose a business idea, prepare a pitch deck, and present it.</p> <p>Slide Design Challenge: Redesign poor slides for clarity and visual appeal using Canva or PowerPoint.</p> <p>Presentation Lab: Practice virtual and in-person presentations with video-based peer evaluation.</p>                                           |                                   |                                            |                                                  |
| <p><b>Targeted Application &amp; Tools for usage</b></p> <p>Grammarly, <b>Ethical use of</b> ChatGPT, and Microsoft Editor for AI-aided business writing practice)</p> <p>Purdue OWL (Online Writing Lab), Microsoft PowerPoint / Google Slides / Canva</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                   |                                            |                                                  |
| <p><b>Project work/Assignment: Mention the Type of Project assignment proposed for this course</b></p> <p>Quiz, Business Email, MoM, Personal Branding Portfolio, Elevator Pitch Presentation</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                   |                                            |                                                  |
| <p><b>Textbook:</b></p> <p>Cardon, P. W. (2021). <i>Business Communication: Developing Leaders for a Networked World</i> (4th ed.). McGraw-Hill Education.</p> <p>Lesikar, V. R., &amp; Flatley, M. (2017). <i>Business Communication: Making Connections in a Digital World</i> (11th ed.). Tata McGraw Hill.</p> <p>Bovee, C. L., &amp; Thill, J. V. (2018). <i>Business Communication Today</i> (14th ed.).</p>                                                                                                                                                                                                                                                                                                                                        |                                   |                                            |                                                  |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Pearson.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |
| <b>References:</b><br>Hofstede, G. (2011). <i>Dimensionalizing Cultures: The Hofstede Model in Context</i> . Online Readings in Psychology and Culture.<br>Goleman, D. (1995). <i>Emotional Intelligence</i> . Bantam Books.<br>Harvard Business Review. (n.d.). Articles on <i>Listening as a Leadership Tool</i> .<br>Schawbel, D. (2012). <i>Me 2.0: Build a Powerful Brand to Achieve Career Success</i> . Kaplan Publishing.<br>Montoya, P., & Vandehey, T. (2008). <i>The Brand Called You</i> . McGraw-Hill.<br>Barrett, D. J. (2021). <i>Leadership Communication</i> (5th ed.). McGraw-Hill. |                   |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Dr. Pritha Sanyal |
| Recommended by the Board of Studies on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | BOS NO:           |
| Date of Approval by the Academic Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |

Semester 3:

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    |          |          |          |          |
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| Course Code:<br>MBA4015      | <b>Course name: Business Law and Regulatory Compliance</b><br><b>Type of Course</b><br><b>Course type : Program Core</b>                                                                                                                                                                                                                                                                                                                                                                                | <b>L- T - P- C</b> | <b>3</b> | <b>0</b> | <b>0</b> | <b>3</b> |
| <b>Version No.</b>           | 2.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |          |          |          |          |
| <b>Course Pre-requisites</b> | <ul style="list-style-type: none"> <li>Basic understanding of business and management functions, including marketing, finance, and operations.</li> <li>Proficiency in English for reading and interpreting legal and regulatory documents.</li> <li>General awareness of the Indian legal system and the roles of legislative, judicial, and regulatory bodies (recommended but not mandatory).</li> </ul>                                                                                             |                    |          |          |          |          |
| <b>Anti-requisites</b>       | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |          |          |          |          |
| <b>Course Description</b>    | This course provides a comprehensive understanding of the Indian legal and regulatory framework governing business operations. It covers key business laws, including contract law, company law, consumer protection, intellectual property rights, and regulatory compliance requirements. Through case studies and practical applications, students will develop the ability to identify legal risks, ensure compliance, and align business practices with applicable legal and regulatory standards. |                    |          |          |          |          |
| <b>Course Out Comes</b>      | <b>CO1:</b> Interpret the fundamental legal concepts related to the Indian Contract Law, the Sale of Goods Act in business settings.<br><b>CO2:</b> Build the compliance requirements in the formation of a company as outlined in the Companies Act, 2013.<br><b>CO3:</b> Analyze the relevant legal principles to protect the intellectual assets in business under Intellectual Property Rights (IPRs) in India.                                                                                     |                    |          |          |          |          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                         |                           |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>CO4:</b> Assess the provisions under Consumer Protection Act, 2019 to identify consumer rights, to resolve consumer disputes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                         |                           |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>This course is designed for skill development of the learner by using participative learning techniques.</p> <p><input type="checkbox"/> Understand the foundational principles of business law relevant to the Indian legal system, including the laws governing contracts, companies, consumer rights, and Intellectual property rights.</p> <p><input type="checkbox"/> Analyse key statutory and regulatory frameworks applicable to business entities in India, such as the Companies Act, 2013.</p> <p><input type="checkbox"/> Evaluate current intellectual property issues and court decisions, and understand their impact on society and businesses.</p> <p><input type="checkbox"/> Interpret legal provisions and compliance obligations in business scenarios, and identify legal risks and implications of non-compliance.</p> |  |                                                                                                         |                           |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                         |                           |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Introduction to the Indian Legal System and the Indian Contract Act, The Sale of Goods Act, 1930                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Assessment 1 – MCQ Quiz on types of contracts, essentials, breach, and remedies.                        | Understand<br>15 Sessions |
| <p>Sources and classification of Indian law, Essentials of a valid contract under the Indian Contract Act, 1872, Types of contracts and enforceability, Performance and discharge of contracts, Remedies for breach of contract and implications for business.</p> <p>The Sale of Goods Act, 1930: Formation of Contract of Sale, Conditions and Warranties, Performance of Contract, Rights of an Unpaid Seller, "Doctrine of Caveat Emptor.</p> <p>Activity: Real-life business agreement case studies.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                         |                           |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Companies Act -2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Assessment 2 – Project on Life Cycle of a Company (From Incorporation to Winding Up)                    | Understand<br>10 Sessions |
| <p>Definition of Company, Characteristics of a Company, Kinds of Companies, Incorporation of Companies, Memorandum of Association (MoA) &amp; Articles of Association (AoA), Directors: Appointment, Roles &amp; Responsibilities, and grounds for disqualification of Directors, Types of Shares, Corporate Social Responsibility (CSR) under Section 135, Winding up of a Company.</p> <p><b>Vodafone case</b> – Dispute over the indirect transfer of Indian assets by a foreign entity.</p>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                         |                           |
| Module 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Intellectual Property Rights (IPR)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Assessment 3 – Group Activity -Poster Designing on types of IP (patents, trademarks, copyrights, etc.). | Analyse<br>10 Sessions    |
| <p>Intellectual Property Rights (IPR)</p> <p>Trademark Act, 1999: Registration, Infringement, Remedies, Copyright Act, 1957: Protection of literary, musical, artistic works, Patent Act, 1970: Patentability Criteria, Process, Rights of Patentees, Geographical Indications (GIs), meaning and importance of GIs.</p> <p>Activity: Cases to be discussed:</p>                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                         |                           |

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| <input type="checkbox"/> Case: Basmati rice GI dispute<br><input type="checkbox"/> Case: Novartis v. Union of India (patent denial for cancer drug)<br><input type="checkbox"/> Copyright: Music and movie piracy implications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                             |  |                                                                   |                        |
| Module 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Consumer Protection Act -2019               |  | Assessment 4- Case Analysis -Case Laws on Celebrity Endorsements. | Understand 10 Sessions |
| <p>Introduction to Consumer Protection Act, 2019, Key Definitions, Rights of Consumers (Section 2(9)), Consumer Disputes Redressal Agencies, E-Commerce and Consumer Rights, Duties and liabilities of e-commerce entities, Product Liability &amp; Penalties, Liability of manufacturer, seller, and service provider, Conditions under which product liability arises, Penalties for misleading ads (endorser liability, celebrity accountability).</p> <p>Activity: Relevant Case Studies / Examples:</p> <ul style="list-style-type: none"> <li>• Maggi noodles case (misleading advertisement &amp; product safety)</li> <li>• E-commerce refund disputes</li> <li>• Celebrity endorsements leading to misleading promotions</li> <li>• Case studies: Amazon/Flipkart refund complaints</li> </ul> <p>Debate: "Are Indian consumers truly protected in the digital age?"</p> |                                             |  |                                                                   |                        |
| <p><b>Targeted Application &amp; Tools that can be used:</b></p> <ul style="list-style-type: none"> <li>• Case lets and flowcharts to trace offer, acceptance, consideration, etc.</li> <li>• Poster making / Canva: Create awareness posters on types of IP.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                             |  |                                                                   |                        |
| <p><b>Text Books:</b></p> <ol style="list-style-type: none"> <li>1. Kapoor, G. K., &amp; Dhamija, S. (2023). <i>Business and corporate laws</i> (Latest ed.). Taxmann Publications.</li> <li>2. Pathak, A. (2022). <i>Legal aspects of business</i> (7th ed.). McGraw Hill Education.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                             |  |                                                                   |                        |
| <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Government of India. (2021). The Indian Contract Act, 1872: Bare act with illustrations (2021 ed.). Government of India Press.</li> <li>2. Taxmann. (2026). Consumer protection law &amp; practice. Taxmann Publications.</li> <li>3. Bhandari, M. K. (2021). Law relating to intellectual property rights. Central Law Publications.</li> <li>4. LexisNexis. (n.d.). Companies Act, 2013 (5th ed.). LexisNexis India.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                             |                                             |  |                                                                   |                        |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Dr. A. ABIRAMI<br>School of Management – UG |  |                                                                   |                        |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                             |  |                                                                   |                        |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                             |  |                                                                   |                        |

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|-------------------------|----------------------------------------------------------------------------------------------------------------|-------------|---|---|---|---|
| Course Code:<br>MBA4014 | <b>Course name: Business Strategy &amp; Corporate Transformation</b><br><b>Course type: Lecture + Tutorial</b> | L- T - P- C | 2 | 1 | 0 | 3 |
| <b>Version No.</b>      |                                                                                                                |             |   |   |   |   |

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| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Management Concepts and Practices (MBAXXXXX)<br>Micro economics for Managers / Managerial Economics (MBAXXXXX)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>In an era defined by rapid technological disruption and relentless market volatility, the traditional boundaries of corporate strategy are being redrawn. Business Strategy &amp; Corporate Transformation moves beyond static planning to explore how organizations can proactively reinvent themselves to stay relevant and competitive. This course examines how leaders navigate the complex interplay of shifting global competition, socio-political dynamics, and the constant emergence of breakthrough technologies.</p> <p>As a core pillar of Strategic Management, this course empowers students to move from conceptual understanding to executive action. It is designed to equip future leaders with the frameworks necessary to diagnose organizational health, design sustainable business models, and steer successful large-scale transformations.</p> |  |  |  |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>Upon successful completion of the course, the students shall be able to:</p> <p>CO1: Define Business/Corporate Strategy and describe vision and mission statement of an organization (Comprehension)</p> <p>CO2: Identify various factors of competitive advantage (Analysis)</p> <p>CO3 Analyze various generic competitive strategies (Application)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The course serves as an opportunity to develop skills for strategic thinking and analysis, leadership, communication, teamwork, and cross-functional integration. And to enhance <b>employability skills</b> through participative Learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
| <p>Introduction to Strategic Management (7 Theory + 3 Tutorials)</p> <p>Theory Sessions:</p> <p>Definition and origin of Strategy, Basic Model of Strategic Management, Organization Vision and Mission Statement Formulation, Competitive Advantage of Corporate Philanthropy, Corporate Shared Value, Neurostrategy</p> <p>Tutorials: Research Article Reviews, Video Reviews</p> <ol style="list-style-type: none"> <li>1. <a href="https://www.youtube.com/watch?v=iuYIGRnC7J8">https://www.youtube.com/watch?v=iuYIGRnC7J8</a></li> <li>2. How Apple Creates it Competitive Advantage: <a href="https://www.youtube.com/watch?v=0Ne9lIOiVpc">https://www.youtube.com/watch?v=0Ne9lIOiVpc</a></li> <li>3. Put Purpose at the Core of Your Strategy: <a href="https://hbr.org/2019/09/put-purpose-at-the-core-of-your-strategy">https://hbr.org/2019/09/put-purpose-at-the-core-of-your-strategy</a></li> <li>4. Case Study: Aid for the Greyed: HelpAge India in Service</li> <li>5. Case Study: Electolux</li> </ol> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
| <p>Environmental Scanning &amp; Industry Analysis (8 Theory + 4 Tutorials)</p> <p>Theory Sessions: Capabilities and Competencies, Value Chain Analysis: Primary and Secondary Activities; Internal and External environmental analysis: SWOT, PESTEL, VUCA, BEVUCA, Blue Ocean and Red Ocean Strategies.</p> <p>Tutorials:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |

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| 1. External Analysis: PESTEL Framework   Strategic Management<br><a href="https://www.youtube.com/watch?v=3UATm7dluY0">https://www.youtube.com/watch?v=3UATm7dluY0</a><br>2. Examine Tesla's business through SWOT analysis<br><a href="https://www.youtube.com/watch?v=Dws0iwmF5ok">https://www.youtube.com/watch?v=Dws0iwmF5ok</a><br>3. Quiz Assignment<br>4. Case Study: Indian Food Processing Industry<br>5. Case Study: Blue Ocean Strategy of Marvel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                    |  |  |  |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                    |  |  |  |
| Strategy Formulation (8 Theory + 4 Tutorials)<br>Theory Sessions: Generic Competitive Strategies – Cost Leadership, Differentiation, Risks of Generic Strategy; Corporate Strategy – A Manager's Guide; Business Strategy in Turbulent Environment; Design Thinking and Competitive Advantage.<br>Tutorials:<br>1. The Five Competitive Forces That Shape Strategy<br><a href="https://www.youtube.com/watch?v=mYF2_FBCvXw">https://www.youtube.com/watch?v=mYF2_FBCvXw</a><br>2. The Business Strategies Behind Chick-fil-A, Costco, Starbucks and More   WSJ<br><a href="https://www.youtube.com/watch?v=fq6jDxJk1LM">https://www.youtube.com/watch?v=fq6jDxJk1LM</a><br>3. Case Study: Navigating the Fog of India's Drone-as-a-Service Industry<br>4. Case Study:                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                    |  |  |  |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                    |  |  |  |
| Competitive Strategy and Corporate Advantage (7 Theory + 4 Tutorials)<br>Theory Sessions: Competitive Strategy in emerging Industries – mobility barriers, coping with competition; Evolution of Global Industries; How to become a Sustainable Company; Balanced Score Card (BSC); Digital Strategy – SMAC; International Business Strategy – mode of entry in international business.<br>Tutorials:<br>1. Byjus- <a href="https://blog.ipleaders.in/case-study-byjus-recent-acquisition-byjus-build-ed-tech-empire/">https://blog.ipleaders.in/case-study-byjus-recent-acquisition-byjus-build-ed-tech-empire/</a><br>2. Nokia- <a href="https://www.theverge.com/2016/5/25/11766540/microsoft-nokia-acquisition-costs-we-can-discuss-on-Meget&amp;Acquisition">https://www.theverge.com/2016/5/25/11766540/microsoft-nokia-acquisition-costs - we can discuss on Meger &amp; Acquisition</a><br>3. Ford- Lee Iacocca, America's Great Turnaround Artist - <a href="https://www.washingtonpost.com/business/2019/07/03/six-ways-lee-iacocca-transformed-auto-industry/">https://www.washingtonpost.com/business/2019/07/03/six-ways-lee-iacocca-transformed-auto-industry/</a> |                                                                                                    |  |  |  |
| <b>Targeted Application &amp; Tools that can be used:</b> N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                    |  |  |  |
| <b>TEXT BOOKS:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                    |  |  |  |
| 1. Bhandari & Verma: <i>Strategic Management - A Conceptual Framework</i> , McGraw Hill Higher Education, New Delhi, India.<br>2. Strategic Management Concepts and Cases: A Competitive Advantage Approach, Fred R. David Francis Marion University Florence, South Carolina, THIRTEENTH EDITION<br>Strategic Management CONCEPTS AND CASES, Fred R. David Francis Marion University Florence, South Carolina Prentice Hall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                    |  |  |  |
| <b>REFERENCE BOOKS:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                    |  |  |  |
| 1. Michael E. Porter: <i>Competitive Strategy</i> , The Free Press, New York<br>Link: <a href="http://www.mim.ac.mw/books/Michael%20E.%20Porter%20-%20Competitive%20Strategy.pdf">http://www.mim.ac.mw/books/Michael%20E.%20Porter%20-%20Competitive%20Strategy.pdf</a> .<br>2. HBR'S 10 Must Reads on Strategy. Harvard University Press, Boston, Massachusetts Paul Leinwand; Cesare Mainardi. <i>Strategy that works</i> , Harvard University Press, Boston, Massachusetts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                    |  |  |  |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Faculty: Dr. Aurobindo Kiriyaakere, Assistant Professor<br>School of Management – PG (MBA Program) |  |  |  |

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| <b>Recommended by the Board of Studies on</b>   |  |
| <b>Date of Approval by the Academic Council</b> |  |

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| Course Code:<br>PPS4011                                                                                                                                                                       | Course Title: Corporate Readiness Program – II<br>Type of Course: Practical Only Course                                                                                                                                                                                                                                                                                                                                                                                                                                             | L- T - P- C        | 0 | 0 | 2 | 0           |
| Version No.                                                                                                                                                                                   | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |   |   |   |             |
| Course Pre-requisites                                                                                                                                                                         | Students are expected to understand Basic English.<br>Students should have inclination and enthusiasm to involve, participate and learn.                                                                                                                                                                                                                                                                                                                                                                                            |                    |   |   |   |             |
| Anti-requisites                                                                                                                                                                               | NIL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |   |   |   |             |
| Course Description                                                                                                                                                                            | This course enables students to develop a strong foundation in the critical soft skills required to succeed in the corporate environment. It equips learners with the ability to create profile-centric resumes, participate effectively in group discussions, and perform confidently in interviews. Through role-playing exercises, simulations, and experiential learning activities, the course offers a practical and engaging learning environment that bridges the gap between academic learning and workplace expectations. |                    |   |   |   |             |
| Course Objective                                                                                                                                                                              | The objective of the course is to familiarize the learners with the concepts of “Corporate Readiness Program II course” and attain SKILL DEVELOPMENT through PARTICIPATIVE LEARNING techniques.                                                                                                                                                                                                                                                                                                                                     |                    |   |   |   |             |
| Course Out Comes                                                                                                                                                                              | On successful completion of this course the students shall be able to:<br>CO1 Create a profile-centric resume that highlights skills and experiences effectively<br>CO2 <i>Apply</i> effective communication strategies such as clarity, relevance, turn-taking, and active listening during group discussions<br>CO3 Apply effective verbal and non-verbal communication skills, and professional presence during interviews                                                                                                       |                    |   |   |   |             |
| Course Content                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |   |   |   |             |
| Module 1                                                                                                                                                                                      | Corporate Readiness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Classroom Activity |   |   |   | 8 Sessions  |
| Topics: KYC (Know Your Company) and JD (Job Description), resume writing (profile centric), video resume, ATS.<br>Activity: Resume Templates, Peer Feedback, Video Resumes                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |   |   |   |             |
| Module 2                                                                                                                                                                                      | Group Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Mock GD            |   |   |   | 10 Sessions |
| Topics: Types & Purpose of GD, Tips to prepare for GD, GD Phrases and Vocabularies, GOD Technique, Mind mapping, Parameters, Mock GD practice.<br>Activity: Group Activities, Peer Assessment |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |   |   |   |             |

|                                                                                                                                                                                                                                                                                           |                           |         |  |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------|--|-------------|
| Module 3                                                                                                                                                                                                                                                                                  | Personal Interview Skills | Mock PI |  | 10 Sessions |
| <p>Topics: Purpose, Type and Modes of Interview, virtual and offline PI, KYC (Know Your Company) and JD (Job Description), Techniques - STAR, CAR, FAB, Mock PI practice.</p> <p>Activity: Interview Question Bank, Sample JDs, KYC Framework, STAR, CAR, and FAB Technique Templates</p> |                           |         |  |             |
| <p>Targeted Application &amp; Tools that can be used:</p> <ol style="list-style-type: none"> <li>1. Interactive Quiz</li> <li>2. TED Talks</li> <li>3. You Tube Links</li> </ol> <p>Activities</p>                                                                                        |                           |         |  |             |
| <p>Assignment proposed for this course</p> <p>Assignment 1: Text &amp; Video Resume</p> <p>Assignment 2: Personal Interview</p>                                                                                                                                                           |                           |         |  |             |
| <ul style="list-style-type: none"> <li>• Continuous Individual Assessment</li> <li>• Campus to Corporate Mock Drill for each module</li> </ul>                                                                                                                                            |                           |         |  |             |
| <p>The topics related to skill development:</p> <p>Corporate Readiness, Group Discussion, Personal Interview skills for Skill Development through Participative Learning Techniques. This is attained through assessment Component mentioned in course handout.</p>                       |                           |         |  |             |
| Catalogue prepared by                                                                                                                                                                                                                                                                     | Ms. Nirmal Kaur           |         |  |             |
| Recommended by the Board of Studies on                                                                                                                                                                                                                                                    |                           |         |  |             |
| Date of Approval by the Academic Council                                                                                                                                                                                                                                                  |                           |         |  |             |

|                    |                          |                         |    |                     |
|--------------------|--------------------------|-------------------------|----|---------------------|
| <b>Course Name</b> | <b>Summer Internship</b> |                         |    | <b>LTPC 0 0 0 4</b> |
| <b>Course Code</b> | MBA8001                  |                         |    |                     |
| <b>Credits</b>     | 4                        | <b>Report</b>           | 70 |                     |
| <b>Duration</b>    | 2 Months                 | <b>Viva- Voce Marks</b> | 30 |                     |

**Course Outcomes: At the end of the course students will be able to:**

1. Utilize management theories and concepts in practical business environments to solve real-world problems.
2. Gain a comprehensive understanding of industry dynamics, market trends, and business practices.
3. Apply analytical tools and techniques to gather, interpret, and present data to support business decisions.
4. Exhibit leadership qualities and the ability to work collaboratively in teams to achieve organizational objectives.
5. Build professional networks and relationships that can support future career growth and opportunities.

## **Introduction**

A summer internship is a pivotal part of the MBA curriculum, designed to bridge the gap between academic learning and practical application in the business world. It provides MBA students with an invaluable opportunity to immerse themselves in a professional environment, apply management theories to real-world challenges, and gain hands-on experience in their chosen fields.

During the internship, students work closely with industry professionals, exploring the nuances of functional areas such as marketing, finance, human resources, operations, or strategy. This exposure not only enhances their technical and managerial skills but also helps them develop critical soft skills like communication, teamwork, and leadership.

The summer internship serves as a platform for students to explore industry dynamics, understand organizational workflows, and tackle business problems with innovative solutions. It also allows them to build professional networks and gain clarity on their career aspirations, making it an essential step toward their professional growth and success.

Through structured mentorship and project-based learning, MBA students gain the confidence and competence to transition from academia to industry, becoming well-rounded professionals ready to make meaningful contributions to the corporate world.

Summer Internship Project report structure

Guidelines for preparing the Internship Report (IR)

The students need to adhere to the following key points whilst preparing the report:

1. Report should be submitted in Times New Roman font, with font size 12 for content and font size 14-16 for headings and sub headings. Spacing 1.5, Justify
2. The report shall be hard-bound facing sheet **(only white colour)**
3. Number of pages for the report must be between 30 to 40 only
4. Incorporate any specific rules regarding the IR Format and Content that the company requires, including any specified deadlines.
5. Prepare a title page
6. Write a table of contents
7. Include an acknowledgement section
8. Certificate from guide & company to be included
9. Provide company background information
10. Give details of your work responsibilities during the internship
11. Discuss the skills you learned and the experiences you had
12. Write a conclusion, mentioning various ongoing considerations
13. Reference should follow APA referencing.

## **Preparing the Internship Report: Specific Sections / pages**

The students should note that Internship report should contain the following sections:

### **The Title Page**

The first page will be the internship report introduction, and it should include the Project Title and the name of the company. It should also have your name, class and college and internship dates. This information will make it easier for the company staff to identify different reports.

### **The Table of Contents**

The next page of internship project report should be a Table of Contents. This page will give readers a quick overview of everything you have included. It will also make the sections easy for readers to find.

## The Acknowledgement

Begin the internship project report by thanking your advisors and the people at the company who helped you during the training period. You can also mention how they helped you and what you learned in particular from each person.

## Introduction

**Company Overview:** Start with a brief introduction to the company where you interned, including its history, mission, vision, and core values. Mention the industry it operates in and its market position.

**Role and Department:** Describe your role and the department you were part of, including your title and primary responsibilities.

## Internship Objectives

**Personal Goals:** Outline what you aimed to achieve during the internship. This could include specific skills you wanted to develop, knowledge you hoped to gain, or professional experiences you sought.

**Assigned Objectives:** Detail the goals set by the company for your internship. These might include project-specific objectives, performance targets, or learning outcomes.

## Methodology

**Tasks and Projects:** Provide a detailed account of the tasks you were assigned and the projects you worked on. Include descriptions of your daily duties as well as any long-term assignments.

**Tools and Techniques:** Explain the tools, software, and methodologies you used to complete your tasks. Mention any specific training or resources provided by the company.

## Key Findings and Contributions

**Results and Achievements:** Highlight your key accomplishments and the results of your projects. Use data and examples to illustrate your contributions to the organization.

**Challenges and Solutions:** Discuss any challenges you faced during the internship and how you overcame them. This demonstrates problem-solving skills and adaptability.

## Skill Development

**Technical Skills:** Detail any technical skills you developed or improved upon, such as proficiency in specific software, data analysis techniques, or industry-specific tools.

**Soft Skills:** Reflect on the soft skills you gained, such as communication, teamwork, time management, and leadership.

## Impact on Career Aspirations

**Career Insights:** Explain how the internship has influenced your career goals and aspirations. Mention any new interests or career paths you discovered during the internship.

**Networking:** Discuss the professional relationships you built and how they might benefit your future career.

## Conclusion

Summarize your overall experience and reiterate the value of the internship in your academic and professional development. Express gratitude to those who supported you during the internship, including supervisors, colleagues, and mentors.

## Appendices and References

Include any additional documents or materials that support your report, such as project deliverables, presentations, data charts, or references to relevant literature.

### Internship Assessment components

| Internship Component                                                                   | Weightage | Time Period                                                                                             |
|----------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------|
| Weekly Report                                                                          | 10%       | Weekly                                                                                                  |
| Professional Conduct and Feedback(<br>By faculty)                                      | 10%       | 20 <sup>th</sup> August                                                                                 |
| Industry Guide Assessment                                                              | 20%       | 20 <sup>th</sup> August                                                                                 |
| Final Report<br><br>Content -10%<br>Data Collection-10%<br>Analysis and Discussion-10% | 30%       | Draft by 10 <sup>th</sup> September with Plagiarism check<br>Final Report by September 17 <sup>th</sup> |
| Vice Voce<br><br>Presentation -20%<br>Q&A-10%                                          | 30%       | TBA                                                                                                     |
| Pass %                                                                                 |           | 40 (If scored less than 40% , SI should be repeated post IV Semester)                                   |

### The Do's & Don'ts during the Internship Program

1. A student shall conduct the study in an organization assigned by the Placement office of the University or in an organization chosen by the student with the permission of the Placement office of the University or after due discussion with the Internship Coordinator & Project Guide.
2. A Student needs to study the entire organization carefully with special emphasis on the project selected / assigned by the company.
3. If an organization approaches, the student in an unsolicited manner, they should immediately bring it to the notice of their Guide.
4. The students should get their letters of bonafide for the internship signed by their Guides. The guide's decision & guidance shall be considered as the final decision.
5. Students are expected to send their weekly reports and project Diary (2 sheets /week – One sheet on task assigned and expected learning's and Second sheet on actual learning's) every Monday during the tenure of project to respective faculty guide.
6. Students need to be in continuous contact with their faculty guides and update them on the progress of their work.
7. In case the students are absenting themselves from interning companies due to any reasons, they should send an email & provide reasons to both their Industry & faculty guides.
8. The students shall take all consent & approvals from the interning company/ reporting manager before sharing any confidential data & information outside the organization.
9. It is expected that the students shall maintain proper decorum & professional conduct during their period of internship in line with the SoP's laid down by the

interning  
organizations.

10. Faculty will monitor the progress of the students under them based on timely submission of weekly report, submitted abstract, Employer feedback, project diary, Midterm Review and final assessment.
11. In addition, faculty will be visiting the organizations for real time feedback.
12. The students of Batch I are getting a minimum of Eight weeks for their internship. If they are interning in more than one organization, they should complete 2 months of internship in at least one organization
13. The students of Batch II are getting Four weeks for their internship. If they are interning in more than one organization, they should complete 1 month of internship in at least one organization.
14. To the extent possible, projects should be done in Offline mode. The Guide shall use his / her discretion to approve Online Projects.
15. The similarity index in Project Reports should be < 25%

### Table of Activities

The schedule of activities with dates to be adhered to, is provided in the Table below:

| SL. No | Submission                                                        | Deadlines                            |
|--------|-------------------------------------------------------------------|--------------------------------------|
| 1      | First Weekly Report with Proposed Project Abstract+ Project Diary | 1 <sup>ST</sup> Monday after Joining |
| 2      | Weekly Report+ Project Diary                                      | Monday                               |
| 3      | Project rough draft submission + Plagiarism report                | September 10 <sup>th</sup>           |
| 4      | Final Project Submission                                          | September 17 <sup>th</sup>           |
| 5      | Viva                                                              | TBA                                  |

## Semester 4:

|                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                            |              |   |                    |  |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------|---|--------------------|--|---|
| CoursCourse Code:<br>MBA4017                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Course name: Entrepreneurship and Innovation Management</b><br><b>Course type : Core</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                            | L- T - P- C  | 3 | 0                  |  | 3 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                            |              |   |                    |  |   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                        | Basic understanding of management principles and business environment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                            |              |   |                    |  |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                            |              |   |                    |  |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                           | This course provides a comprehensive understanding of entrepreneurship and innovation as critical drivers of economic growth, organizational competitiveness, and societal development. Drawing upon curricula offered by leading institutions such as Harvard Business School, Stanford University, Massachusetts Institute of Technology, Indian Institute of Management Bangalore, and Indian Institute of Technology Bombay, the course equips learners with the knowledge and skills required to identify opportunities, develop innovative business models, launch new ventures, and manage innovation in dynamic environments. Students will explore entrepreneurial ecosystems, design thinking, innovation processes, startup financing, growth strategies, and venture sustainability through case studies, simulations, assignments, and project-based learning. |                                            |              |   |                    |  |   |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <ol style="list-style-type: none"><li>1. Explain the concepts, theories, and ecosystem components of entrepreneurship and innovation management. [Understanding]</li><li>2. Apply entrepreneurial and innovation frameworks to identify opportunities and develop viable business models. [Applying]</li><li>3. Analyze startup financing, innovation processes, and growth strategies to support venture development.[Analyzing]</li><li>4. Evaluate entrepreneurial ventures and innovation initiatives to recommend sustainable and scalable business solutions. [Evaluating]</li></ol>                                                                                                                                                                                                                                                                                  |                                            |              |   |                    |  |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"><li>• To develop an understanding of entrepreneurship, innovation, and entrepreneurial ecosystems.</li><li>• To equip learners with tools for opportunity recognition, business model development, and venture creation.</li><li>• To enhance competencies in innovation management, design thinking, and strategic decision-making.</li><li>• To enable learners to evaluate startup financing, growth, and sustainability strategies.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                         |                                            |              |   |                    |  |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                            |              |   |                    |  |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                     | Foundations of Entrepreneurship and Innovation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Assignment (Participative Learning)</b> | Assignment   |   | <b>11 sessions</b> |  |   |
| Concept and evolution of entrepreneurship, Entrepreneurial mindset and characteristics, Types of entrepreneurships, Role of entrepreneurship in economic development, Innovation: concepts and classifications, Entrepreneurial ecosystem, Startup ecosystem in India, Government initiatives for entrepreneurship, Creativity and opportunity recognition, Innovation and value creation, Case Studies on successful entrepreneurs |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                            |              |   |                    |  |   |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Opportunity Assessment and</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>(Experiential Learning)</b>             | Live Project |   | <b>11 sessions</b> |  |   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                         |                                    |                    |                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------|--------------------|--------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Business Model Development</b>                                       |                                    |                    |                    |
| Opportunity identification and screening, Design thinking approach, Customer discovery and validation, Problem-solution fit and product-market fit, Lean Startup methodology, Business Model Canvas, Value proposition design, Market assessment and feasibility analysis, Business plan preparation, Pitch deck development, Venture ideation workshop                                                                                                                                                                                                                                                                                                  |                                                                         |                                    |                    |                    |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Innovation Management and Venture Growth</b>                         | <b>(Simulation Based Learning)</b> | Group Presentation | <b>11 sessions</b> |
| Innovation management process, Organizational innovation, Open innovation and collaborative innovation, Managing technology and disruptive innovation, Intellectual Property Rights (IPR), Innovation culture and leadership, Startup operations and scaling strategies, Strategic alliances and partnerships, Growth and expansion planning, Case studies of innovative enterprises                                                                                                                                                                                                                                                                     |                                                                         |                                    |                    |                    |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Startup Financing, Sustainability and Entrepreneurial Leadership</b> | <b>(Participative Learning)</b>    | Case Study         | <b>12 sessions</b> |
| Sources of startup finance, Bootstrapping and crowdfunding, Angel investors and venture capital, Financial planning for startups, Risk management in entrepreneurial ventures, Social entrepreneurship and sustainable innovation, ESG and responsible entrepreneurship, Entrepreneurial leadership, Exit strategies and valuation, Emerging trends in entrepreneurship and innovation, Role Play: Investor Pitch and Venture Evaluation                                                                                                                                                                                                                 |                                                                         |                                    |                    |                    |
| <b>Project work/Assignment:</b> Students will ideate, validate, and pitch an original venture using real-world tools. Peer feedback, mentor reviews, and simulation-based learning are integrated.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                         |                                    |                    |                    |
| <b>Text Book</b><br>T1: Hisrich, R.D., Peters, M.P., & Shepherd, D.A. Entrepreneurship (10th ed.) – McGraw-Hill Education<br>T2: Drucker, P.F. Innovation and Entrepreneurship – Harper Business<br>T3: Barringer, B.R., & Ireland, R.D. Entrepreneurship: Successfully Launching New Ventures – Pearson<br>T4: Byers, T., Dorf, R., & Nelson, A. Technology Ventures: From Idea to Enterprise – McGraw-Hill<br><b>Reference books:</b><br>R1: Hisrich, R.D., Peters, M.P., & Shepherd, D.A. Entrepreneurship, McGraw-Hill<br>R2: Osterwalder, A. & Pigneur, Y. Value Proposition Design, Wiley<br>R3: Tidd, J. & Bessant, J. Managing Innovation, Wiley |                                                                         |                                    |                    |                    |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Faculty: Dr R Lathangi<br>School of Management                          |                                    |                    |                    |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                         |                                    |                    |                    |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                         |                                    |                    |                    |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------|---|---|----|---|
| Course Code:<br>MBA4016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Course name: Governance, Business Ethics and ESG Management</b><br><b>Course type : PC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      | L- T - P- C                          | 2 | 1 | 0  | 3 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |                                      |   |   |    |   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |                                      |   |   |    |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |                                      |   |   |    |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | This course equips students with practical knowledge of Corporate Governance, Business Ethics, ESG (Environmental, Social and Governance) and Sustainability in contemporary organizations. Students explore how governance systems, ethical decision-making, responsible leadership and sustainability practices create long-term value for businesses and stakeholders. Through case studies, ESG disclosures, sustainability reports, regulatory frameworks and industry applications, learners develop the ability to evaluate governance challenges, implement responsible business practices and analyze ESG performance. The course emphasizes real-world business scenarios, emerging regulations, stakeholder expectations and sustainable value creation. |      |                                      |   |   |    |   |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CO1) Apply corporate governance principles and governance mechanisms to business situations (Apply).<br>CO2) Apply ethical frameworks and ESG practices to address organizational challenges (Apply).<br>CO3) Analyze sustainability strategies and ESG reporting practices across industries (Analyze).<br>CO4 ) Analyze governance failures, ethical dilemmas and stakeholder impacts to recommend responsible business solutions (Analyze).                                                                                                                                                                                                                                                                                                                      |      |                                      |   |   |    |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | This course is designed to improve the learners' <b>EMPLOYABILITY SKILLS</b> by using <b>PARTICIPATIVE LEARNING</b> techniques.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                      |   |   |    |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                      |   |   |    |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Corporate Governance in Practice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CA 1 | Governance audit of a listed company |   |   | 12 |   |
| Governance principles; board structure and responsibilities; independent directors; audit committees; shareholder rights; governance regulations; governance in family businesses and startups; governance risk assessment; board diversity and inclusion (gender diversity, skill-based boards, and inclusive decision-making); governance best practices; stakeholder governance and engagement (balancing shareholder and stakeholder interests in governance decisions); digital governance and cybersecurity oversight (board responsibilities in data privacy, cybersecurity, and digital transformation). |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                      |   |   |    |   |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Business Ethics and ESG Implementation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | CA 2 | ESG action plan for an organization  |   |   | 13 |   |
| Business Ethics – Meaning and Importance; Ethical decision-making models; ethical leadership; codes of conduct; whistleblowing; ESG pillars and materiality; ESG integration into business functions; responsible supply chains; diversity and inclusion; ESG metrics and KPIs; Climate Risk and Carbon Management – Carbon footprint assessment, net-zero strategies, and climate-related business risks; Ethical Challenges in Artificial Intelligence and Digital Business – Responsible AI, data privacy, algorithmic bias, and digital ethics; ESG Assurance                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                      |   |   |    |   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                               |      |                                         |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------|-----------------------------------------|----|
| Monitoring, and Continuous Improvement – Internal controls, audits and performance improvement mechanisms.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                               |      |                                         |    |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Sustainability Strategy and Reporting                         | CA 3 | Sustainability report analysis.         | 10 |
| Triple Bottom Line; SDGs; circular economy; sustainable business model sustainability reporting standards -(GRI, ISSB, BRSR); stakeholder engagement; analysis of sustainability reports; Green Finance and Sustainable Investments – ESG investing, green bonds, sustainability-linked financing, and responsible capital allocation; Resource Efficiency and Sustainable Operations – Energy management, waste reduction, water stewardship, and sustainable procurement practices; Sustainability Performance Measurement and Benchmarking – Developing sustainability scorecards, KPIs, dashboards, and benchmarking against industry leaders;                                                                                                                                              |                                                               |      |                                         |    |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Governance Failures, ESG Risks and Sustainable Value Creation | CA 4 | Case analysis and boardroom simulation. | 10 |
| Corporate scandals; greenwashing; ESG controversies; risk governance; responsible investment; stakeholder capitalism; integrated value creation; emerging trends in AI ethics and responsible business; Board Oversight of ESG and Sustainability Risks - Role of boards in monitoring ESG performance, sustainability targets, and risk mitigation; Corporate Accountability and Transparency - Disclosure practices, ethical reporting, accountability mechanisms, and stakeholder trust; Crisis Management and Reputation Risk - governance failures and ESG incidents impact; corporate reputation and business continuity; Business Resilience and Sustainable Risk Management – Evaluating environmental and social risks, scenario planning, and building resilient business strategies. |                                                               |      |                                         |    |
| <b>Targeted Application &amp; Tools that can be used:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                               |      |                                         |    |
| <b>Reference books</b><br><b>T1. Business Ethics: Ethical Decision Making and Cases</b><br><b>O.C. Ferrell, John Fraedrich &amp; Linda Ferrell</b><br>Cengage Learning, Latest Edition<br><b>T2. Corporate Governance: Principles, Policies and Practices</b><br><b>A.C. Fernando &amp; K.P.M. Fernando</b><br><b>Pearson Education, Latest Edition</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                               |      |                                         |    |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Dr. Akhila R Udupa<br>Faculty<br>School of Management – PG    |      |                                         |    |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                               |      |                                         |    |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                               |      |                                         |    |

|                    |                                              |                              |    |
|--------------------|----------------------------------------------|------------------------------|----|
| <b>Course Name</b> | <b>Dissertation in the Chosen Discipline</b> |                              |    |
| <b>Course Code</b> | MBA8001                                      |                              |    |
| <b>Credits</b>     | 6                                            | <b>CIE Marks</b>             | 60 |
| <b>Duration</b>    | 16 weeks                                     | <b>SEE Marks(Viva- Voce)</b> | 40 |

**Program Outcomes:**

- PO 1 : An ability to lead themselves and others to achieve organizational goals contributing effectively to a team environment.
- PO 2 : An ability to integrate functional knowledge and apply managerial skills in changing business environment.
- PO 3 : An ability to identify real life problems in different management functions and solve them through strategic planning, critical thinking and innovation.
- PO 4 : An ability to identify and evaluate business ideas and opportunities.
- PO 5 : An ability to make data driven decisions and effectively communicate to different stakeholders.
- PO 6 : An ability to evaluate and integrate ethical and societal considerations when making business decisions.
- PO 7 : An ability to demonstrate commitment to continuous learning.

PSO 1: Demonstrate advanced domain specific knowledge to make informed business decisions.

PSO 2: Apply management theories and tools to solve complex marketing, financial, HR, and operational problems.

PSO 3: Develop and implement business plans that include marketing, financial, HR, and operational strategies.

PSO 4: Demonstrate proficiency in formulating business strategies that align with organizational goals.

PSO 5: Integrate sustainable practices into core business operations to drive innovation and value creation.

Course Outcomes: At the end of the course students will be able to:

1. Identify the research problems based on the area of study and its framework.
2. Choose proper research design with appropriate sampling and data collection methods.
3. Apply analytical and problem-solving methods.
4. Derive the appropriate findings and practical suggestions for research problem.

| <b>Course Outcomes (COs)</b> | <b>PO 1</b> | <b>PO 2</b> | <b>PO 3</b> | <b>PO 4</b> | <b>PO 5</b> | <b>PO 6</b> | <b>PO 7</b> |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| CO1                          | L           | H           | H           | M           | M           | L           | M           |
| CO2                          | L           | H           | M           | L           | H           | M           | M           |
| CO3                          | L           | M           | H           | L           | H           | M           | M           |
| CO4                          | L           | M           | H           | M           | H           | H           | M           |

| <b>Course Outcomes (COs)</b> | <b>PSO 1</b> | <b>PSO 2</b> | <b>PSO 3</b> | <b>PSO 4</b> | <b>PSO 5</b> |
|------------------------------|--------------|--------------|--------------|--------------|--------------|
| CO1                          | H            | M            | M            | M            | L            |
| CO2                          | M            | H            | M            | M            | M            |
| CO3                          | H            | H            | M            | H            | M            |

|     |   |   |   |   |   |
|-----|---|---|---|---|---|
| CO4 | H | H | H | H | M |
|-----|---|---|---|---|---|

## Introduction

All the students of Master of Business Administration (MBA) are required to undertake Dissertation in IV Semester MBA which provides an opportunity to learn independently so that they can identify, define and analyze problems and provide suggestions/measures in a Business Scenario.

The emphasis is an application of concepts and the investigation of some practical problems or issues related to the situation in which an organization or system operates. The content of the Dissertation/Project report must be paid utmost attention, which is being submitted in partial fulfillment of the requirements of the MBA degrees. A Standard format is equally important and will be prescribed by the University which helps in bringing uniformity in all the reports and improves aesthetics of report.

## General Guidelines

Unlike any other academic assignment, Dissertation provides an opportunity to judge the student's time and self-management skills and his/her ability to successfully undertake an in-depth study of an applied nature, synthesizing various elements, in his area of interest. The report should highlight what the student has attempted and why; the methods used to collect, collate and analyze the information obtained. Any suggestions made should be supported by the evidence presented and by logical argument using deductive and inductive reasoning.

- 1. Organization of the Dissertation/Project report:** This report shall be presented in a number of chapters, starting with Introduction and ending with Conclusions. It shall be ensured that all the chapters will have a precise title reflecting the contents of the chapter. A chapter can be subdivided into sections, sub-sections and so on as to present the content discretely and with due emphasis.

- 1.1 Introduction:** The title of Chapter 1 shall be Introduction. It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the report. It may also highlight the significant contributions from the investigation.

- 1.2 Review of Literature:** This shall normally form Chapter 2 and shall present a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation. The extent and emphasis of the chapter shall depend on the nature of the investigation.

- 1.3 Report on the Present Investigation:** The reporting on the investigation shall be presented in one or more chapters with appropriate chapter titles.

- 1.3.1** Due importance shall be given to experimental setups, procedures adopted, techniques developed, methodologies developed and adopted.

- 1.3.2** Figures and tables should be presented immediately following their first mention in the text. Short tables and figures (say, less than half the writing area of the page) should be presented within the text, while large table and figures may be presented on separate pages.

- 1.4 Results and Discussions:** This shall form the penultimate chapter of the report and shall include a thorough evaluation of the investigation carried out and bring out the contributions from the study. The discussion shall logically lead to inferences and conclusions as well as scope for possible further future work.

- 1.5 Conclusions:** This will be the final chapter of the report. A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the

logical analysis presented in the Results and Discussions Chapter shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly in the last part of the chapter.

**1.6Appendix:** Detailed information, abbreviations etc. are to be presented in the separate appendices, which shall be numbered in Roman Capitals (e.g. "Appendix I"). Since reference can be drawn to published/unpublished literature in the appendices these should precede the "Literature Cited" section.

**1.7Literature Cited:** This should follow the Appendices, if any, otherwise the Conclusions chapter. The candidates shall follow the APA style of citation. However, the names of all the authors along with their initials and the full title of the article/monogram/book etc. have to be given in addition to the journals/publishers, volume, number, pages(s) and year of publication. Citation from websites should include the names(s) of author(s) (including the initials), full title of the article, website reference and when last accessed.

## 2. Choosing a Topic:

The topic of the dissertation will be decided in consultation with the faculty guide and necessarily from their area of specialization. The ideas can come from personal experience, observation of events and issues of current interests. Initial ideas are likely to originate in a vague form and may lack a clear focus. These then need to be developed into something manageable and practical by consideration of available literature/ texts and discussion with dissertation supervisors once allocated. Whatever the source of your research idea, familiarity with the area is imperative for the successful completion of the project.

## 3. Duration of the Dissertation:

The Dissertation work shall be from JAN 2028 to Mar XXX, 2028

## 4. Guide:

Students must ensure that they maintain regular contact with their guide and also, they provide the guide with progress of their work on weekly basis compulsorily. Internal guide of the Dissertation will be a fulltime faculty member from the department.

## 5. Plagiarism Check:

With the permission of the internal guide the final report will be undergo plagiarism check by applying TURNITIN software. The plagiarism should not be more than 15 per cent.

Students in consultation with faculty can publish their research work in any of the referred journal.

## 6. Schedule to be followed during Dissertation Work/Dissertation

| Activity                                                                      | Timeline | Remark                                                                                                                                                                    |
|-------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Literature Review, Problem Identification, Objectives                         | XXXX     | Discussion with the guide for finalization of research problem, objectives of the study                                                                                   |
| Preparation of Research instrument for data collection and Collection of Data | XXXX     | Discussion with the guide for finalization of research instrument and Data collection method and should complete the Data Collection                                      |
| Analysis and finalization of report                                           | XXXX     | Students must use appropriate statistical tools and techniques for analyzing the data. (It is must to use Statistical Package whose result should be shown in the report) |
| Preparation of Report                                                         | XXXX     | Final Report has to be prepared and submitted to the University on or before Mar 31, 2025                                                                                 |
| Dissertation Viva-Voce                                                        | XXXX     |                                                                                                                                                                           |

## 7. Evaluation:

- Internal Evaluation:** Internal evaluation will be done by the internal guide.
- Viva-voce/Presentation:** The viva-voce examination will be conducted by the respective Assistant Dean / Professors of the department or an expert drawn from other institutions
- Project Work** (Project) work carries 100 marks consisting of 60 marks for internal

evaluation by the internal guide, 40 marks for viva-voce examination

- d. **Format of the Dissertation report:** The Dissertation report shall be prepared using word processor, using Times New Roman font sized 12 for body text, 16 / 14 font size for heading and sub-heading respectively on a page layout of A4 size with 1" margin on all sides and 1.5 line spacing and paragraph spacing. The Project Work report shall not exceed 75 pages and not less than 40 pages.

**8. Submission of report:** Students should submit 2 hard copies of the Dissertation report one in electronic data form, in PDF file (Un-editable format) to the University before conducting the viva-voce examination.

**9. Publication of research findings:** Students are expected to present their research findings in seminars/conferences/technical fests or publish their research work in journals in association with their internal guide. Appropriate weight age should be given to this in the internal evaluation of the Dissertation.

**\*Synopsis:**

**A synopsis with not exceeding 500 words and minimum 250 words is to be submitted to the Guide with the required signatures as stated in the format on or before Dec 20, 2028**

**Business Analytics Courses:**

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |   |   |   |   |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---|---|---|---|
| Course Code:<br>BAL 4527     | <b>Course name:</b> AI for Business Innovation<br><b>Course type:</b> Skill Enhancement Course                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | L- T - P- C | 2 | 0 | 4 | 4 |
| <b>Version No.</b>           | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |   |   |   |   |
| <b>Course Pre-requisites</b> | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |   |   |   |   |
| <b>Anti-requisites</b>       | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |   |   |   |   |
| <b>Course Description</b>    | This course provides a comprehensive introduction to Artificial Intelligence, Deep Learning, Natural Language Processing, Generative AI, and AI-powered business applications. The course focuses on how modern AI technologies are transforming business processes, decision-making, customer engagement, and innovation across industries. Students will gain hands-on experience with TensorFlow, NLP libraries, Large Language Models (LLMs), Prompt Engineering, OpenAI APIs, Conversational AI, and AI Agents. Through practical exercises, industry case studies, and a capstone project, learners will develop AI-driven solutions that address real-world business challenges while adhering to responsible AI principles. |             |   |   |   |   |
| <b>Course Out Comes</b>      | <ul style="list-style-type: none"> <li>CO1: Explain the concepts of Artificial Intelligence, Deep Learning, Natural Language Processing, and Generative AI in business contexts.</li> <li>CO2: Apply NLP techniques using NLTK and spaCy to preprocess, analyze, and extract insights from textual business data.</li> <li>CO3: Develop AI-powered business applications using Prompt Engineering, OpenAI APIs, and Generative AI technologies.</li> </ul>                                                                                                                                                                                                                                                                          |             |   |   |   |   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>CO4: Build conversational AI systems and AI agents to automate business processes and improve organizational productivity.</li> <li>CO5: Design and present an end-to-end AI-driven business solution by integrating modern AI tools while adhering to responsible AI principles.</li> </ul>                                                                                                                                                                                                                                                                                                                                     |  |  |  |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>To understand the fundamental concepts of Artificial Intelligence, Deep Learning, and Generative AI for business innovation.</li> <li>To apply Natural Language Processing and Large Language Models for analyzing and generating business information.</li> <li>To develop AI-powered business applications using OpenAI APIs and modern Generative AI tools.</li> <li>To design intelligent conversational systems and AI agents for business automation and enhanced customer engagement.</li> <li>To implement ethical, responsible, and business-oriented AI solutions for real-world organizational challenges.</li> </ul> |  |  |  |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Foundations of Artificial Intelligence and Deep Learning for Business</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
| <p><b>Unit 1: Introduction to Artificial Intelligence and Business Innovation</b><br/> Fundamentals of Artificial Intelligence and Machine Learning, Evolution of AI, Deep Learning, and Generative AI, AI-driven Digital Transformation and Business Innovation, Applications of AI in Marketing, Finance, HR, Operations, Supply Chain, and Customer Service, AI ecosystem, trends, and business opportunities.<br/> Hands-on Activities: Exploring AI-powered business applications across industries, Identifying business problems suitable for AI-based solutions.<br/> Case Study: AI-driven Business Transformation at Amazon and Netflix.</p> <p><b>Unit 2: Deep Learning Fundamentals using TensorFlow (Basics)</b><br/> Introduction to Deep Learning and Neural Networks, Artificial Neural Networks (ANNs) and their architecture, TensorFlow ecosystem and workflow, Building and training simple neural network models, Model evaluation and prediction, Business applications of Deep Learning.<br/> Hands-on Activities: Building a basic neural network using TensorFlow, Training and evaluating a simple business prediction model.<br/> Case Study: Product Image Classification for E-commerce Applications.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Natural Language Processing and Generative AI</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| <p><b>Unit 1: Natural Language Processing using NLTK and spaCy</b><br/> Introduction to Natural Language Processing (NLP), Text preprocessing and cleaning techniques, Tokenization, Stop-word Removal, Stemming, and Lemmatization, Part-of-Speech Tagging and Named Entity Recognition (NER), Sentiment Analysis and Text Classification, Information Extraction using spaCy.<br/> Hands-on Activities: Performing sentiment analysis on customer reviews, Extracting business entities from financial reports and news articles.<br/> Case Study: Customer Sentiment Analysis for Brand Reputation Management.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|--|--|--|
| <b>Unit 2: Generative AI, Large Language Models, and Prompt Engineering</b><br>Introduction to Generative AI and Foundation Models, Large Language Models (LLMs): Concepts and Architecture, Prompt Engineering principles and best practices, Zero-shot, One-shot, and Few-shot Prompting, Prompt Chaining and Structured Prompting, Business applications of Generative AI, Limitations, hallucinations, and prompt optimization.<br>Hands-on Activities: Designing prompts for business problem-solving, Generating reports, marketing content, and executive summaries using Generative AI tools.<br>Case Study: AI-assisted Marketing Content Generation for Digital Campaigns.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                |  |  |  |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>AI Applications, Chatbots, and Intelligent Automation</b>   |  |  |  |
| <b>Unit 1: OpenAI APIs and AI Application Development</b><br>Introduction to OpenAI APIs and API architecture, Authentication and API integration, Text generation and conversational AI using OpenAI APIs, AI-powered document summarization and question answering, Function Calling and Structured Outputs, Embeddings and Semantic Search (Introduction), Developing AI-powered business assistants.<br>Hands-on Activities: Building an AI-powered document summarization application, Developing a business assistant using OpenAI APIs.<br>Case Study: Intelligent AI Assistant for Business Knowledge Management.<br><b>Unit 2: AI Chatbots and Conversational AI</b><br>Introduction to Conversational AI, Chatbot architecture and conversation design, Rule-based vs AI-powered Chatbots, Intent Recognition and Context Management, Integrating OpenAI APIs into chatbot applications, Deployment concepts and business applications.<br>Hands-on Activities: Building an AI-powered customer support chatbot, Developing an FAQ assistant for a business website.<br>Case Study: AI Chatbots for Customer Service Automation in Banking.<br><b>Unit 3: AI Agents and Workflow Automation for Business</b><br>Introduction to AI Agents and autonomous workflows, AI Agents vs Chatbots, Business process automation using Generative AI, Introduction to Retrieval-Augmented Generation (RAG) concepts, AI Copilots for productivity and decision support, Emerging trends in Agentic AI.<br>Hands-on Activities: Designing an AI-powered workflow for business process automation, Developing a simple AI assistant for report generation or customer support. |                                                                |  |  |  |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Responsible AI, Business Strategy, and Capstone Project</b> |  |  |  |
| <b>Unit 1: AI Governance, Responsible AI, and Business Strategy</b><br>Responsible AI principles and ethical considerations, Bias, fairness, and explainability in AI systems, AI governance frameworks and regulatory compliance, Data privacy, security, and intellectual property considerations, AI adoption strategies and organizational readiness.<br>Hands-on Activities: Evaluating AI-generated outputs for fairness and reliability, Assessing ethical risks in AI-enabled business applications.<br>Case Study: Responsible AI Adoption in Financial Services.<br><b>Unit 2: Capstone Project – AI for Business Innovation</b><br>Identification of a real-world business problem suitable for AI implementation, Designing an AI-powered solution using Generative AI, NLP, OpenAI APIs, and AI Agents, Developing an AI application for business automation or decision support, Evaluating the solution using                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                |  |  |  |

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| <p>appropriate business performance metrics, Presenting the AI solution, business impact, and strategic recommendations.</p> <p>Capstone Project: Develop an end-to-end AI-powered business solution by integrating Natural Language Processing, Generative AI, OpenAI APIs, Conversational AI, and AI Agents to address a real-world business challenge and deliver measurable organizational value.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |  |  |  |
| <b>Module V</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                      |  |  |  |
| <p><b>Targeted Application &amp; Tools that can be used:</b></p> <p>Python<br/> Jupyter Notebook<br/> Google Colab<br/> Anaconda<br/> NumPy<br/> Pandas<br/> Matplotlib<br/> Seaborn<br/> Scikit-learn<br/> TensorFlow<br/> Keras<br/> NLTK<br/> spaCy<br/> OpenAI API<br/> ChatGPT<br/> GitHub Copilot<br/> LangChain (Introduction)<br/> Vector Databases (Introduction)<br/> AI Agent Platforms<br/> Prompt Engineering Frameworks<br/> Microsoft Copilot<br/> Generative AI Productivity Tools</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                      |  |  |  |
| <p><b>Reference books</b></p> <ol style="list-style-type: none"> <li>1. Stuart Russell &amp; Peter Norvig – <i>Artificial Intelligence: A Modern Approach</i></li> <li>2. Aurélien Géron – <i>Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow</i></li> <li>3. Jacob Eisenstein – <i>Introduction to Natural Language Processing</i></li> <li>4. Delip Rao &amp; Brian McMahan – <i>Natural Language Processing with PyTorch</i></li> <li>5. Steven Bird, Ewan Klein &amp; Edward Loper – <i>Natural Language Processing with Python</i></li> <li>6. Tom Taulli – <i>Generative AI: How ChatGPT and Other AI Tools Will Revolutionize Business</i></li> <li>7. Noah Gift &amp; Alfredo Deza – <i>Practical MLOps</i></li> <li>8. David Foster – <i>Generative Deep Learning</i></li> <li>9. Ronald T. Kneusel – <i>Practical Deep Learning</i></li> <li>10. Bernard Marr – <i>Generative AI in Practice</i></li> <li>11. OpenAI – <i>OpenAI API Documentation and Developer Guides</i></li> <li>12. Andrew Ng – <i>AI for Everyone</i></li> </ol> |                                      |  |  |  |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Faculty<br>School of Management – UG |  |  |  |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                      |  |  |  |

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|-------------------------------------------------|--|
| <b>Date of Approval by the Academic Council</b> |  |
|-------------------------------------------------|--|

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---|---|---|---|
| Course Code:<br>BAL4524                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Course name:</b> Python for Business Analytics<br><b>Course type:</b> Skill Enhancement Course                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | L- T - P- C | 2 | 0 | 4 | 4 |
| <b>Version No.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |   |   |   |   |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Proficiency in Mathematics Basics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |   |   |   |   |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |   |   |   |   |
| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | This course introduces Python programming and its application in business analytics. Students will learn programming fundamentals, data handling, numerical analysis, data visualization, and analytics workflows using Python libraries such as NumPy, Pandas, Matplotlib, and Seaborn. The course emphasizes hands-on learning through business-oriented case studies and projects.                                                                                                                                                                                |             |   |   |   |   |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• CO1: Apply Python programming for business problem-solving.</li> <li>• CO2: Use NumPy for numerical computation and array-based data analysis.</li> <li>• CO3: Use Pandas for structured data manipulation and business data processing.</li> <li>• CO4: Build meaningful visualizations using Matplotlib and Seaborn to derive insights.</li> <li>• CO5: Execute an end-to-end analytics project integrating data import, transformation, analysis, and visualization.</li> </ul>                                          |             |   |   |   |   |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ol style="list-style-type: none"> <li>1. To apply Python for real-world business analytics and data-driven decision-making.</li> <li>2. To build analytical skills using Python libraries such as NumPy, Pandas, Matplotlib, and Seaborn.</li> <li>3. To perform data cleaning, transformation, and exploratory analysis using structured datasets.</li> <li>4. To visualize patterns, relationships, and business insights effectively.</li> <li>5. To integrate multiple Python libraries in a cohesive analytical workflow for business applications.</li> </ol> |             |   |   |   |   |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |   |   |   |   |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Fundamentals of Python Programming</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |   |   |   |   |
| <b>Unit 1: Introduction to Python and Programming Basics</b><br>Introduction to Python: Features, applications, and environment setup, Writing and executing Python scripts ,Variables, constants, and data types ,Operators: Arithmetic, comparison, logical, assignment, and membership operators , Input/output operations and basic formatting.<br>Hands-on Activities: Writing Python scripts for simple arithmetic and business logic , Creating user-driven input/output programs.<br>Case Study: Retail Operations – Automating daily billing and discount calculations. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |   |   |   |   |

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| <b>Unit 2: Control Flow and Decision Structures</b><br>Conditional statements: if, elif, else, Looping structures: for and while, Loop control statements: break, continue, pass, Nested loops and conditional nesting for structured problem-solving.<br>Hands-on Activities: Writing programs for employee payroll, inventory tracking, and invoice generation, Creating pattern-based and iterative logic programs.<br>Case Study: HR Case – Automating attendance validation and leave tracking using control structures.                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                   |  |  |  |
| <b>Unit 3: Python Data Structures</b><br>Lists: Creation, indexing, slicing, and list operations, Tuples and sets: Properties, operations, and use cases, Dictionaries: Key-value pairs, iteration, and updates, Comprehensions: List, dictionary, and set comprehensions.<br>Hands-on Activities: Creating and modifying collections of customer or product data, Implementing search and filter operations using lists and dictionaries.<br>Case Study: E-Commerce Case – Managing and analyzing order and customer data using Python collections.                                                                                                                                                                                                                                                                                                                                                                                                    |                                                   |  |  |  |
| <b>Unit 4: Functions, Exception Handling and File Operations</b><br>Defining and calling functions, Parameters, arguments, and return values, Scope of variables and default arguments, Lambda functions and functional programming concepts, Exception handling using try, except, finally, Working with text and CSV files, Reading, writing, and appending data, Using context managers (with statement), Introduction to JSON for structured data representation.<br>Hands-on Activities: Writing reusable functions for discount calculation, tax computation, and data validation, Handling division-by-zero and missing-value errors, Reading and writing transaction data to text and CSV files, Generating automated reports from stored files.<br>Case Studies: Financial Case – Creating modular functions for interest, tax, and EMI calculations, Marketing Case – Maintaining campaign records and automating data updates through files. |                                                   |  |  |  |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Data Analysis and Preparation using Python</b> |  |  |  |
| <b>Unit 1: Introduction to Python for Business Analytics</b><br>Overview of Python's role in business analytics, Introduction to analytics libraries ecosystem (NumPy, Pandas, Matplotlib, Seaborn), Understanding data workflows and analysis pipeline in Python.<br>Hands-on Activities: Importing sample business datasets.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                   |  |  |  |
| <b>Unit 2: Numerical and Statistical Analysis with NumPy</b><br>Introduction to NumPy arrays and their advantages over Python lists, Creating and manipulating 1D, 2D, and 3D arrays, Array operations: indexing, slicing, reshaping, and concatenation, Mathematical and statistical functions (mean, median, standard deviation, variance, sum, correlation), Broadcasting and vectorized computations for performance optimization.<br>Hands-on Activities: Perform ROI, sales growth, and cost optimization computations using arrays, Calculate financial KPIs and statistical summaries for datasets.<br>Case Study: Financial Analytics Case – Using NumPy for sales performance and profitability analysis.                                                                                                                                                                                                                                     |                                                   |  |  |  |
| <b>Unit 3: Data Manipulation and Preparation with Pandas</b><br>Introduction to Pandas: Series and DataFrames, Importing and exporting data (CSV, Excel, JSON), Selecting, filtering, and indexing data, Handling missing values and duplicates,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                   |  |  |  |

Grouping, aggregating, and merging datasets, Transformations using `apply()`, `map()`, and `lambda` functions, Sorting and ranking for business analytics.  
 Hands-on Activities: Cleaning and merging customer and order datasets, Computing average order values, top customers, and regional sales.  
 Case Study: Retail Business Case – Data cleaning and transformation for sales analytics and forecasting.

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| <b>Module 3</b> | <b>Data Visualization and Business Storytelling</b> |  |  |  |
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**Unit 1: Data Visualization with Matplotlib**  
 Overview of data visualization principles, Creating basic plots such as line charts, bar charts, pie charts, scatter plots, and histograms, Customizing visuals using colors, legends, titles, and annotations, Creating subplots and multi-graph dashboards, Exporting charts for business reports.

Hands-on Activities: Plotting revenue trends, category performance, and time-series visualizations, Building a simple sales dashboard using Matplotlib.

Case Study: Operations Case – Visualizing production performance and resource utilization trends.

**Unit 2: Advanced Visualization and Statistical Insights with Seaborn**  
 Introduction to Seaborn and comparison with Matplotlib, Creating statistical plots such as boxplots, violin plots, distribution plots, pairplots, and heatmaps, Customizing themes and color palettes, Combining Seaborn and Matplotlib for advanced visualizations, Storytelling through data visualization.

Hands-on Activities: Creating customer segmentation visuals and correlation heatmaps, Visualizing sales distribution across time and region.

Case Study: Marketing Analytics Case – Using Seaborn to uncover customer behavior patterns.

**Unit 3: Visualization-Based Business Reporting**  
 Presenting analytical insights to decision-makers, best practices for data storytelling, Designing effective business reports and dashboards, Communicating data-driven recommendations through visual narratives.

Hands-on Activities: Creating executive-ready business reports, Developing visualization-driven presentations for management decision-making.

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| <b>Module 4</b> | <b>Integrated Business Analytics Workflow and Capstone Project</b> |  |  |  |
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**Unit 1: Integrated Business Analytics Workflow**  
 Combining NumPy, Pandas, Matplotlib, and Seaborn in a unified analytics pipeline, Data preparation, analysis, visualization, and reporting workflow, automating analytical processes using reusable functions, Real-world analytics applications across HR, finance, and marketing domains.

Hands-on Activities: Creating a business report integrating KPIs, charts, and analytical summaries, Developing automated reporting workflows using Python analytics libraries.

Case Study: HR Analytics Case – Employee performance analysis and visualization using an integrated analytics workflow.

**Unit 2: Capstone Project**  
 Design and implementation of an end-to-end business analytics project, Data import, cleaning, computation, exploratory data analysis, and visualization, Integration of descriptive statistics

and data storytelling techniques, Presentation of analytical insights and business recommendations.

Capstone Project: End-to-end Business Analytics Project integrating Python, NumPy, Pandas, Matplotlib, and Seaborn to solve a real-world business problem and provide actionable recommendations based on data-driven insights.

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| <b>Module V</b> |  |  |  |  |
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**Targeted Application & Tools that can be used:**

- Python
- Jupyter Notebook
- Google Colab
- Anaconda
- NumPy
- Pandas
- Matplotlib
- Seaborn

**Reference books**

1. Wes McKinney – *Python for Data Analysis*
2. Jake VanderPlas – *Python Data Science Handbook*
3. Eric Matthes – *Python Crash Course*
4. Al Sweigart – *Automate the Boring Stuff with Python*
5. Wes McKinney – *Python for Data Analysis: Data Wrangling with Pandas, NumPy, and Jupyter*
6. Claus Fuhner – *Hands-On Data Visualization with Python*
7. Allen Downey – *Think Python*

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| <b>Catalogue prepared by</b>                    | Faculty<br>School of Management – UG |
| <b>Recommended by the Board of Studies on</b>   |                                      |
| <b>Date of Approval by the Academic Council</b> |                                      |

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| Course Code:<br>BAL4525      | <b>Course name:</b> Machine Learning for Business<br><b>Course type:</b> Skill Enhancement Course | L- T - P- C | 2 | 0 | 4 | 4 |
| <b>Version No.</b>           | 1.0                                                                                               |             |   |   |   |   |
| <b>Course Pre-requisites</b> | Proficiency in mathematics basics (Linear Algebra, Probability, Statistics)                       |             |   |   |   |   |
| <b>Anti-requisites</b>       | Nil                                                                                               |             |   |   |   |   |

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| <b>Course Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | This course introduces the fundamental concepts and techniques of Machine Learning with a focus on business applications. Students will learn how to prepare data, build predictive and descriptive models, evaluate model performance, and apply machine learning techniques to solve real-world business problems. The course emphasizes hands-on learning using Python and Scikit-learn through business-oriented case studies and projects in finance, marketing, HR, and operations.                                                                                                   |  |  |  |
| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• CO1: Explain core machine learning concepts and business use cases.</li> <li>• CO2: Prepare and preprocess business datasets for machine learning.</li> <li>• CO3: Build and evaluate supervised learning models for prediction tasks.</li> <li>• CO4: Apply unsupervised learning techniques for customer and market segmentation.</li> <li>• CO5: Develop and present an end-to-end machine learning solution for a business case.</li> </ul>                                                                                                    |  |  |  |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• To understand fundamental machine learning concepts and their relevance to business decision-making.</li> <li>• To apply supervised and unsupervised learning techniques to solve business problems.</li> <li>• To build predictive models using Python libraries such as NumPy, Pandas, Matplotlib, Seaborn, and Scikit-learn.</li> <li>• To evaluate and optimize machine learning models using appropriate performance metrics.</li> <li>• To implement an end-to-end machine learning project for real-world business applications.</li> </ul> |  |  |  |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Introduction to Machine Learning and Data Preparation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| <p><b>Unit 1: Introduction to Machine Learning and Business Applications</b><br/> Introduction to Machine Learning: Definition and scope, Types of Machine Learning: Supervised, Unsupervised, Reinforcement Learning, ML vs Traditional Programming, Applications of ML in Finance, Marketing, HR, and Operations, Overview of ML workflow: Data → Model → Evaluation → Deployment.</p> <p>Hands-on Activities: Identifying business problems suitable for machine learning, Exploring sample datasets and defining prediction objectives.</p> <p><b>Unit 2: Data Preprocessing and Feature Engineering</b><br/> Data collection and dataset structure, Handling missing values and outliers, Encoding categorical variables using Label Encoding and One-Hot Encoding, Feature scaling through Normalization and Standardization, Feature selection techniques, Train-test split concept.<br/> Hands-on Activities: Cleaning and transforming business datasets, Implementing preprocessing techniques using Scikit-learn preprocessing tools.<br/> Case Study: Preparing customer credit data for loan approval prediction.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Supervised Learning for</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Business Prediction</b>                                         |                |                 |                 |
| <b>Unit 1: Supervised Learning – Regression Models</b><br>Introduction to supervised learning, Linear Regression: Concept and assumptions, Multiple Linear Regression, Model evaluation using MAE, MSE, RMSE, and $R^2$ , Overfitting and underfitting, Introduction to Regularization techniques including Ridge and Lasso Regression. Hands-on Activities: Building sales forecasting models, Evaluating regression performance using business KPIs.<br>Case Study: Predicting monthly revenue based on marketing spend. |                                                                    |                |                 |                 |
| <b>Unit 2: Supervised Learning – Classification Models</b><br>Classification problems in business, Logistic Regression, K-Nearest Neighbors (K-NN), Decision Trees, Confusion Matrix, Accuracy, Precision, Recall, F1-Score, ROC Curve and AUC. Hands-on Activities: Building customer churn prediction models, Evaluating classification performance using confusion matrices.<br>Case Study: Predicting customer churn to improve retention strategies.                                                                  |                                                                    |                |                 |                 |
| <b>Unit 3: Model Validation and Performance Optimization</b><br>Cross-validation techniques, Bias-variance tradeoff, Hyperparameter tuning using Grid Search, Feature importance and model interpretability. Hands-on Activities: Performing k-fold cross-validation, Tuning model parameters for improved accuracy.<br>Case Study: Improving fraud detection model performance.                                                                                                                                           |                                                                    |                |                 |                 |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Unsupervised Learning for Business Insights</b>                 |                |                 |                 |
| <b>Unit 1: Unsupervised Learning – Clustering</b><br>Introduction to unsupervised learning, K-Means Clustering, Hierarchical Clustering, Choosing the optimal number of clusters using Elbow Method and Silhouette Score, Business applications of clustering. Hands-on Activities: Customer segmentation using K-Means, Visualizing clusters using Matplotlib and Seaborn.<br>Case Study: Segmenting customers for targeted promotional campaigns.                                                                        |                                                                    |                |                 |                 |
| <b>Unit 2: Unsupervised Learning – Association Rule Mining</b><br>Introduction to Market Basket Analysis, Support, Confidence, and Lift, Apriori Algorithm, Business applications in retail and e-commerce. Hands-on Activities: Identifying frequently purchased product combinations, Interpreting association rules for recommendation systems.<br>Case Study: Improving cross-selling strategies using transaction data.                                                                                               |                                                                    |                |                 |                 |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Capstone Project – End-to-End Machine Learning for Business</b> |                |                 |                 |
| <b>Unit 1:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>End-to-End</b>                                                  | <b>Machine</b> | <b>Learning</b> | <b>Workflow</b> |
| Business problem identification and understanding, Data collection and preprocessing, Exploratory Data Analysis (EDA), Model selection and implementation, Model evaluation and optimization, Business interpretation of machine learning results. Hands-on Activities: Building an end-to-end machine learning workflow from data preparation to model evaluation, Interpreting model outputs and business recommendations.                                                                                               |                                                                    |                |                 |                 |

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| <b>Unit 2: Capstone Project – End-to-End ML for Business</b><br>Design and implementation of a complete machine learning project, Integration of data preprocessing, model development, evaluation, and optimization techniques, Presentation of insights and managerial recommendations.<br>Capstone Project: End-to-end Machine Learning Project integrating data preprocessing, supervised or unsupervised learning techniques, model evaluation, and business interpretation to solve a real-world business problem with actionable recommendations.                                                                                                                                                                                         |                                      |  |  |  |
| <b>Module V</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |  |  |  |
| <b>Targeted Application &amp; Tools that can be used:</b> <ul style="list-style-type: none"> <li>• Python</li> <li>• Jupyter Notebook</li> <li>• Google Colab</li> <li>• Anaconda</li> <li>• NumPy</li> <li>• Pandas</li> <li>• Matplotlib</li> <li>• Seaborn</li> <li>• Scikit-learn</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                      |  |  |  |
| <b>Reference books</b> <ol style="list-style-type: none"> <li>8. Aurélien Géron – <i>Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow</i></li> <li>9. Andreas Müller &amp; Sarah Guido – <i>Introduction to Machine Learning with Python</i></li> <li>10. Sebastian Raschka &amp; Vahid Mirjalili – <i>Python Machine Learning</i></li> <li>11. Gareth James, Daniela Witten, Trevor Hastie &amp; Robert Tibshirani – <i>An Introduction to Statistical Learning</i></li> <li>12. Christopher M. Bishop – <i>Pattern Recognition and Machine Learning</i></li> <li>13. Ethem Alpaydin – <i>Introduction to Machine Learning</i></li> <li>14. Kevin P. Murphy – <i>Machine Learning: A Probabilistic Perspective</i></li> </ol> |                                      |  |  |  |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Faculty<br>School of Management – UG |  |  |  |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                      |  |  |  |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |  |  |  |

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| Course Code:<br>BAL4526      | <b>Course name:</b> Strategic Business Analytics<br><b>Course type:</b> Skill Enhancement Course | L- T - P- C | 2 | 0 | 4 | 4 |
| <b>Version No.</b>           | 1.0                                                                                              |             |   |   |   |   |
| <b>Course Pre-requisites</b> | Basic understanding of business functions and Excel-based analytics.                             |             |   |   |   |   |

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| <b>Anti-requisites</b>    | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
| <b>Course Description</b> | This course focuses on the application of analytics across major business functions, including Marketing, Finance, Human Resources, and Operations. Students will learn domain-specific analytical techniques, key performance indicators (KPIs), dashboard development, forecasting methods, and data-driven decision-making frameworks. Through hands-on exercises, case studies, and a cross-functional capstone project, learners will develop the ability to transform business data into actionable insights that support strategic and operational decisions. |  |  |  |
| <b>Course Out Comes</b>   | <ul style="list-style-type: none"> <li>• CO1: Demonstrate understanding of domain-specific business metrics and analytics needs.</li> <li>• CO2: Apply appropriate analytical methods to solve Marketing, Finance, HR, and Operations problems.</li> <li>• CO3: Build and interpret dashboards and reports using real-world datasets.</li> <li>• CO4: Use statistical and predictive techniques to support managerial decisions.</li> <li>• CO5: Develop end-to-end domain-specific analytical solutions and present actionable insights.</li> </ul>                 |  |  |  |
| <b>Course objective</b>   | <ul style="list-style-type: none"> <li>• To introduce analytical applications across four major management domains.</li> <li>• To provide domain-specific analytics techniques, KPIs, and decision-making frameworks.</li> <li>• To develop Excel/Python-based analytical skills for Marketing, Finance, HR, and Operations.</li> <li>• To interpret business datasets, generate insights, and prepare analytical dashboards.</li> <li>• To solve real-world business problems using structured multi-domain analytics.</li> </ul>                                   |  |  |  |
| <b>Course Content:</b>    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |
| <b>Module 1</b>           | <b>Market Analytics for Business Growth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |

**Unit 1: Introduction to Business Analytics in Management**

Role of analytics in management decision-making, Overview of the four major domains: Marketing, Finance, HR, and Operations, Types of analytics: Descriptive, Diagnostic, Predictive, and Prescriptive Analytics, Tools for analysis: Excel, Python, Power Query, and Pivot Tables, Data lifecycle: Collection → Cleaning → Analysis → Reporting.

Hands-on Activities: Working with a combined business dataset across all four domains, Creating descriptive statistical summaries.

Case Study: Cross-Functional Company Case – Understanding analytics needs for each management domain in a single organization.

**Unit 2: Marketing Analytics**

Key KPIs: Customer Acquisition Cost (CAC), Customer Lifetime Value (CLV), Conversion Rate, and Return on Advertising Spend (ROAS), Customer segmentation, RFM analysis, and cohort analysis, Campaign analysis including A/B testing, funnel performance, and churn indicators, Market basket analysis using association rules, Product, price, promotion, and channel analytics.

Hands-on Activities: Performing segmentation on customer datasets, Calculating CLV, CAC, churn, and cohort metrics, Creating campaign performance dashboards.

Case Study: E-Commerce Firm – Identifying high-value customers and optimizing marketing spend.

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| <b>Module 2</b> | <b>Financial Analytics for Business Decision-Making</b> |  |  |  |
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**Unit 1: Financial Analytics**

Key KPIs: Profit Margins, ROI, ROE, Current Ratio, and Working Capital, Financial Statement Analysis including Balance Sheet, Profit & Loss Statement, and Cash Flow Statement, Ratio analysis and trend analytics, Break-even analysis, budgeting, and forecasting, Risk analytics including sensitivity analysis and scenario modeling.

Hands-on Activities: Building financial statement dashboards, Creating forecasting models using moving average and growth-based forecasting techniques, Performing sensitivity analysis for pricing and cost changes.

Case Study: Retail Chain – Profitability analysis and forecasting for the upcoming quarter.

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| <b>Module 3</b> | <b>Human Resource and Operations Analytics</b> |  |  |  |
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**Unit 1: Human Resource (HR) Analytics**

Key KPIs: Attrition Rate, Absenteeism, Performance Score, and Hiring Funnel Efficiency, Employee segmentation and role-based metrics, Predicting attrition using logistic regression concepts (non-technical), Learning and Development Analytics, Talent Scoring and Productivity Analysis, Compensation and Workforce Planning Analytics.

Hands-on Activities: Calculating attrition rates, absenteeism percentages, and engagement scores, Identifying employee risk clusters, Designing HR dashboards for attrition, hiring, and performance monitoring.

Case Study: IT Services Company – Using analytics to reduce attrition among high-performing employees.

**Unit 2: Operations and Supply Chain Analytics**

Key KPIs: Inventory Turnover, Order Accuracy, Cycle Time, and Utilization Rate, Demand forecasting and stock-out prediction, Process optimization and bottleneck analysis, Logistics

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| <p>metrics including lead time, fill rate, and cost-to-serve, Quality analytics including defect rates and customer return analysis.</p> <p>Hands-on Activities: Building demand forecasting models in Excel, Identifying bottlenecks using process data, Creating inventory dashboards.</p> <p>Case Study: Manufacturing Firm – Improving production efficiency and reducing inventory carrying costs.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                     |  |  |  |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Integrated Strategic Business Analytics and Capstone Project</b> |  |  |  |
| <p><b>Unit 1: Integrating Analytics Across All Four Domains</b></p> <p>Cross-domain data relationships among Marketing, Sales, Finance, HR, and Operations, Creating multi-domain dashboards, Prioritizing business decisions using data, Storytelling with data for CXOs and business leaders.</p> <p>Hands-on Activities: Creating a unified business KPI dashboard, Generating cross-domain business insights.</p> <p>Case Study: Enterprise Case – Using integrated analytics to drive strategic planning.</p> <p><b>Unit 2: Capstone Cross-Domain Business Analytics Project</b></p> <p>Development of a full business analytics solution involving business problem identification, data preparation, cleaning and transformation, KPI dashboard development, predictive or trend analysis, cross-domain insight generation, and presentation of recommendations.</p> <p>Capstone Project: Develop a complete business analytics solution by selecting a business domain, preparing and analyzing data, creating KPI dashboards, performing predictive or trend analysis, generating cross-domain insights, and presenting strategic recommendations through a final report and presentation.</p> |                                                                     |  |  |  |
| <b>Module V</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                     |  |  |  |
| <p><b>Targeted Application &amp; Tools that can be used:</b></p> <p>Microsoft Excel</p> <p>Power Query</p> <p>Microsoft Power BI</p> <p>Tableau</p> <p>Python</p> <p>Jupyter Notebook</p> <p>Google Colab</p> <p>Pandas</p> <p>NumPy</p> <p>Matplotlib</p> <p>Seaborn</p> <p>Scikit-learn</p> <p>Statistical Analysis Tools</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                     |  |  |  |
| <p><b>Reference books :</b></p> <ol style="list-style-type: none"> <li>1. James Evans – <i>Business Analytics: Methods, Models and Decisions</i></li> <li>2. Jeffrey D. Camm, James Cochran, Michael Fry, Jeffrey Ohlmann, David Anderson, Dennis Sweeney, Thomas Williams – <i>Business Analytics</i></li> <li>3. Wayne L. Winston – <i>Data Analysis and Business Modeling with Microsoft Excel</i></li> <li>4. Foster Provost &amp; Tom Fawcett – <i>Data Science for Business</i></li> <li>5. Albright &amp; Winston – <i>Business Analytics: Data Analysis and Decision Making</i></li> <li>6. Nitin Kale – <i>Business Analytics for Managers</i></li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                     |  |  |  |

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| 7. Bernard Marr – <i>Data Strategy: How to Profit from a World of Big Data, Analytics and Artificial Intelligence</i><br>8. Bhimasankaram Pochiraju, Sridhar Seshadri – <i>Essentials of Business Analytics</i><br>9. U Dinesh Kumar – <i>Business Analytics: The Science of Data-Driven Decision Making</i><br><b>10.</b> Wayne Winston – <i>Microsoft Excel Data Analysis and Business Modeling</i> |                                      |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                          | Faculty<br>School of Management – UG |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                         |                                      |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                       |                                      |

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|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---|---|---|---|
| Course Code:<br>BAL4507      | <b>Course name:</b> Business Intelligence and Data Visualization<br><b>Course type : Core</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | L- T- P-C | 1 | 1 | 2 | 3 |
| <b>Version No.</b>           | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           |   |   |   |   |
| <b>Course Pre-requisites</b> | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |           |   |   |   |   |
| <b>Anti-requisites</b>       | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |   |   |   |   |
| <b>Course Description</b>    | <b>This course</b> empowers future managers to convert raw enterprise data into actionable strategic insights. This course balances back-end data management with front-end analytical storytelling. Students will first master relational databases using SQL to extract, filter, and aggregate corporate transactional data. They will then transition to Power BI to clean, model, and visualize this data through interactive executive dashboards. By focusing on data-driven storytelling and key performance indicators (KPIs), graduates will develop the skills to spot market trends, track operational health, and present compelling data narratives to senior stakeholders. |           |   |   |   |   |
| <b>Course Out Comes</b>      | <b>CO1) Understand</b> the fundamentals of SQL and relational database structures. <b>[Understand]</b><br><b>CO2) Apply</b> SQL queries to extract and aggregate multi-table business data. <b>[Apply]</b><br><b>CO3) Analyze</b> organizational datasets using Power BI to build robust data models, custom measures, and business metrics. <b>[Analyze]</b><br><b>CO4) ) Design</b> and deploy interactive executive dashboards utilizing advanced visual storytelling and automated reporting features. <b>[Design]</b>                                                                                                                                                               |           |   |   |   |   |
| <b>Course objective</b>      | This course prepares management students to bridge the gap between technical data infrastructure and executive decision-making. The curriculum focuses on building data literacy, enabling learners to independently query database systems without relying on IT departments. Students will learn to design interactive, user-centric dashboards that monitor cross-functional business metrics and tracking frameworks.                                                                                                                                                                                                                                                                |           |   |   |   |   |
| <b>Course Content:</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |   |   |   |   |

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| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>SQL Foundations for Business Analytics</b>        | <b>Quiz</b>                                 |  | <b>4L+4T+7P= 15 hours</b> |
| Introduction to relational databases; understanding schemas, primary keys, and foreign keys; basic structure of SQL queries; extracting data using SELECT and FROM; filtering records with WHERE, operators, and wildcards; sorting data using ORDER BY; cleaning text and handling null values; calculating basic business metrics using mathematical expressions and alias functions                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                      |                                             |  |                           |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Module 2: Advanced SQL &amp; Data Aggregation</b> | <b>Assignment</b>                           |  | <b>3L+4T+8P= 15 hours</b> |
| Aggregating transactional data using GROUP BY and HAVING; calculating key corporate performance indicators using functions like SUM, AVG, COUNT, MIN, and MAX; merging multiple enterprise tables using INNER, LEFT, RIGHT, and FULL JOIN frameworks; utilizing subqueries for multi-layered business analytics; database optimization and preparing clean data views for visualization tools.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                      |                                             |  |                           |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Power BI Data Transformations &amp; Modeling</b>  | <b>Case Study</b>                           |  | <b>4L+4T+8P= 16 hours</b> |
| Introduction to the Power BI ecosystem; connecting to diverse business data sources and relational databases; data transformation workflows using Power Query; handling missing values, splitting columns, and changing data types; establishing data relationships and star schemas; introduction to Data Analysis Expressions (DAX); creating custom business metrics, calculated columns, and time-intelligence measures (e.g., Year-over-Year growth).                                                                                                                                                                                                                                                                                                                                                                                                |                                                      |                                             |  |                           |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Visual Storytelling &amp; Dashboard Design</b>    | <b>Capstone Project/ Group Presentation</b> |  | <b>4L+3T+7P= 14 hours</b> |
| Core principles of data visualization and human perception; selecting optimal chart types for business metrics (bar, line, scatter, matrix, KPI cards); designing interactive user interfaces with slicers, filters, and bookmarks; building drill-down capabilities for deep operational audits; publishing reports to Power BI Service; managing enterprise data refreshing, role-based security, and cloud distribution.                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                      |                                             |  |                           |
| <b>Targeted Application &amp; Tools that can be used: PostgreSQL / MySQL, Power BI Desktop, Power BI Service, DBeaver / pgAdmin</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                      |                                             |  |                           |
| <p><b>Textbooks</b><br/> <b>T1:</b> Ferrari, A., &amp; Russo, M. (2023). <i>Introducing Microsoft Power BI</i> (2nd ed.). Microsoft Press.<br/> <b>T2:</b> Forta, B. (2023). <i>Sams teach yourself SQL in 10 minutes</i> (6th ed.). Sams Publishing.<br/> <b>T3:</b> Shmueli, G., Patel, N. R., &amp; Bruce, P. C. (2022). <i>Data mining for business analytics: Concepts, techniques, and applications in R</i> (2nd ed.). John Wiley &amp; Sons. (<i>Focus on the Business Intelligence modules</i>).</p> <p><b>Reference Books</b><br/> <b>R1:</b> Powell, B. (2024). <i>Microsoft Power BI cookbook: Gain actionable business insights with impactful data visualizations</i> (3rd ed.). Packt Publishing.<br/> <b>R2:</b> DeBarros, A. (2022). <i>Practical SQL: A beginner's guide to story-telling with data</i> (2nd ed.). No Starch Press.</p> |                                                      |                                             |  |                           |

**R3:** Few, S. (2021). *Information dashboard design: Displaying data for at-a-glance monitoring* (2nd ed.). Analytics Press.

#### Online Resources

**Microsoft Learn for Power BI.** Official training modules, DAX reference guides, and dashboard design path documentation. [microsoft.com](https://microsoft.com)

**SQLZoo.** Interactive, hands-on SQL tutorial platform used for live syntax testing and database query practice. [sqlzoo.net](https://sqlzoo.net)

**Gartner Business Intelligence Insights.** Regular research whitepapers covering enterprise data maturity curves and analytics deployment patterns. [gartner.com](https://gartner.com)

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|-------------------------------------------------|-----------------------|
| <b>Catalogue prepared by</b>                    | Dr. Varalakshmi Dandu |
| <b>Recommended by the Board of Studies on</b>   |                       |
| <b>Date of Approval by the Academic Council</b> |                       |

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| <b>Course Code:</b><br><b>BAL4528</b> | <b>Course Title:</b> Text Analytics and Natural Language Processing                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>L</b>                                                                                              | <b>T</b> | <b>P</b> | <b>C</b> |
|                                       | <b>Type of Course: Specialization Track Elective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>1</b>                                                                                              | <b>1</b> | <b>2</b> | <b>3</b> |
| <b>Version No.</b>                    | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                       |          |          |          |
| <b>Course Pre-requisites</b>          | QNT4111 Applied Business Statistics<br>QNT4112 Applied Data Analysis and Visualization                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                       |          |          |          |
| <b>Anti-requisites</b>                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                       |          |          |          |
| <b>Course Description</b>             | This course offers a comprehensive exploration of text analytics and natural language processing (NLP) techniques with applications in business intelligence, sentiment analysis, social media analytics, customer feedback mining, and automation. Students will learn to preprocess, analyze, and model textual data using Python libraries and machine learning models. Practical implementation focuses on deriving actionable insights from unstructured text in business contexts. |                                                                                                       |          |          |          |
| <b>Course Outcomes</b>                | <b>CO1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Understand</b> the concepts, challenges, and workflow of text mining and NLP                       |          |          |          |
|                                       | <b>CO2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Apply</b> preprocessing and feature engineering techniques to textual datasets                     |          |          |          |
|                                       | <b>CO3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Analyze</b> unstructured business data using NLP tools and machine learning models                 |          |          |          |
|                                       | <b>CO4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Create</b> business applications using sentiment analysis, topic modeling, and text classification |          |          |          |

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| <b>Course Objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              | To empower learners with <b>hands-on skills</b> in text analytics and natural language processing through <b>experiential learning</b> , enabling them to solve business problems involving large-scale unstructured text data. |                                                     |                                             |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Introduction to Text Analytics</b>                                                                                                                                                                                           | Quiz                                                | <b>4 lecture + 4 Tutorial + 5 Practical</b> |
| <b>Topics:</b> Foundations of Text Analytics: Types of textual data, tokenization, stemming, lemmatization, stop words, POS tagging.                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                 |                                                     |                                             |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Text Representation &amp; Preprocessing</b>                                                                                                                                                                                  | Assignment using E Library (Participative Learning) | <b>4 lecture + 4 Tutorial + 7 Practical</b> |
| <b>Topics:</b> Text Representation & Preprocessing: Bag of Words, TF-IDF, word embeddings, N-grams, vectorization techniques.                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                 |                                                     |                                             |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>NLP Techniques &amp; Models</b>                                                                                                                                                                                              | Case Study (Experiential Learning)                  | <b>4 lecture + 3 Tutorial + 9 Practical</b> |
| <b>Topics:</b> NLP Techniques and Models: Named Entity Recognition (NER), sentiment analysis, topic modeling (LDA), classification using Naive Bayes, SVM.                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                 |                                                     |                                             |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Applications in Business Analytics</b>                                                                                                                                                                                       | Project (Experiential Learning)                     | <b>3 lecture + 4 Tutorial + 9 Practical</b> |
| <b>Topics:</b> Applications in Business Analytics: Social media analytics, feedback mining, chatbot NLP, fraud detection, document summarization.                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                 |                                                     |                                             |
| <b>Targeted Application &amp; Tools that can be used:</b> Python, NLTK, spaCy, Scikit-learn, TextBlob, Gensim, Hugging Face Transformers, Google Colab                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                 |                                                     |                                             |
| <b>Project work/Assignment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                 |                                                     |                                             |
| <b>Assignment 1:</b> Module 1 - Quiz<br><b>Assignment 2:</b> Module 2 - Written Assignment<br><b>Assignment 3:</b> Module 3 - Case study<br><b>Assignment 4:</b> Module 4 - Project Work                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                 |                                                     |                                             |
| <b>Text Book:</b><br><b>T1:</b> Raj, B., & Abhishek, M. (2021). <i>Text Analytics with Python: A Practical Real-World Approach to Gaining Actionable Insights from Your Data</i> (2nd Ed.). Apress.                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                 |                                                     |                                             |
| Reference Books:<br><b>R1:</b> Bird, S., Klein, E., & Loper, E. (2009). <i>Natural Language Processing with Python</i> . O'Reilly.<br><b>R2:</b> Jurafsky, D., & Martin, J. H. (2021). <i>Speech and Language Processing</i> (3rd Ed.). Draft.<br><b>R3:</b> Sarkar, D. (2016). <i>Text Analytics with Python</i> . Apress.                                                                                                                                                          |                                                                                                                                                                                                                                 |                                                     |                                             |
| <b>Online Resources:</b><br>1. Presidency University Library Portal:<br><a href="https://presiuniv.knimbus.com/user#/home">https://presiuniv.knimbus.com/user#/home</a><br>2. NLTK Tutorials:<br><a href="https://www.nltk.org/book/">https://www.nltk.org/book/</a><br>3. Hugging Face Transformers:<br><a href="https://huggingface.co/transformers/">https://huggingface.co/transformers/</a><br><b>Research Articles:</b><br><b>Multimedia (Videos):</b><br><b>Case Studies:</b> |                                                                                                                                                                                                                                 |                                                     |                                             |

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| 1. <b>Netflix</b> – Text summarization for content metadata tagging<br><a href="https://netflixtechblog.com/tagged/nlp">https://netflixtechblog.com/tagged/nlp</a><br>2. <b>Zomato</b> – Sentiment analysis from customer reviews<br><a href="https://medium.com/swlh/sentiment-analysis-on-zomato-reviews-using-python-nlp-5f8493ebc23f">https://medium.com/swlh/sentiment-analysis-on-zomato-reviews-using-python-nlp-5f8493ebc23f</a><br>3. <b>Amazon</b> – Customer feedback mining for product improvement<br><a href="https://towardsdatascience.com/applying-nlp-to-analyze-amazon-reviews-using-python-71efb491dfa0">https://towardsdatascience.com/applying-nlp-to-analyze-amazon-reviews-using-python-71efb491dfa0</a><br>4. <b>HDFC Bank</b> – Chatbot analytics and NER for customer service<br><a href="https://analyticsindiamag.com/hdfc-banks-use-of-analytics-machine-learning-explained/">https://analyticsindiamag.com/hdfc-banks-use-of-analytics-machine-learning-explained/</a><br>5. <b>Twitter</b> – Trend analysis and political sentiment detection<br><a href="https://monkeylearn.com/blog/sentiment-analysis-twitter/">https://monkeylearn.com/blog/sentiment-analysis-twitter/</a> |                              |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Dr. Varalakshmi Dandu</b> |
| Recommended by the Board of Studies on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | BOS NO:                      |
| Date of Approval by the Academic Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Academic Council Meeting No. |

| Course Code:<br>BAL4529      | Course Title: BFSI Analytics<br>Type of Course:<br>Specialization Track<br>Elective<br>Theory and Practical                                                                                                                                                                                                                                                                                                                                                         | L                                                                                                          | T | P | C |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---|---|---|
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1                                                                                                          | 1 | 2 | 3 |
| <b>Version No.</b>           | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                            |   |   |   |
| <b>Course Pre-requisites</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                            |   |   |   |
| <b>Anti-requisites</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                            |   |   |   |
| <b>Course Description</b>    | This course explores the use of analytics in the Banking, Financial Services, and Insurance (BFSI) sector. It equips students with the skills to analyze financial data, detect fraud, assess credit risk, optimize customer value, and support regulatory compliance. Learners will use statistical tools and machine learning techniques to solve real-world BFSI problems and gain experience with industry-standard platforms for risk and financial analytics. |                                                                                                            |   |   |   |
| <b>Course Outcomes</b>       | <b>CO1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Understand</b> the analytics lifecycle within banking, financial, and insurance services                |   |   |   |
|                              | <b>CO2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Apply</b> predictive analytics techniques to assess credit risk, customer churn, and loan defaults      |   |   |   |
|                              | <b>CO3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Analyze</b> financial and transactional data using advanced analytical tools                            |   |   |   |
|                              | <b>CO4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Create</b> data-driven solutions for fraud detection, portfolio optimization, and customer segmentation |   |   |   |

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| <b>Course Objective</b>                                                                                                                                                                                                                                                                                                                                                                                                     | To enable learners to apply <b>analytics in financial decision-making, risk modeling, and compliance monitoring</b> through hands-on experience with real-world datasets and platforms used in the BFSI domain. |                                                     |                               |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <b>BFSI Sector Overview</b>                                                                                                                                                                                     | Quiz (Participative Learning)                       | <b>(4L, 4T) + 5 Practical</b> |
| <b>Topics:</b> BFSI Sector Overview & Data Landscape: Core banking, insurance systems, payment ecosystems, financial KPIs, compliance data                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Credit Risk and Customer Analytics</b>                                                                                                                                                                       | Assignment using E Library (Participative Learning) | <b>(4L, 4T) + 7 Practical</b> |
| <b>Topics:</b> Credit Risk and Customer Analytics: Credit scoring, churn prediction, customer value segmentation, predictive models                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Fraud Detection and Regulatory Analytics</b>                                                                                                                                                                 | Case Study (Experiential Learning)                  | <b>(4L, 3T) + 9 Practical</b> |
| <b>Topics:</b> Fraud Detection and Regulatory Analytics: Anomaly detection, anti-money laundering (AML), Basel compliance, audit trails.                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Portfolio and Insurance Analytics</b>                                                                                                                                                                        | Class activity (Project Work)                       | <b>(3L, 4T) + 9 Practical</b> |
| <b>Topics:</b> Portfolio and Insurance Analytics: Investment analysis, claims prediction, solvency modeling, project dashboard.                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Targeted Application &amp; Tools that can be used:</b> Python, R, SAS, Power BI, Tableau, SQL, Scikit-learn, XGBoost, Alteryx                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Project work/Assignment:</b>                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Assignment 1:</b> Module 1 - Quiz<br><b>Assignment 2:</b> Module 2 - Written Assignment<br><b>Assignment 3:</b> Module 3 - Case study<br><b>Assignment 4:</b> Module 4 - Project Work                                                                                                                                                                                                                                    |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Text Book:</b><br><b>T1:</b> Naresh Malhotra & Satya Bhushan Dash. (2025). <i>Marketing Research: An Applied Orientation with BFSI Case Studies</i> . Pearson.                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Reference Books:</b><br><b>R1:</b> Baesens, B. (2014). <i>Analytics in a Big Data World: The Essential Guide to Data Science and its Applications</i> . Wiley.<br><b>R2:</b> James, G., Witten, D., Hastie, T., & Tibshirani, R. (2021). <i>An Introduction to Statistical Learning</i> . Springer.                                                                                                                      |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Online Resources:</b><br>Presidency University Library Portal:<br><a href="https://presiuniv.knimbus.com/user#/home">https://presiuniv.knimbus.com/user#/home</a><br>RBI Publications:<br><a href="https://www.rbi.org.in">https://www.rbi.org.in</a><br>World Bank Financial Data:<br><a href="https://databank.worldbank.org/source/financial-inclusion">https://databank.worldbank.org/source/financial-inclusion</a> |                                                                                                                                                                                                                 |                                                     |                               |
| <b>Research Articles:</b><br>1. <a href="https://academic.oup.com/jrsssa/article-pdf/160/3/523/49760733/jrsssa_160_3_523.pdf">https://academic.oup.com/jrsssa/article-pdf/160/3/523/49760733/jrsssa_160_3_523.pdf</a>                                                                                                                                                                                                       |                                                                                                                                                                                                                 |                                                     |                               |

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| 2.<br><a href="https://www.researchgate.net/publication/368824037_USE_OF_BIG_DATA_ANALYTICS_IN_BANKING_INDUSTRY">https://www.researchgate.net/publication/368824037_USE_OF_BIG_DATA_ANALYTICS_IN_BANKING_INDUSTRY</a>                                                                                                         |                              |
| 3. <a href="https://www.emerald.com/insight/content/doi/10.1108/jeim-05-2020-0176/full/html">https://www.emerald.com/insight/content/doi/10.1108/jeim-05-2020-0176/full/html</a>                                                                                                                                              |                              |
| <b>Multimedia (Videos):</b>                                                                                                                                                                                                                                                                                                   |                              |
| 1. <a href="https://www.youtube.com/watch?v=2A_2AzaA-zI&amp;list=PL_sAZbXvtzYIQrP06zyJqmqhELMynzWI4">https://www.youtube.com/watch?v=2A_2AzaA-zI&amp;list=PL_sAZbXvtzYIQrP06zyJqmqhELMynzWI4</a>                                                                                                                              |                              |
| 2. <a href="https://www.youtube.com/watch?v=VEb7Zs6Cfh8">https://www.youtube.com/watch?v=VEb7Zs6Cfh8</a>                                                                                                                                                                                                                      |                              |
| 3. <a href="https://www.youtube.com/watch?v=hHthCn_XjVk">https://www.youtube.com/watch?v=hHthCn_XjVk</a>                                                                                                                                                                                                                      |                              |
| <b>Case Studies:</b>                                                                                                                                                                                                                                                                                                          |                              |
| <b>HDFC Bank</b> – Credit risk modeling using ML<br><a href="https://analyticsindiamag.com/hdfc-banks-use-of-analytics-machine-learning-explained/">https://analyticsindiamag.com/hdfc-banks-use-of-analytics-machine-learning-explained/</a>                                                                                 |                              |
| <b>ICICI Lombard</b> – Predictive analytics in claims and underwriting<br><a href="https://www.icicilombard.com/blogs/health-insurance/hi/how-data-analytics-is-helping-the-health-insurance-industry">https://www.icicilombard.com/blogs/health-insurance/hi/how-data-analytics-is-helping-the-health-insurance-industry</a> |                              |
| <b>SBI</b> – Customer segmentation and CRM analytics<br><a href="https://www.sbi.co.in/web/about-us/analytics">https://www.sbi.co.in/web/about-us/analytics</a>                                                                                                                                                               |                              |
| <b>Axis Bank</b> – Fraud analytics and AML compliance<br><a href="https://www.analyticsvidhya.com/blog/2021/03/how-axis-bank-uses-data-science/">https://www.analyticsvidhya.com/blog/2021/03/how-axis-bank-uses-data-science/</a>                                                                                            |                              |
| <b>LIC India</b> – Mortality and solvency analytics<br><a href="https://www.licindia.in/Bottom-Links/Financials">https://www.licindia.in/Bottom-Links/Financials</a>                                                                                                                                                          |                              |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                  | <b>Dr. Srikanth Reddy</b>    |
| Recommended by the Board of Studies on                                                                                                                                                                                                                                                                                        | BOS NO:                      |
| Date of Approval by the Academic Council                                                                                                                                                                                                                                                                                      | Academic Council Meeting No. |

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|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---|---|---|---|
| Course Code:<br>BAL4516      | <b>Course name:</b> Deep Learning Techniques and Applications<br><b>Course type : Core</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>L- T- P-C</b> |   |   |   |   |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  | 1 | 1 | 2 | 3 |
| <b>Version No.</b>           | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                  |   |   |   |   |
| <b>Course Pre-requisites</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |   |   |   |   |
| <b>Anti-requisites</b>       | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  |   |   |   |   |
| <b>Course Description</b>    | This course provides students with a comprehensive understanding of deep learning techniques and their applications in solving complex business and real-world problems. The course explores neural network architectures, deep learning frameworks, computer vision, natural language processing, generative AI, and emerging AI technologies. Emphasis is placed on developing practical skills for designing, training, evaluating, and deploying deep learning models using modern AI tools and cloud platforms. Through hands-on laboratories, industry case studies, and capstone projects, students learn how deep learning drives innovation across marketing, finance, healthcare, operations, human resources, and customer experience management. |                  |   |   |   |   |

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| <b>Course Out Comes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p><b>CO1:</b> Understand the fundamental concepts, architectures, and algorithms of deep learning and neural networks. <b>[Understand]</b></p> <p><b>CO2:</b> Apply deep learning frameworks and techniques to develop predictive and intelligent business applications. <b>[Apply]</b></p> <p><b>CO3:</b> Analyze complex datasets using advanced deep learning models for image, text, speech, and business analytics applications. <b>[Analyze]</b></p> <p><b>CO4:</b> Design and deploy deep learning solutions that address organizational challenges and create strategic business value. <b>[Design]</b></p>                                                             |                   |  |                           |
| <b>Course objective</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>This course prepares students to leverage deep learning technologies for advanced analytics and intelligent decision-making. The curriculum focuses on understanding neural network architectures, implementing deep learning models, and evaluating their business impact. Students gain practical experience with industry-standard tools and frameworks while exploring applications in computer vision, natural language processing, recommendation systems, predictive analytics, and generative AI. The course also addresses ethical considerations, explainable AI, model governance, and enterprise deployment challenges associated with deep learning systems.</p> |                   |  |                           |
| <b>Course Content:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |  |                           |
| <b>Module 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Foundations of Deep Learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Quiz</b>       |  | <b>4L+4T+7P= 15 hours</b> |
| Introduction to Artificial Intelligence, Machine Learning, and Deep Learning; biological inspiration of neural networks; perceptrons and artificial neurons; activation functions; feedforward neural networks; forward and backward propagation; gradient descent and optimization algorithms; loss functions and model evaluation; hyperparameter tuning; overfitting and underfitting; regularization techniques; introduction to TensorFlow, Keras, and PyTorch; business applications of deep learning. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |  |                           |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Deep Neural Networks and Predictive Analytics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Assignment</b> |  | <b>3L+4T+8P= 15 hours</b> |
| Deep neural network architectures; multilayer perceptrons; optimization strategies; dropout and batch normalization; model training and validation; predictive analytics using deep learning; customer churn prediction; demand forecasting; fraud detection; credit risk modeling; recommendation systems; customer segmentation; performance evaluation metrics; explainability and interpretability of deep learning models.                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |  |                           |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Computer Vision and Natural Language Processing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Case Study</b> |  | <b>4L+4T+8P= 16 hours</b> |
| Convolutional Neural Networks (CNNs); image classification and object detection; facial recognition and image analytics; computer vision applications in retail, healthcare, manufacturing, and security; Recurrent Neural Networks (RNNs), LSTMs, and GRUs; text classification; sentiment analysis; chatbot development; language modeling; transformer architectures; business applications of NLP and conversational AI; multimodal AI systems.                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |  |                           |

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| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Generative AI and Enterprise Deep Learning Applications | <b>Capstone Project/ Group Presentation</b> |  | <b>4L+3T+7P= 14 hours</b> |
| Generative AI and foundation models; Large Language Models (LLMs); Generative Adversarial Networks (GANs); prompt engineering; Retrieval-Augmented Generation (RAG); enterprise AI copilots; autonomous agents and intelligent assistants; cloud-based AI platforms; deployment and monitoring of deep learning models; ethical AI, bias, fairness, privacy, and governance; future trends in deep learning; Final Capstone Project: Designing and implementing a deep learning solution for a business challenge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                         |                                             |  |                           |
| <b>Targeted Application &amp; Tools that can be used:</b> Python, Jupyter Notebook, Google Colab, Anaconda                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                         |                                             |  |                           |
| <b>Textbooks</b><br><b>T1:</b> Goodfellow, I., Bengio, Y., & Courville, A. (2024). <i>Deep Learning</i> (Updated Edition). MIT Press.<br><b>T2:</b> Chollet, F. (2025). <i>Deep Learning with Python</i> (3rd ed.). Manning Publications.<br><b>T3:</b> Stevens, E., Antiga, L., & Viehmann, T. (2024). <i>Deep Learning with PyTorch</i> (2nd ed.). Manning Publications.<br><b>Reference Books</b><br><b>R1:</b> Géron, A. (2025). <i>Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow</i> (4th ed.). O'Reilly Media.<br><b>R2:</b> Raschka, S., Liu, Y., & Mirjalili, V. (2024). <i>Machine Learning with PyTorch and Scikit-Learn</i> . Packt Publishing.<br><b>R3:</b> Russell, S., & Norvig, P. (2022). <i>Artificial Intelligence: A Modern Approach</i> (4th ed.). Pearson.<br><b>Online Resources</b> <ul style="list-style-type: none"> <li>• <a href="https://www.tensorflow.org">https://www.tensorflow.org</a></li> <li>• <a href="https://pytorch.org">https://pytorch.org</a></li> <li>• <a href="https://keras.io">https://keras.io</a></li> <li>• <a href="https://huggingface.co/docs">https://huggingface.co/docs</a></li> <li>• <a href="https://developers.google.com/machine-learning">https://developers.google.com/machine-learning</a></li> <li>• <a href="https://www.deeplearning.ai">https://www.deeplearning.ai</a></li> <li>• <a href="https://colab.research.google.com">https://colab.research.google.com</a></li> <li>• <a href="https://docs.aws.amazon.com/sagemaker/">https://docs.aws.amazon.com/sagemaker/</a></li> <li>• <a href="https://learn.microsoft.com/en-us/azure/ai-services/">https://learn.microsoft.com/en-us/azure/ai-services/</a></li> <li>• <a href="https://cloud.google.com/vertex-ai/docs">https://cloud.google.com/vertex-ai/docs</a></li> <li>• <a href="https://openai.com/research">https://openai.com/research</a></li> <li>• <a href="https://paperswithcode.com">https://paperswithcode.com</a></li> <li>• <a href="https://arxiv.org/archive/cs.LG">https://arxiv.org/archive/cs.LG</a></li> </ul> |                                                         |                                             |  |                           |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Dr. Varalakshmi Dandu                                   |                                             |  |                           |
| <b>Recommended by the Board of Studies on</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                         |                                             |  |                           |
| <b>Date of Approval by the Academic Council</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                         |                                             |  |                           |

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|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---|---|---|---|
| Course Code:<br>BAL4506      | <b>Course name: AI-Driven Operations and Supply Chain Management</b><br><b>Course type : STC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | L- T - P- C | 1 | 1 | 2 | 3 |
| <b>Version No.</b>           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |   |   |   |   |
| <b>Course Pre-requisites</b> | OPS4111 – Production Operations and Logistics Management<br>QNT4114 – Applied Data Analysis and Visualization<br>Fundamentals of Business Analytics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |   |   |   |   |
| <b>Anti-requisites</b>       | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |   |   |   |   |
| <b>Course Description</b>    | This course offers an extensive exploration of how artificial intelligence (AI) and digital technologies change traditional operations and global supply chain ecosystems. Students will analyse the structural frameworks, identify the mechanics of bottlenecks, and variations in processes across service and manufacturing sectors while assessing the strategic financial impact of operational decisions. The course creates a balance between the core process design with advanced technologies, stressing the integration of the Internet of Things (IoT), robotics, and blockchain to improve end-to-end transparency. It emphasizes on deploying machine learning algorithms to predict demand, execute inventory in real-time, and evaluate risk-mitigated logistics networks. Ultimately, this course prepares the future managers to build agile, resilient, and ecologically sustainable logistics networks and supply chains using responsible AI frameworks and autonomous systems. |             |   |   |   |   |
| <b>Course Out Comes</b>      | CO-1: Understand the core fundamentals of manufacturing and service operations, process architectures, and the structural enablers of digital transformation within an organization.<br>CO-2: Analyze structural bottlenecks, network strategies, and supply chain design frameworks to effectively align operational capacities with an organization's financial goals.<br>CO-3: Evaluate the integration of disruptive digital technologies, including IoT, robotics, blockchain, and data analytics tools, to maximize supply chain visibility, risk mitigation, and operational transparency.<br>CO-4: Create optimized, resilient, and sustainable supply chain strategies using artificial intelligence models, machine learning algorithms, and real-time simulation tools.                                                                                                                                                                                                                    |             |   |   |   |   |
| <b>Course objective</b>      | To equip students with a strategic and practical understanding of how digital technologies and artificial intelligence transform modern operations, enabling them to evaluate financial and process frameworks, analyze supply chain bottlenecks, integrate Industry 4.0 architectures (IoT, robotics, and blockchain), and deploy machine learning models to build resilient, optimized, and environmentally sustainable global supply chain ecosystems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |   |   |   |   |
| <b>Course Content:</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |   |   |   |   |
| <b>Module 1</b>              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |   |   |   |   |

**Foundations of Operations and Digital Supply Chain Strategy:**

Fundamentals of operations in manufacturing and services; Process and systems view of the organization; Product-process matrix and operational process analysis; Digital transformation: strategic opportunities, adoption challenges, and organizational alignments; International value chain management and global business strategy. Quantitative process capacity and throughput analysis. Designing interactive digital operational dashboards using corporate BI tools (e.g., Power BI or Tableau).

**Module 2**

**Supply Chain Structure, Design, and Financial Metrics:**

Supply chain planning concepts, core processes, and structural bottlenecks; Evaluating supply chain network strategy regarding capacity, geographic locations, and technology; Supply chain structure design and frameworks; Translating supply chain decisions into financial terms; Aligning the supply chain with corporate finance, cash-to-cash cycles, working capital, and cost-to-serve modeling; Inventory valuation and financial reporting trade-offs. Developing quantitative cost-to-serve matrices; Calculating cash-to-cash cycle times and working capital optimizations under network variability; Formulating linear programming models for capacity planning. Building comprehensive supply chain financial metrics and performance dashboards; Running scenario-based optimization models in advanced spreadsheet applications (e.g., Excel Solver) to evaluate network design trade-offs

**Module 3**

**Digital Technologies, Big Data, and Supply Chain Analytics:**

The digitalization of supply chain systems: insights, outlook, and Industry 4.0 evolution; Internet of Things (IoT) architectures (sensors, actuators, and telemetry feedback loops); Robotics, automated guided vehicles (AGVs), and control automation; Blockchain structures for tracking, provenance, and supply chain transparency; Statistics for operations managers; Descriptive, predictive, and prescriptive analytics; Multi-criteria decision making (MCDM) frameworks. Applying probability distributions and regression mathematics to operational datasets; Formulating analytical hierarchy processes (AHP) and multi-criteria decision matrices for supplier selection.

**Module 4**

**Intelligent AI/ML Applications, Smart Inventory, and Sustainability:**

Introduction to AI and Machine Learning in supply chain ecosystems; Deep-dive into predictive demand forecasting using ML, dynamic pricing strategies, and AI-driven supply chain visibility; Smart warehousing technologies and automation in distribution centers; AI-driven inventory optimization and autonomous routing algorithms. Warehouse, last-mile delivery, and routing challenges overcome using AI/ML; Digital, green, and sustainable procurement practices (Scope 3 emissions, carbon accounting, circular economy principles). Deriving mathematical formulations for AI-driven multi-echelon inventory systems; Calculating carbon footprints and supply chain Scope 3 emission allocation models.

**Targeted Application & Tools that can be used:** Python, R Programming, Power BI, MS Excel, Arena

**Reference books**

**T1: Stanton, D. H. (2023). The AI Revolution: Transforming Operations Management: Shaping the Future of Industry by Unleashing the Power of AI in Operations Management. Amazon Digital Services LLC – KDP**

**T2: Mubarik, M. S., & Khan, S. A. (2024). Digital Supply Chain Management: Evolution, Definitions, and Dimensions (The Theory, Methods and Application of Managing Digital Supply Chains). Emerald Publishing Limited.**

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| <b>R1: Turlapati, V. R. (2024). Artificial Intelligence in Supply Chain Management: Enhancing Efficiency and Flexibility. Vinsa Publishing.</b> |  |
| <b>R2: Chopra, S., Meindl, P., &amp; Kalra, D. V. (2019/Latest Ed.). Supply Chain Management: Strategy, Planning, and Operation. Pearson.</b>   |  |
| <b>Catalogue prepared by</b>                                                                                                                    |  |
| <b>Recommended by the Board of Studies on</b>                                                                                                   |  |
| <b>Date of Approval by the Academic Council</b>                                                                                                 |  |

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|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---|---|-----------------------|
| Course Code:<br>BAL4530                                                                                                                | Course Title: Retail Marketing Analytics<br>Type of Course: Specialization Track<br>Elective<br>Theory and Practical                                                                                                                                                                                                                                                                                                                    | L                                                                                                                | T | P | C                     |
|                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1                                                                                                                | 1 | 2 | 3                     |
| Version No.                                                                                                                            | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                  |   |   |                       |
| Course Pre-requisites                                                                                                                  | MKT4111: Marketing Management - Theories and Practices<br>QNT4112: Applied Data Analysis and Visualization                                                                                                                                                                                                                                                                                                                              |                                                                                                                  |   |   |                       |
| Anti-requisites                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                  |   |   |                       |
| Course Description                                                                                                                     | This course focuses on the application of analytics in the retail marketing domain. It helps students understand how retail businesses use data to drive merchandising decisions, inventory planning, customer segmentation, campaign optimization, and loyalty strategies. Learners will apply statistical and machine learning techniques to real-world retail datasets using analytics tools to derive actionable business insights. |                                                                                                                  |   |   |                       |
| Course Outcomes                                                                                                                        | CO1                                                                                                                                                                                                                                                                                                                                                                                                                                     | Understand the use of analytics in solving retail marketing problems                                             |   |   |                       |
|                                                                                                                                        | CO2                                                                                                                                                                                                                                                                                                                                                                                                                                     | Apply techniques for customer segmentation, sales forecasting, and pricing analysis                              |   |   |                       |
|                                                                                                                                        | CO3                                                                                                                                                                                                                                                                                                                                                                                                                                     | Analyze customer behavior, basket size, churn, and loyalty using retail data                                     |   |   |                       |
|                                                                                                                                        | CO4                                                                                                                                                                                                                                                                                                                                                                                                                                     | Create data-driven strategies for personalized marketing, inventory optimization, and store performance tracking |   |   |                       |
| Course Objective                                                                                                                       | To equip learners with the skills to analyze retail marketing data and make data-driven decisions using advanced analytics techniques and tools.                                                                                                                                                                                                                                                                                        |                                                                                                                  |   |   |                       |
| Module 1                                                                                                                               | Retail Analytics Landscape                                                                                                                                                                                                                                                                                                                                                                                                              | Quiz (Participative Learning)                                                                                    |   |   | (4L,4T) + 5 Practical |
| Topics: Retail Analytics Landscape: Retail KPIs, POS systems, retail data sources, retail channel analytics, consumer decision journey |                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                  |   |   |                       |

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| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Customer and Product Analytics</b> | Assignment using E Library (Participative Learning) | <b>(4L,4T) + 7 Practical</b> |
| <b>Topics:</b> Customer and Product Analytics: Segmentation, RFM analysis, market basket analysis, product affinity, churn prediction                                                                                                                                                                                                                                                                                                                                                                                                                              |                                       |                                                     |                              |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Inventory Optimization</b>         | Case Study (Experiential Learning)                  | <b>(3L,4T) + 9 Practical</b> |
| <b>Topics:</b> Pricing, Promotion, and Inventory Optimization: Markdown pricing, sales forecasting, ABC analysis, campaign ROI                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                       |                                                     |                              |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Advanced Applications</b>          | Project (Experiential Learning)                     | <b>(4L,3T) + 9 Practical</b> |
| <b>Topics:</b> Advanced Applications and Capstone: Store performance dashboards, omnichannel retail analytics, personalization, use of AI/ML                                                                                                                                                                                                                                                                                                                                                                                                                       |                                       |                                                     |                              |
| <b>Targeted Application &amp; Tools that can be used</b> Python, R, Power BI, Tableau, Excel Solver, RapidMiner, SQL, Orange, Google Analytics                                                                                                                                                                                                                                                                                                                                                                                                                     |                                       |                                                     |                              |
| <b>Project work/Assignment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                       |                                                     |                              |
| <b>Assignment 1:</b> Module 1 – Quiz on Retail KPIs and Data<br><b>Assignment 2:</b> Module 2 – Customer Segmentation and Basket Analysis<br><b>Assignment 3:</b> Module 3 – Pricing Optimization Project<br><b>Assignment 4:</b> Module 4 – Capstone: Store or Campaign Analytics Dashboard                                                                                                                                                                                                                                                                       |                                       |                                                     |                              |
| <b>Text Book:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                       |                                                     |                              |
| <b>T1:</b> Cox, E. (2011). Retail analytics: The secret weapon (1st ed.). Wiley.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                       |                                                     |                              |
| <b>Reference Books:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                       |                                                     |                              |
| <b>R1:</b> Kumar, V., & Reinartz, W. (2018). <i>Customer Relationship Management</i> . Springer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                       |                                                     |                              |
| <b>R2:</b> Davenport, T. H. (2006). <i>Competing on Analytics</i> . Harvard Business Press.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                     |                              |
| <b>Online Resources:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                                                     |                              |
| Presidency University Library Portal:<br><a href="https://presiuniv.knimbus.com/user#/home">https://presiuniv.knimbus.com/user#/home</a>                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                                                     |                              |
| McKinsey on Retail:<br><a href="https://www.mckinsey.com/industries/retail">https://www.mckinsey.com/industries/retail</a>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                       |                                                     |                              |
| Harvard Business Review Retail Articles:<br><a href="https://hbr.org/topic/retail">https://hbr.org/topic/retail</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                       |                                                     |                              |
| <b>Research Articles:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                       |                                                     |                              |
| 1. <a href="https://www.researchgate.net/profile/Sudeep-Chandramana/publication/323309092_Retail_Analytics_Driving_Success_in_Retail_Industry_with_Business_Analytics/links/5a8d4ad5a6fdcc786eb06cf9/Retail-Analytics-Driving-Success-in-Retail-Industry-with-Business-Analytics.pdf">https://www.researchgate.net/profile/Sudeep-Chandramana/publication/323309092_Retail_Analytics_Driving_Success_in_Retail_Industry_with_Business_Analytics/links/5a8d4ad5a6fdcc786eb06cf9/Retail-Analytics-Driving-Success-in-Retail-Industry-with-Business-Analytics.pdf</a> |                                       |                                                     |                              |
| 2. <a href="https://www.emerald.com/insight/content/doi/10.1108/sd-04-2021-0039/full/html">https://www.emerald.com/insight/content/doi/10.1108/sd-04-2021-0039/full/html</a>                                                                                                                                                                                                                                                                                                                                                                                       |                                       |                                                     |                              |
| 3. <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5068349">https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5068349</a>                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                                                     |                              |
| <b>Multimedia (Videos):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                     |                              |
| 1. <a href="https://www.youtube.com/watch?v=6WXgqkTsv0k">https://www.youtube.com/watch?v=6WXgqkTsv0k</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                                                     |                              |
| 2. <a href="https://www.youtube.com/watch?v=ZoAtxdXZAKk">https://www.youtube.com/watch?v=ZoAtxdXZAKk</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                                                     |                              |
| 3. <a href="https://www.youtube.com/watch?v=mJWfdHVbRFk">https://www.youtube.com/watch?v=mJWfdHVbRFk</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                       |                                                     |                              |
| <b>Case Studies:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                       |                                                     |                              |
| <b>Walmart</b> – Demand forecasting and shelf optimization<br><a href="https://hbr.org/2010/11/the-future-of-retail">https://hbr.org/2010/11/the-future-of-retail</a>                                                                                                                                                                                                                                                                                                                                                                                              |                                       |                                                     |                              |
| <b>Zara</b> – Inventory planning through data analytics<br><a href="https://www.mckinsey.com/industries/retail/our-insights/zara-it-for-fast-fashion">https://www.mckinsey.com/industries/retail/our-insights/zara-it-for-fast-fashion</a>                                                                                                                                                                                                                                                                                                                         |                                       |                                                     |                              |
| <b>Amazon</b> – Personalized recommendations using retail analytics<br><a href="https://aws.amazon.com/retail/analytics/">https://aws.amazon.com/retail/analytics/</a>                                                                                                                                                                                                                                                                                                                                                                                             |                                       |                                                     |                              |

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| <b>Reliance Retail</b> – Customer profiling and regional campaign strategies<br><a href="https://www.analyticsvidhya.com/blog/2022/01/how-reliance-uses-data-analytics-in-retail/">https://www.analyticsvidhya.com/blog/2022/01/how-reliance-uses-data-analytics-in-retail/</a><br><b>Big Bazaar</b> – Pricing and promotion analytics for footfall optimization<br><a href="https://www.indianretailer.com/article/technology/digital-trends/how-big-bazaar-is-transforming-with-retail-analytics.a6781/">https://www.indianretailer.com/article/technology/digital-trends/how-big-bazaar-is-transforming-with-retail-analytics.a6781/</a> |                                                          |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Dr. N Srikanth Reddy</b>                              |
| Recommended by the Board of Studies on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | BOS NO: 18th held on 6, June, 2025                       |
| Date of Approval by the Academic Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Academic Council Meeting No. 26th held on 25, July, 2025 |

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| <b>Course Code:</b><br><b>BAL4531</b>                                                                                                                                                                                                             | <b>Course Title:</b> FinTech and Blockchain Analytics                                                                                                                                                                                                                                                                                                                                              | <b>L</b>                                                                                | <b>T</b> | <b>P</b>                     | <b>C</b> |
|                                                                                                                                                                                                                                                   | <b>Type of Course: Specialization Track Elective</b>                                                                                                                                                                                                                                                                                                                                               | <b>1</b>                                                                                | <b>1</b> | <b>2</b>                     | <b>3</b> |
| <b>Version No.</b>                                                                                                                                                                                                                                | 1.0                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                         |          |                              |          |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                      | QNT4111 Applied Business Statistics                                                                                                                                                                                                                                                                                                                                                                |                                                                                         |          |                              |          |
| <b>Anti-requisites</b>                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                         |          |                              |          |
| <b>Course Description</b>                                                                                                                                                                                                                         | This course provides a strategic and analytical understanding of emerging FinTech innovations and blockchain technologies. Learners will explore the evolving digital financial ecosystem, including cryptocurrencies, decentralized finance (DeFi), robo-advisors, and payment systems. Emphasis is placed on blockchain data analytics and how it informs decision-making in financial services. |                                                                                         |          |                              |          |
| <b>Course Outcomes</b>                                                                                                                                                                                                                            | <b>CO1</b>                                                                                                                                                                                                                                                                                                                                                                                         | <b>Understand the components and technologies shaping the FinTech ecosystem.</b>        |          |                              |          |
|                                                                                                                                                                                                                                                   | <b>CO2</b>                                                                                                                                                                                                                                                                                                                                                                                         | <b>Apply blockchain principles to evaluate decentralized systems and crypto assets.</b> |          |                              |          |
|                                                                                                                                                                                                                                                   | <b>CO3</b>                                                                                                                                                                                                                                                                                                                                                                                         | <b>Analyze financial and blockchain data using analytics tools and models.</b>          |          |                              |          |
|                                                                                                                                                                                                                                                   | <b>CO4</b>                                                                                                                                                                                                                                                                                                                                                                                         | <b>Create business insights using real-time FinTech and blockchain applications.</b>    |          |                              |          |
| <b>Course Objective</b>                                                                                                                                                                                                                           | This course is designed to improve the learners' <b>EMPLOYABILITY SKILLS</b> by using <b>EXPERIENTIAL LEARNING</b> techniques.                                                                                                                                                                                                                                                                     |                                                                                         |          |                              |          |
| <b>Module 1</b>                                                                                                                                                                                                                                   | <b>Foundations of FinTech and Digital Finance</b>                                                                                                                                                                                                                                                                                                                                                  | Quiz (Participative Learning)                                                           |          | <b>(4L,4T) + 5 Practical</b> |          |
| <b>Topics:</b> Introduction to FinTech – Evolution of Digital Finance – RegTech, InsurTech, WealthTech – FinTech Business Models – FinTech Disruptions in Banking and Capital Markets – Digital Lending, Digital Payments – Regulatory Landscape. |                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                         |          |                              |          |

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| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Blockchain Technology and Cryptocurrency</b> | Assignment using E Library (Participative Learning) | <b>(4L,4T) + 7 Practical</b> |
| <b>Topics:</b> Blockchain Architecture – Consensus Mechanisms – Smart Contracts – Distributed Ledger Technologies (DLT) – Introduction to Bitcoin, Ethereum – Wallets and Exchanges – Security, Privacy and Regulatory Considerations.                                                                                                                                                                                                                                              |                                                 |                                                     |                              |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Blockchain Analytics</b>                     | Case Study (Experiential Learning)                  | <b>(3L,4T) + 9 Practical</b> |
| <b>Topics:</b> Understanding Blockchain Data – Public Block Explorers (e.g., Etherscan) – Transaction Analytics – Wallet Tracking – Blockchain Network Analysis – Applications in AML, KYC, and Fraud Detection – On-chain vs Off-chain Data.                                                                                                                                                                                                                                       |                                                 |                                                     |                              |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Data Analytics in FinTech</b>                | Project (Experiential Learning)                     | <b>(4L,3T) + 9 Practical</b> |
| <b>Topics:</b> FinTech Data Sources – Predictive Models in Credit Scoring – Risk Modeling – Customer Segmentation – Robo-Advisory Systems – Sentiment Analysis in Crypto Markets – Real-time Payment and Transaction Analytics.                                                                                                                                                                                                                                                     |                                                 |                                                     |                              |
| <b>Targeted Application &amp; Tools that can be used:</b><br>Python (for crypto and financial analytics)<br>Power BI / Tableau for visualization<br>Google Colab, Excel for Financial Modeling                                                                                                                                                                                                                                                                                      |                                                 |                                                     |                              |
| <b>Project work/Assignment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |                                                     |                              |
| <b>Assignment 1:</b> Module 1 - Quiz<br><b>Assignment 2:</b> Module 2 - Written Assignment<br><b>Assignment 3:</b> Module 3 - Case study<br><b>Assignment 4:</b> Module 4 - Project Work                                                                                                                                                                                                                                                                                            |                                                 |                                                     |                              |
| <b>Text Book:</b><br><b>T1:</b> Schueffel, P. (2020). <i>The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries</i> . Wiley.                                                                                                                                                                                                                                                                                                              |                                                 |                                                     |                              |
| <b>Reference Books:</b><br><b>R1:</b> Mougayar, W. (2016). <i>The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology</i> . Wiley.<br><b>R2:</b> Tapscott, D., & Tapscott, A. (2016). <i>Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business, and the World</i> . Penguin.<br><b>R3:</b> Iman, N. (2022). <i>FinTech and RegTech in a Nutshell, and the Future in a Sandbox</i> . Springer.                    |                                                 |                                                     |                              |
| <b>Online Resources:</b><br><a href="https://presiuniv.knimbus.com/user#/home">https://presiuniv.knimbus.com/user#/home</a>                                                                                                                                                                                                                                                                                                                                                         |                                                 |                                                     |                              |
| <b>Research Articles:</b><br>1. <a href="https://www.sciencedirect.com/science/article/pii/S2772485922000606">https://www.sciencedirect.com/science/article/pii/S2772485922000606</a><br>2. <a href="https://jfin-swufe.springeropen.com/articles/10.1186/s40854-023-00469-3">https://jfin-swufe.springeropen.com/articles/10.1186/s40854-023-00469-3</a><br>3. <a href="https://dl.acm.org/doi/abs/10.1145/3531056.3531068">https://dl.acm.org/doi/abs/10.1145/3531056.3531068</a> |                                                 |                                                     |                              |
| <b>Multimedia (Videos):</b><br>1. <a href="https://www.youtube.com/watch?v=tmDrZAECvfA">https://www.youtube.com/watch?v=tmDrZAECvfA</a><br>2. <a href="https://www.youtube.com/watch?v=n41dE9Z9_NI">https://www.youtube.com/watch?v=n41dE9Z9_NI</a><br>3. <a href="https://www.youtube.com/watch?v=puN2la6L5qU">https://www.youtube.com/watch?v=puN2la6L5qU</a>                                                                                                                     |                                                 |                                                     |                              |
| <b>Case Studies:</b><br>1. Paytm's Role in Transforming India's Digital Payments<br>2. Ethereum Gas Fees and Smart Contract Use in DeFi<br>3. Blockchain Analytics in Fraud Detection – Chainalysis Case                                                                                                                                                                                                                                                                            |                                                 |                                                     |                              |

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| 4. The Rise of Robo-Advisors: Betterment and Wealthfront |                                                        |
| <b>Catalogue prepared by</b>                             | <b>Dr. T S Edwin</b>                                   |
| Recommended by the Board of Studies on                   | BOS NO: 18th held on 6,June,2025                       |
| Date of Approval by the Academic Council                 | Academic Council Meeting No. 26th held on 25,July,2025 |

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| Course Code: BAL4509                                                                                                                                                                        | <b>Course name:</b> AI Ethics, Governance and Responsible AI<br><b>Course type : Core</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | L- T- P-C   | 3 | 0 | 0 | 3              |
| <b>Version No.</b>                                                                                                                                                                          | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |   |   |   |                |
| <b>Course Pre-requisites</b>                                                                                                                                                                | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |   |   |   |                |
| <b>Anti-requisites</b>                                                                                                                                                                      | <b>Nil</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |   |   |   |                |
| <b>Course Description</b>                                                                                                                                                                   | This course equips students with the knowledge and practical skills required to leverage Python programming, data analytics, and Artificial Intelligence (AI) for business decision-making. The course covers the complete analytics lifecycle, including data acquisition, cleaning, transformation, visualization, predictive modeling, and AI-enabled decision support. Through hands-on applications using Python libraries and business datasets, students will develop the ability to generate insights, build predictive models, and communicate data-driven recommendations for managerial and strategic decision-making. |             |   |   |   |                |
| <b>Course Out Comes</b>                                                                                                                                                                     | <b>CO1 ) Understand</b> AI bias, black-box opacity, privacy concerns, and foundational ethical frameworks [ <b>Understand</b> ]<br><br><b>CO2 )Apply</b> corporate compliance toolkits, risk matrices, and global AI regulatory standards [ <b>Apply</b> ]<br><br><b>CO3 )Analyze</b> data systems using Explainable AI (XAI) techniques and fairness metrics [ <b>Analyze</b> ]<br><b>CO4) Design</b> enterprise-grade safety guidelines, deployment policies, and generative AI guardrails [ <b>Design</b> ]                                                                                                                    |             |   |   |   |                |
| <b>Course objective</b>                                                                                                                                                                     | This course prepares learners to navigate the ethical, regulatory, and technical complexities of automated enterprise decision-making . Students will internalize core principles of algorithmic fairness, data privacy, and systemic risk mitigation within fast-moving corporate environments . The curriculum builds practical skills in operationalizing international compliance frameworks, AI risk assessment matrices, and organizational audit toolkits                                                                                                                                                                  |             |   |   |   |                |
| <b>Course Content:</b>                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |   |   |   |                |
| <b>Module 1</b>                                                                                                                                                                             | Foundations of AI Ethics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Quiz</b> |   |   |   | <b>9 hours</b> |
| Introduction to AI morality; historical ethics context; definition of automated bias; algorithmic fairness metrics; transparency vs opacity; black-box problems; human-in-the-loop systems; |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |   |   |   |                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                |                                             |  |                 |
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| data privacy principles; surveillance capitalism; intellectual property concerns; global ethics frameworks; case studies in healthcare bias.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                |                                             |  |                 |
| <b>Module 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | AI Governance Frameworks & Compliance          | <b>Assignment</b>                           |  | <b>12 hours</b> |
| Corporate governance models; regulatory landscapes (EU AI Act); national AI policies; compliance auditing toolkits; risk assessment matrices; accountability frameworks; stakeholder mapping protocols; liability in autonomous systems; certification processes; third-party vendor audits; algorithmic impact assessments; compliance tracking software tools.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                |                                             |  |                 |
| <b>Module 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Technical Technicalities of Responsible AI     | <b>Case Study</b>                           |  | <b>10 hours</b> |
| De-biasing training datasets; explainable AI (XAI) techniques; SHAP and LIME methodologies; adversarial robustness testing; synthetic data generation privacy; differential privacy mechanisms; federated learning architectures; model drift evaluation; fairness-aware machine learning; lineage tracking for data; error analysis paradigms; open-source fairness toolkits.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                |                                             |  |                 |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Generative AI, Safety, & Enterprise Deployment | <b>Capstone Project/ Group Presentation</b> |  | <b>12 hours</b> |
| Large Language Model safety; deepfake detection methods; misinformation mitigation strategies; copyright in GenAI; socio-economic workforce displacement; environmental impact of training; alignment problem approaches; enterprise deployment policies; Capstone Project on Responsible AI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                |                                             |  |                 |
| <b>Targeted Application &amp; Tools that can be used:</b><br>IBM AIF360, Fairlearn, Tensor Flow Fairness Indicators                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                |                                             |  |                 |
| <b>Text books:</b><br><b>T1:</b> Coeckelbergh, M. (2020). AI ethics. MIT Press.<br><b>T2:</b> Bartoletti, I. (2020). An artificial revolution: On power, politics and AI. The Indigo Press.<br><b>Reference Books</b><br><b>R1:</b> Russell, S. (2019). Human compatible: Artificial intelligence and the problem of control. Viking.<br><b>R2:</b> Dubber, M. D., Pasquale, F., & Das, S. (Eds.). (2020). The Oxford handbook of ethics of AI. Oxford University Press.<br><b>R3:</b> Christian, B. (2020). The alignment problem: Machine learning and human values. W. W. Norton & Company.<br><b>Online Resources</b><br><b>EU AI Act Official Portal.</b> Regulatory frameworks, compliance requirements, and risk tiers. <a href="https://artificialintelligenceact.eu">artificialintelligenceact.eu</a><br><b>Google AI.</b> Responsible AI practices and technical fairness development guides. <a href="https://ai.google">ai.google</a><br><b>IBM Research.</b> AI Fairness 360 & Explainable AI open-source developer toolkits. <a href="https://ibm.com">ibm.com</a><br><b>Microsoft AI.</b> RAI Standard, impact assessment templates, and deployment playbooks. <a href="https://microsoft.com">microsoft.com</a><br><b>Coursera.</b> AI Ethics: Global Perspectives (by Charles Stewart Mott Foundation / London Interdisciplinary School). <a href="https://coursera.org">coursera.org</a> |                                                |                                             |  |                 |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Dr. Varalakshmi Dandu                          |                                             |  |                 |

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| <b>Recommended by the Board of Studies on</b>   |  |
| <b>Date of Approval by the Academic Council</b> |  |

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| <b>Course Code:</b><br><b>BAL4533</b>                                                                                                                                                                                                                    | <b>Course Title:</b> Digital and Social Media Analytics                                                                                                                                                                                                                                                                                                                          | <b>L</b>                                                                        | <b>T</b> | <b>P</b>                        | <b>C</b> |
|                                                                                                                                                                                                                                                          | <b>Type of Course:</b> Specialization Track Elective<br><b>Theory and Practical</b><br><b>Course</b>                                                                                                                                                                                                                                                                             | <b>2</b>                                                                        | <b>0</b> | <b>2</b>                        | <b>3</b> |
| <b>Version No.</b>                                                                                                                                                                                                                                       | 1.0                                                                                                                                                                                                                                                                                                                                                                              |                                                                                 |          |                                 |          |
| <b>Course Pre-requisites</b>                                                                                                                                                                                                                             | QNT4112 Applied Data Analysis and Visualization, Digital Marketing                                                                                                                                                                                                                                                                                                               |                                                                                 |          |                                 |          |
| <b>Anti-requisites</b>                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                 |          |                                 |          |
| <b>Course Description</b>                                                                                                                                                                                                                                | This course equips learners with analytical tools and frameworks to extract insights from digital and social media data. It emphasizes the strategic use of analytics to measure campaign effectiveness, track customer engagement, and optimize online marketing performance across platforms. Practical exposure to web and social analytics tools is integral to this course. |                                                                                 |          |                                 |          |
| <b>Course Outcomes</b>                                                                                                                                                                                                                                   | <b>CO1</b>                                                                                                                                                                                                                                                                                                                                                                       | Understand the role of analytics in digital and social media marketing.         |          |                                 |          |
|                                                                                                                                                                                                                                                          | <b>CO2</b>                                                                                                                                                                                                                                                                                                                                                                       | Apply metrics and KPIs to assess the performance of digital campaigns.          |          |                                 |          |
|                                                                                                                                                                                                                                                          | <b>CO3</b>                                                                                                                                                                                                                                                                                                                                                                       | Analyze data from web and social media platforms using analytics tools.         |          |                                 |          |
|                                                                                                                                                                                                                                                          | <b>CO4</b>                                                                                                                                                                                                                                                                                                                                                                       | Create data-driven marketing insights for improved customer engagement and ROI. |          |                                 |          |
| <b>Course Objective</b>                                                                                                                                                                                                                                  | This course is designed to improve the learners' <b>EMPLOYABILITY SKILLS</b> by using <b>EXPERIENTIAL LEARNING</b> techniques.                                                                                                                                                                                                                                                   |                                                                                 |          |                                 |          |
| <b>Module 1</b>                                                                                                                                                                                                                                          | <b>Foundations of Digital and Social Media Analytics</b>                                                                                                                                                                                                                                                                                                                         | Quiz (Participative Learning)                                                   |          | <b>8 Sessions + 5 Practical</b> |          |
| <b>Topics:</b> Importance of Analytics in Digital Marketing – Evolution of Social Media and Web Analytics – Types of Digital Metrics – Understanding KPIs – Introduction to Google Analytics and Facebook Insights – Ethical Considerations in Data Use. |                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                 |          |                                 |          |
| <b>Module 2</b>                                                                                                                                                                                                                                          | <b>Tools and Techniques in Digital Analytics</b>                                                                                                                                                                                                                                                                                                                                 | Assignment using E Library (Participative Learning)                             |          | <b>8 Sessions + 7 Practical</b> |          |

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| <b>Topics:</b> Setting up Analytics Tools (Google Analytics, Meta Business Suite) – Tagging and Tracking – UTM Parameters – Data Collection and Filtering – Dashboard Creation – Introduction to Google Tag Manager.                                             |                                                      |                                       |                                 |
| <b>Module 3</b>                                                                                                                                                                                                                                                  | <b>Social media Listening and Sentiment Analysis</b> | Case Study<br>(Experiential Learning) | <b>7 Sessions + 9 Practical</b> |
| <b>Topics:</b> Social media Listening Platforms (Hootsuite, Brandwatch) – Hashtag and Keyword Tracking – Sentiment Analysis Techniques – Brand Engagement Metrics – Case Studies in Social Media Campaigns.                                                      |                                                      |                                       |                                 |
| <b>Module 4</b>                                                                                                                                                                                                                                                  | <b>Data Interpretation and Visualization</b>         | Project<br>(Experiential Learning)    | <b>7 Sessions + 9 Practical</b> |
| <b>Topics:</b> Audience Behavior and Engagement Metrics – Funnel Analysis – Cohort Analysis – Attribution Models – Custom Reports and Visual Dashboards using Google Data Studio / Power BI.                                                                     |                                                      |                                       |                                 |
| <b>Targeted Application &amp; Tools that can be used:</b> Google Analytics (GA4), Meta Business Suite (Facebook & Instagram Insights), Twitter Analytics, LinkedIn Analytics, Google Tag Manager, Power BI, Hootsuite, Brandwatch (for listening and monitoring) |                                                      |                                       |                                 |
| <b>Project work/Assignment:</b>                                                                                                                                                                                                                                  |                                                      |                                       |                                 |
| <b>Assignment 1:</b> Module 1 - Quiz<br><b>Assignment 2:</b> Module 2 - Written Assignment<br><b>Assignment 3:</b> Module 3 - Case study<br><b>Assignment 4:</b> Module 4 - Project Work                                                                         |                                                      |                                       |                                 |
| <b>Text Book:</b>                                                                                                                                                                                                                                                |                                                      |                                       |                                 |
| <b>T1:</b> Marshall, G., & Johnston, M. (2022). <i>Digital Marketing Analytics: Making Sense of Consumer Data in a Digital World</i> . Pearson.                                                                                                                  |                                                      |                                       |                                 |
| <b>Reference Books:</b>                                                                                                                                                                                                                                          |                                                      |                                       |                                 |
| <b>R1:</b> Tuten, T. L., & Solomon, M. R. (2020). <i>Social Media Marketing</i> . Sage.                                                                                                                                                                          |                                                      |                                       |                                 |
| <b>R2:</b> Chaffey, D., & Ellis-Chadwick, F. (2019). <i>Digital Marketing</i> (7th ed.). Pearson                                                                                                                                                                 |                                                      |                                       |                                 |
| <b>Online Resources:</b>                                                                                                                                                                                                                                         |                                                      |                                       |                                 |
| <a href="https://presiuniv.knimbus.com/user#/home">https://presiuniv.knimbus.com/user#/home</a>                                                                                                                                                                  |                                                      |                                       |                                 |
| <b>Research Articles:</b>                                                                                                                                                                                                                                        |                                                      |                                       |                                 |
| 1. <a href="https://www.researchgate.net/publication/342511503_Digital_Analytics_Modeling_for_Insights_and_New_Methods">https://www.researchgate.net/publication/342511503_Digital_Analytics_Modeling_for_Insights_and_New_Methods</a>                           |                                                      |                                       |                                 |
| 2. <a href="https://www.jisem-journal.com/download/a-review-of-usage-and-applications-of-social-media-analytics-10958.pdf">https://www.jisem-journal.com/download/a-review-of-usage-and-applications-of-social-media-analytics-10958.pdf</a>                     |                                                      |                                       |                                 |
| 3. <a href="https://www.researchgate.net/publication/259148570_The_Power_of_Social_Media_Analytics">https://www.researchgate.net/publication/259148570_The_Power_of_Social_Media_Analytics</a>                                                                   |                                                      |                                       |                                 |
| <b>Multimedia (Videos):</b>                                                                                                                                                                                                                                      |                                                      |                                       |                                 |
| 1. <a href="http://www.youtube.com/watch?v=aEsWltLmPfc">http://www.youtube.com/watch?v=aEsWltLmPfc</a>                                                                                                                                                           |                                                      |                                       |                                 |
| 2. <a href="http://www.youtube.com/watch?v=yDUIzn77DL4">http://www.youtube.com/watch?v=yDUIzn77DL4</a>                                                                                                                                                           |                                                      |                                       |                                 |
| 3. <a href="http://www.youtube.com/watch?v=Pn82AJme0_o">http://www.youtube.com/watch?v=Pn82AJme0_o</a>                                                                                                                                                           |                                                      |                                       |                                 |
| <b>Case Studies:</b>                                                                                                                                                                                                                                             |                                                      |                                       |                                 |
| 1: Nike's Campaign Optimization using Web Analytics                                                                                                                                                                                                              |                                                      |                                       |                                 |
| 2. Starbucks' Sentiment Analysis on Social Media Feedback                                                                                                                                                                                                        |                                                      |                                       |                                 |
| 3. Netflix Personalization through Audience Behavior Analytics                                                                                                                                                                                                   |                                                      |                                       |                                 |
| 4. Airbnb's Use of Data to Improve Marketing Funnel Conversion                                                                                                                                                                                                   |                                                      |                                       |                                 |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                     | Dr. S Suresh Kumar                                   |                                       |                                 |
| Recommended by the Board of Studies on                                                                                                                                                                                                                           | BOS NO: 18th held on 6, June, 2025                   |                                       |                                 |

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| Date of Approval by the Academic Council | Academic Council Meeting No. 26th held on 25,July,2025 |
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| <b>Course Code:</b><br><b>BAL4532</b>                                                                                                                                                                          | <b>Course Title:</b> Strategic HR Analytics                                                                                                                                                                                                                                                                                                                                                                                                     | <b>L</b>                                                                                                        | <b>T</b> | <b>P</b>                        | <b>C</b> |
|                                                                                                                                                                                                                | <b>Type of Course:</b> Specialization Track<br><b>Elective</b><br><b>Theory and Practical Course</b>                                                                                                                                                                                                                                                                                                                                            | <b>2</b>                                                                                                        | <b>0</b> | <b>2</b>                        | <b>3</b> |
| <b>Version No.</b>                                                                                                                                                                                             | 1.0                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                 |          |                                 |          |
| <b>Course Pre-requisites</b>                                                                                                                                                                                   | QNT4111 Applied Business Statistics<br>OBH4111 Human Behavior in Organizations                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                 |          |                                 |          |
| <b>Anti-requisites</b>                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                 |          |                                 |          |
| <b>Course Description</b>                                                                                                                                                                                      | This course introduces students to the strategic application of HR analytics to drive data-informed decisions within organizations. By integrating quantitative methods with HR practices, the course enables learners to link HR metrics to business outcomes, predict workforce trends, and enhance decision-making. Students will use tools such as Excel, Power BI, R, or Python to visualize, interpret, and communicate HR data insights. |                                                                                                                 |          |                                 |          |
| <b>Course Outcomes</b>                                                                                                                                                                                         | <b>CO1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Understand</b> the role of HR analytics in strategic decision-making                                         |          |                                 |          |
|                                                                                                                                                                                                                | <b>CO2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Apply</b> statistical tools to analyze and interpret HR data                                                 |          |                                 |          |
|                                                                                                                                                                                                                | <b>CO3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Analyze</b> workforce metrics and identify trends to support strategic initiatives                           |          |                                 |          |
|                                                                                                                                                                                                                | <b>CO4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Create</b> HR dashboards and predictive models to support talent management and organizational effectiveness |          |                                 |          |
| <b>Course Objective</b>                                                                                                                                                                                        | This course is designed to improve the learners' <b>EMPLOYABILITY SKILLS</b> by using <b>EXPERIENTIAL LEARNING</b> techniques.                                                                                                                                                                                                                                                                                                                  |                                                                                                                 |          |                                 |          |
| <b>Module 1</b>                                                                                                                                                                                                | <b>Introduction to Strategic HR Analytics</b>                                                                                                                                                                                                                                                                                                                                                                                                   | Quiz (Participative Learning)                                                                                   |          | <b>8 Sessions + 5 Practical</b> |          |
| <b>Topics:</b> Introduction to HR Analytics; Evolution from operational to strategic HR analytics; Strategic workforce planning; Metrics and KPIs in HR; Data sources in HRIS Tools: MS Excel, Power BI basics |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                 |          |                                 |          |
| <b>Module 2</b>                                                                                                                                                                                                | <b>Data Analysis for HR Decision-Making</b>                                                                                                                                                                                                                                                                                                                                                                                                     | Assignment using E Library (Participative Learning)                                                             |          | <b>8 Sessions + 7 Practical</b> |          |
| <b>Topics:</b> Descriptive analytics; Statistical analysis of HR data; Visualization techniques; Employee turnover, retention, and engagement metrics Tools: Excel, Tableau / Power B                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                 |          |                                 |          |
| <b>Module 3</b>                                                                                                                                                                                                | <b>Predictive Analytics in HR</b>                                                                                                                                                                                                                                                                                                                                                                                                               | Case Study (Experiential Learning)                                                                              |          | <b>7 Sessions + 9 Practical</b> |          |

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| <b>Topics:</b> Regression and classification models; Attrition prediction; Performance modeling; Sentiment analysis from employee feedback. <b>Tools:</b> R / Python (pandas, scikit-learn)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                      |                                 |                                 |
| <b>Module 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Strategic Applications &amp; Capstone Project</b> | Project (Experiential Learning) | <b>7 Sessions + 9 Practical</b> |
| <b>Topics:</b> Aligning HR analytics with business strategy; Talent acquisition analytics; Succession planning; Building HR analytics dashboards. <b>Tools:</b> Power BI or Tableau. <b>Hands-on Project:</b> Real-world HR problem and analytics solution presentation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                      |                                 |                                 |
| <b>Targeted Application &amp; Tools that can be used:</b> Python, Tensorflow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                      |                                 |                                 |
| <b>Project work/Assignment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                      |                                 |                                 |
| <b>Assignment 1:</b> Module 1 - Quiz<br><b>Assignment 2:</b> Module 2 - Written Assignment<br><b>Assignment 3:</b> Module 3 - Case study<br><b>Assignment 4:</b> Module 4 - Project Work                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                      |                                 |                                 |
| <b>Text Book:</b><br><b>T1:</b> Fitz-enz, J., & Mattox, J. R. (2014). <i>Predictive Analytics for Human Resources</i> . Wiley.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                      |                                 |                                 |
| <b>Reference Books:</b><br><b>R1:</b> Pease, G., Beresford, B., & Walker, L. (2014). <i>Human Capital Analytics</i> . Wiley<br><b>R2:</b> Marr, B. (2018). <i>Data-Driven HR: How to Use Analytics and Metrics to Drive Performance</i> . Kogan Page                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                      |                                 |                                 |
| <b>Online Resources:</b><br><a href="https://presiuniv.knimbus.com/user#/home">https://presiuniv.knimbus.com/user#/home</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                      |                                 |                                 |
| <b>Research Articles:</b><br>1. Bridging the Gap: Why, How and When HR Analytics Can Impact Organizational Performance; Steven McCartney and Na Fu (2022)<br>2. The Role of HR Analytics in Strategic Decision-Making: A Systematic Literature Review; Ahmad Solihin (2024)<br>3. HR Data Analytics and Evidence-Based Practice as a Strategic Business Partner; B.S. Patil and M.R.S.R. Priya (2024)                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                      |                                 |                                 |
| <b>Multimedia (Videos):</b><br>1. <a href="https://www.youtube.com/watch?v=5MtyabqzoSo">https://www.youtube.com/watch?v=5MtyabqzoSo</a><br>2. <a href="https://www.youtube.com/watch?v=MyKbMmyg3Eo">https://www.youtube.com/watch?v=MyKbMmyg3Eo</a><br>3. <a href="https://www.youtube.com/watch?v=5fh5IAFWeiU">https://www.youtube.com/watch?v=5fh5IAFWeiU</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                      |                                 |                                 |
| <b>Case Studies:</b><br>1: Walmart – Shelf Inventory Monitoring<br>2: Coca-Cola – Brand Logo Detection in Social Media<br>3: BMW – Automated Visual Inspection in Manufacturing<br>4: Amazon Go – Computer Vision for Cashless Retailing<br><a href="https://venturebeat.com/ai/walmart-opens-an-ai-powered-store-to-monitor-inventory-in-real-time">https://venturebeat.com/ai/walmart-opens-an-ai-powered-store-to-monitor-inventory-in-real-time</a><br><a href="https://towardsdatascience.com/detecting-brand-logos-in-social-media-images-with-deep-learning-f7e80f4c5a7e">https://towardsdatascience.com/detecting-brand-logos-in-social-media-images-with-deep-learning-f7e80f4c5a7e</a><br><a href="https://www.bmw.com/en/innovation/artificial-intelligence-production.html">https://www.bmw.com/en/innovation/artificial-intelligence-production.html</a> |                                                      |                                 |                                 |
| <b>Catalogue prepared by</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Dr. S Suresh Kumar                                   |                                 |                                 |
| Recommended by the Board of Studies on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | BOS NO: 18th held on 6,June,2025                     |                                 |                                 |

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| Date of Approval<br>by the Academic<br>Council | Academic Council Meeting No. 26th held on 25,July,2025 |
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