PRESIDENCY UNIVERSITY

Private University Estd. in Karnataka State by Act No. 41 of 2013

Itgalpura, Rajankunte, Yelahanka, Bengaluru – 560064

School of Management
Master of Business Administration (MBA)

CURRICULUM STRUCTURE

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

Master of Business Administration

MBA [Business Analytics]

2024-2026

Regulation No: PU/AC-24.17/SOM16/MBL/2024-26

Resolution No.17 of the 24th Meeting of the Academic Council held on 03rd August 2024, and ratified by the Board of Management in its 24th Meeting held on 05th August, 2024.

(As amended up to the 26th Meeting of the Academic Council held on 25th July 2025. This document supersedes all previous guidelines)

August, 2024

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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 2024-2026.
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 2024-2026 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 2024-2025.

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 Bachelor of Technology Degree Program Regulations and Curriculum, 2024-2026;

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 2024-2026 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 2024-2026 offered by the Presidency School of Management (PSOM):

1. MBA
2. MBA (Business Analytics)
3. MBA (Digital Marketing)
4. MBA (Marketing & Finance)
5. MBA (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 **Error! Reference source not found.** 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.**Error! Reference source not found.** 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 2nd year (3rd Semester) of the MBA-Business Analytics Program of the University

A student who has completed the 1st Year (i.e., passed in all the Courses / Subjects prescribed for the 1st Year) of the MBA-Business Analytics Two-Year Degree Program from another recognized University, may be permitted to transfer to the 2nd Year (3rd 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 2nd Year (3rd 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 1st 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 2nd 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 1st Year of the MBA-Business Analytics 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 1st Year of the MBA. Program and obtained a CGPA of not less than 6.00 at the end of the 2nd Semester, shall be eligible for consideration for a change of Program.

11.2 Change of Program, if provided, shall be made effective from the commencement of the 3rd 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 Program, the Fee Policy pertaining to that Program of the MBA 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 3rd 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 3rd 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 **Error! Reference source not found.** of Academic R egulations) 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 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) [NTCC], but with assigned Credits (as defined in Clause **Error! Reference s ource not found.** 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 **Error! Reference source not found.** of Academic Regulations) a nd 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.

Table 13.3.2: Durations and Credit Equivalence for Transfer of Credits from SWAYAM-NPTEL/ other approved MOOC Courses

Sl. No.	Course Duration	Credit Equivalence
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:

The Master of Business Administration (MBA-Business Analytics) Program Structure (2024-2026) totaling 104 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: Master of Business Administration (MBA-Business Analytics) Program Structure 2024-2026: Summary of Mandatory Courses and Minimum Credit Contribution from various Baskets

Sl. No.	Baskets	Credit Contribution
1	Program Core Courses (PCC)	41
2	Discipline Specific Courses (DSEC)	26
3	Entrepreneurial Skills Enhancement Core Course (ESECC)	3
4	Ability Skill Enhancement Courses (ASEC)	12
5	Soft Skill Enhancement Courses (SSEC)	4
6	Open Electives Courses (OEC)	6
7	Industry Collaborative Courses (ICC)	12
8	Value Added Courses (VAC)	0
	Total Credits	**104**

15 Minimum Total Credit Requirements of Award of Degree:

As per the AICTE guidelines, a minimum of 104 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 Hours, Course Basket, Type of Skills etc., as applicable).

Table 17.1.4: Master of Business Administration (MBA-Business Analytics) Program Structure 2024-2026: Program Core Course (PCC)

S. NO.	COURSE TYPE	COURSE CODE	COURSE NAME	L	T	P	C
1	PCC	MBA1022	Economics for Managers	3	0	0	3
2	PCC	MBA1007	Business Statistics	4	0	0	4
3	PCC	MBA2034	Accounting for Managers	4	0	0	4
4	PCC	MBA1023	Organizational Behavior	3	0	0	3
5	PCC	MBA1020	Marketing Management	3	0	0	3
6	PCC	MBA2043	Technology Foundations for Business	3	0	0	3
7	PCC	MBA2042	Corporate Finance	3	0	0	3
8	PCC	MBA2027	Human Resource Management	3	0	0	3
9	PCC	MBA2033	Business Research Methods	3	0	0	3
10	PCC	MBA2040	Production and Logistics Management	3	0	0	3
11	PCC	MBA3001	Business Law	3	0	0	3
12	PCC	MBA3052	Corporate Strategy	3	0	0	3
13	PCC	MBA2019	Digital Marketing	3	0	0	3

Table 17.2.4: Master of Business Administration (MBA-Business Analytics) Program Structure 2024-2026: Ability Skill Enhancement Courses (ASEC)

S. NO.	COURSE TYPE	COURSE CODE	COURSE NAME	L	T	P	C
1	ASEC	MBA1021	Data Analysis using Spreadsheets	3	0	0	3
2	ASEC	PPS3022	Aptitude Training	2	0	2	3
3	ASEC	MBA2041	Business Analytics for Decision Making	3	0	0	3
4	ASEC	PPS3024	Industry Readiness Program - III	1	0	2	2
5	ASEC	PPS4003	Aptitude Training Advanced	0	0	2	1

Table 17.3.4: Master of Business Administration (MBA-Business Analytics) Program Structure 2024-2026: Entrepreneurial Skills Enhancement Core Course (ESECC)

S. NO.	COURSE TYPE	COURSE CODE	COURSE NAME	L	T	P	C
1	ESECC	MBA3051	Entrepreneurship and Business Ethics	3	0	0	3

Table 17.4.4: Master of Business Administration (MBA-Business Analytics) Program Structure 2024-2026: Industry Collaborative Courses (ICC)							
S. NO.	**COURSE TYPE**	**COURSE CODE**	**COURSE NAME**	**L**	**T**	**P**	**C**
1	ICC	MBA3074	Summer Internship Project	-	-	-	6
2	ICC	MBA3145	Dissertation	-	-	-	6

Table 17.5.4: Master of Business Administration (MBA-Business Analytics) Program Structure 2024-2026: Soft Skill Enhancement Courses (SSEC)							
S. NO.	**COURSE TYPE**	**COURSE CODE**	**COURSE NAME**	**L**	**T**	**P**	**C**
1	SSEC	ENG5002	Business Communication	3	0	0	3
2	SSEC	PPS1013	Personality Development I	0	0	2	1

Table 17.6.4: Master of Business Administration (MBA-Business Analytics) Program Structure 2024-2026: Value Added Courses (VAC)							
S. NO.	**COURSE TYPE**	**COURSE CODE**	**COURSE NAME**	**L**	**T**	**P**	**C**
1	VAC	MBA1034	Data analysis for Managers uisng IBM SPSS	1	0	0	0
2	VAC	MBA1031	How To Analyze Data - Using Microsoft Excel Add Inns	1	0	0	0
3	VAC	MBA1030	Personal and Professional Business Networking Skills	1	0	0	0
4	VAC	MBA1033	Personal Branding: Aligning Values with Career Success	1	0	0	0
5	VAC	MBA1032	Python Programming	1	0	0	0

18 Practical/Skill based Courses – Internships/Thesis/Dissertation/Capstone 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.

18.1 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 2nd and 3rd Semesters, subject to the following conditions:

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

18.1.2 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.

18.1.3 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.

18.1.4 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.

18.2 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:

18.2.1 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.

19 List of Elective Courses under various Specializations/Stream Basket:

Sl. No.	Course Code	Course Name	L	T	P	C	Type of Skill/ Focus	Course Caters to	Pre/ Co-Requisites	Anti requisites	Future Courses in that need this Course as Prerequisite
DISCIPLINE ELECATIVE – Minimum Credits to be earned from this basket						26					
Business Analytics - Discipline Elective											
1	MBA3016	Applied Business Analytics	3	0	0	3	DSEC	Employability			
2	MBA3017	Business Forecasting	3	0	0	3	DSEC	Employability			
3	MBA3053	Applied Artificial Intelligence and Machine Learning	3	0	0	3	DSEC	Employability			
4	MBA3054	Database Management	3	0	0	3	DSEC	Employability			
5	MBA3055	Storytelling and Business Intelligence	3	0	0	3	DSEC	Employability			
6	MBA4035	Supply Chain Analytics	2	0	0	2	DSEC	Employability			
7	MBA4036	Text Mining	2	0	0	2	DSEC	Employability			
8	MBA3083	Programming for Analytics	3	0	0	3	DSEC	Employability			
9	MBA4088	Retail Analytics	2	0	0	2	DSEC	Employability			
10	MBA3141	Website Data Analytics	2	0	0	2	DSEC	Employability			
11	MBA3120	Deep Learning	2	0	0	2	DSEC	Employability			
12	MBA3129	Healthcare Pharma IT and Analytics	2	0	0	2	DSEC	Employability			
13	MBA3123	MarkTech and AdTech	2	0	0	2	DSEC	Employability			
14	MBA3122	Digital Transformation	2	0	0	2	DSEC	Employability			
15	MBA3090	Marketing Analytics	3	0	0	3	DSEC	Employability			
16	MBA3087	Financial Analytics	3	0	0	3	DSEC	Employability			
17	MBA3093	Design Thinking for Business Innovation	3	0	0	3	DSEC	Employability			
18	MBA3064	HR Analytics	3	0	0	3	DSEC	Employability			
19	MBA3082	FinTech	3	0	0	3	DSEC	Employability			
Dissertation/Field Immersion/ ELECTIVE - Minimum Credits to be earned from this basket Management - Industry Collaborative Courses											
20	MBA3074	Summer Internship Project	0	0	0	6	ICC	EM			
21	MBA3145	Dissertation	0	0	0	6	ICC	EM			

20 List of Open Electives to be offered by the School / Department (Separately for ODD and EVEN Semesters).

Management - Open Electives Courses											
23	MBA3037	Personal Wealth Management	3	0	0	3	ASEC	EM			
25	MBA3039	Market Research	3	0	0	3	ASEC	EM			
26	MBA3046	Game Theory in Business	3	0	0	3	ASEC	EM			
27	MBA3047	Data Story Telling	3	0	0	3	ASEC	EM			
28	MBA3048	Environmental Sustainability and Value Creation	3	0	0	3	ASEC	EM			
29	MBA3049	Industry 4.0	3	0	0	3	ASEC	EM			

21 List of MOOC (NPTEL) Courses:

Sl No.	Finance Area	Duration
1	Advanced Trading Algorithms	12-15 Weeks
2	New Venture Finance: Start-up Funding for Entrepreneurs	12-15 Weeks
3	Interest Rate Models	12-15 Weeks
4	Sustainability: The Role of Non-Financial Reporting	12-15 Weeks
	Marketing:	
1	AI in Marketing by Prof. Rahman, IIT Roorkee	12-15 Weeks
2	Innovation in Marketing & Marketing of Innovation by Prof. V Sharma, IIT Roorkee	12-15 Weeks
3	Marketing Analytics by Prof. Swagato Chatterjee, IIT Kharagpur	12-15 Weeks
	HR:	
1	Gender Justice and Workplace Security by Prof. D Dube IIT Kharagpur	12-15 Weeks
2	Human Factors Engineering by Prof. Pradip Kumar Ray, Prof. V. K. Tewari, IIT Kharagpur	12-15 Weeks
3	Labour Economics-Theory, Practice by Pattanaik IIT Roorkee	12-15 Weeks
	Business Analytics:	
1	Business Intelligence & Analytics By Prof. Mathew, IIT Madras"	12-15 Weeks
2	Business Analytics For Management Decision By Prof. Pradhan , IIT Kharagpur	12-15 Weeks
3	Prescriptive Analytics By Prof. Murthy , IIMB	12-15 Weeks
	Operations:	
1	Design Thinking - A Primer by Prof. Ashwin Mahalingam, Prof. B Ramadurai, IIT Madras	12-15 Weeks
2	Fundamentals of Artificial intelligence. Prof. SM. Hazarika, IIT Guwahati	12-15 Weeks

3	Product Design & Development by Prof. I Singh, IIT Roorkee	12-15 Weeks
4	E-Business by Prof. Mamata Jenamani IIT Kharagpur	12-15 Weeks

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

Table 17.1 List of MBA Courses							
MBA							
I SEMESTER				**CREDIT STRUCTURE**			
S. NO.	**COURSE TYPE**	**COURSE CODE**	**COURSE NAME**	**L**	**T**	**P**	**C**
1	PCC	MBA1022	Economics for Managers	3	0	0	3
2	PCC	MBA1007	Business Statistics	4	0	0	4
3	SSEC	ENG5002	Business Communication	3	0	0	3
4	ASEC	MBA1021	Data Analysis using Spreadsheets	3	0	0	3
5	SSEC	PPS1013	Personality Development I	0	0	2	1
6	PCC	MBA2034	Accounting for Managers	4	0	0	4
7	PCC	MBA1023	Organisational Behaviour	3	0	0	3
8	PCC	MBA1020	Marketing Management	3	0	0	3
9	VAC		**Value Added Course**	0	0	0	0
			Total Credits (8 Courses)				**24**
II SEMESTER				**CREDIT STRUCTURE**			
S. NO.	**COURSE TYPE**	**COURSE CODE**	**COURSE NAME**	**L**	**T**	**P**	**C**
1	ASEC	PPS3022	Aptitude Training	2	0	2	3
2	PCC	MBA2043	Technology Foundations for Business	3	0	0	3
3	PCC	MBA2042	Corporate Finance	3	0	0	3
4	PCC	MBA2027	Human Resource Management	3	0	0	3
5	ASEC	MBA2041	Business Analytics for Decision Making	3	0	0	3
6	PCC	MBA2019	Digital Marketing	3	0	0	3
7	PCC	MBA2033	Business Research Methods	3	0	0	3
8	PCC	MBA2040	Production and Logistics Management	3	0	0	3
9	VAC		**Value Added Course**	0	0	0	0
			Total Credits (8 Courses)				**24**
III SEMESTER				**CREDIT STRUCTURE**			
S. NO.	**COURSE TYPE**	**COURSE CODE**	**COURSE NAME**	**L**	**T**	**P**	**C**
1	PCC	MBA3001	Business Law	3	0	0	3
2	ASEC	PPS3024	Industry Readiness Program - III	1	0	2	2
3	ASEC	PPS4003	Aptitude Training Advanced	0	0	2	1
4	ICC	MBA3074	Summer Internship Project	-	-	-	6
5	PCC	MBA3052	Corporate Strategy	3	0	0	3

6	DSEC	MBAXXXX	E1 Dual 1 Discipline Core	3	0	0	3
7	DSEC	MBAXXXX	E2 Dual 1 Elective	3	0	0	3
8	DSEC	MBAXXXX	E3 Dual 1 Elective	2	0	0	2
9	DSEC	MBAXXXX	E4 Dual 2 Discipline Core	3	0	0	3
10	DSEC	MBAXXXX	E5 Dual 2 Elective	3	0	0	3
11	DSEC	MBAXXXX	E6 Dual 2 Elective	2	0	0	2
			Total Credits (10 Courses)				**31**
IV SEMESTER				**CREDIT STRUCTURE**			
S. NO.	**COURSE TYPE**	**COURSE CODE**	**COURSE NAME**	**L**	**T**	**P**	**C**
1	ESECC	MBA3051	Entrepreneurship and Business Ethics	3	0	0	3
2	DSEC	MBAXXXX	E7 Dual 1 Discipline Core	3	0	0	3
3	DSEC	MBAXXXX	E8 Dual 1 Elective	2	0	0	2
4	OEC	MBAXXXX	E9 Open / Specialization MOOC 1/International Certification	3	0	0	3
5	DSEC	MBAXXXX	E10 Dual 2 Discipline Core	3	0	0	3
6	DSEC	MBAXXXX	E11 Dual 2 Elective	2	0	0	2
7	OEC	MBAXXXX	E12 Open/Specialization MOOC 2/International Certification	3	0	0	3
8	ICC	MBA3145	Dissertation	-	-	-	6
			Total Credits (8 Courses)				**25**
Grand Total				**104Credits**			

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24.Course Catalogue

Course Catalogue of all Courses Listed including the Courses Offered by other School / Department and Discipline / Program Electives – Course Code, Course Name, Prerequisite, Anti-requisite, Course Description, Course Outcome, Course Content (with Blooms Level, CO, No. of Contact Hours), Reference Resource

Course Catalogues of MBA Business Analytics Programs

I SEMESTER

Course Code: MBA1023	**Course Title: Organizational Behaviour** **Type of Course: School Core** **Theory Only**	**L- T-P- C**	**3**	**0**	**0**	**3**
Version No.	1.0					
Course Pre-requisites	The students should have fundamental knowledge of organization structure, Organizational functions, HRM, HRM evolution, HRM functions, Interpersonal skills, Motivation, Personality and Leadership.					
Anti-requisites	NIL					
Course Description	Organizational Behavior (OB) focuses on how people behave in organizations and how their behavior and a variety of organizational characteristics affect organizational performance and effectiveness. This course is designed to provide students with a foundational understanding of the history and development of Organizational Behavior (OB) theories and concepts. The students will learn the individual Behavior, Group Behavior and Organizational Behavior of working people. The body of knowledge focuses on how the attributes and behaviors of individuals and groups influence the culture, design, ethics, learning and structure of an organization. The applied focus of the course is to facilitate experiential learning of contemporary approaches to Perception, Personality, Learning, leadership, motivation, Group dynamics, Organization Development and Change, Conflict Resolution, Power and Politics in organizations.					
Course Outcomes	On completion of this course, the student will be able to: **1.** Explain the importance and concepts of human behaviour in the organizations**. [Comprehension]** **2.** Demonstrate how and why people behave under different conditions in the organisations. [**Application]** **3.** Evaluate options for the logical and optimal solution to control human behaviour at Works. [**Application]** **4.** Discover the components to maximize people's potential and performance in the organizations. [**Application]** **5.** Construct creative and innovative ideas that could positively shape the organizations. [**Application]**					
Course Objective:	This course will enhance the organizational people management skills of the students through participative learning that will be helpful for managing organizations.					
Module 1	Introduction to Organizational Behavior (OB)	Assignment	Class Discussions, presentations (Participative learning)	15 Hours		
Topics: Organization Behavior and its Importance, Historical Development of OB, Management Roles, Management Skills, Discipline that contribute to OB. Challenges and Opportunities of OB: Globalization and Economic Pressures, Managing diverse workforce, Employee Engagement, Employees Wellbeing and Happiness, Employees Ethical Behavior, Challenges of Virtual Workforce etc. [Comprehension]						
Module 2	Attitudes and Emotions at Work	Assignment,	Participative learning	10 Hours		
Topics: Attitudes – Definition, Key elements of attitudes, Attitudes and related concepts (Values, opinion, belief and ideology), Characteristics of attitudes, Attitude formation, Attitude measurement, Changing attitudes. Job Attitudes: Job Satisfaction, Organizational Commitment, Perceived Organizational Support, Employee Engagement. Understanding of Emotions and Moods: Nature and Types of Emotions, Moods and its nature, Sources and Emotions and Moods, Emotional Intelligence, Emotional Labor. [Application]						
Module 3	Perception, Personality and	Assignment, Case studies	Assignment (Participative Learning)	10 Hours		

	Learning		Case studies (Problem solving Learning)	
Topics: Perception and factors influencing Perception, Common Perception Distortions: Stereotypes, Hallo Effect, Selective Perception, Contrast Effect. Attribution Theory. Personality, determinants of Personality, Personality Frameworks: Big Five Model and Myres-Briggs Type Indicator (MBTI).. Defining learning, classical and operant conditioning learning in organizations [Application]				
Module 4	Motivation and its Application, Power, Leadership	Case Study	Participative Learning	10 Hours
Topics: Motivation: Concept, Early and Contemporary theories of Motivation. Application of Motivation: Job Design, Job Rotation, Job Enrichment, Alternative work Arrangement and Employees Involvement. Defining Power, Sources of Power, Organizational politics, Leadership: concept, contingency and contemporary theories of leadership. Leadership Prospective: Charismatic leadership, Transactional and Transformational leadership, Servant Leadership. [Application]				
Module 5	Group and Organization Dynamics	Assignment/Group discussion	Participative learning	5 Hours
Topics: Group development and Models: Tuckman's Model of Group Development, Punctuated-Equilibrium Model, Overview of Group Properties of roles, norms, status, size, cohesiveness and diversity. Group think and Group Shift. Organization Development and Organization Change. Organization Conflict: Concept, its types, relation with performance and process of conflict. [Application]				
Targeted Application & Tools that can be used: Fundamental exposure to the qualitative and quantitative surveys techniques in organisational behaviour. Professionally Used Software: Microsoft excel, SPSS, R software, and qualitative techniques.				
Project work/Assignment:				
Project/ Assignment: (Participative learning) Assignment: 1] Submit a report on the issues and challenges of Organisational behaviour before and after Covid 19. (Kindly note: Student should visit PU library and access the online resources for the same and incorporate the assignment as well as attach the photo of log in and log out in person in the end of the assignment file.) Assignment: 2] Compare any two business personalities from industry with their personality traits using MBTI Scale with a detailed analysis. (This assignment has to be done in group. All the members of the group have to contribute and submit report and PPT presentation.) Assignment: 3] Identify any one MNC and bring out the various activities and strategies followed in that organization with reference to Cultural Diversity and submit a report. (Kindly note: Student should visit PU library and access the online resources for the same and incorporate the assignment as well as attach the photo of log in and log out in person in the end of the assignment file.)				
Text Book **T1- Stephen P. Robbins , Timothy A. Judge , Neharika Vohra (2016). Organizational Behavior, Sixteenth Edition, Pearson Publication.**				
References R1 – John R. Scsermerhorn, Richard N. Osborn, Mary Uhl-Bien (2018). Organizational Behavior, Twelfth Edition, Wlley India Pvt. Ltd. R2- Sanket Sunand Dash (2021). Organizational Behavior, Thirteenth Edition, Wlley India Pvt. Ltd. R3- Udai Pareek, Sushma Khanna (2018), Understanding Organizational Behavior, Oxford University Press. **Research and Articles:** • **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 • **Changing attitudes, as well as jobs** https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/eb002065/full/html • **Customer response to employee emotional labor: the structural relationship between emotional labor, job satisfaction, and customer satisfaction** https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/JSM-07-2013-0161/full/html • **The influence of organizational culture and job design on job commitment and human resource performance** https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/JOCM-07-2017-0286/full/html • **Gender role, decision style and leadership style** https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/09649429610148737/full/html				

- **Let's change the subject and change our organization: an appreciative inquiry approach to organization change**
  https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/13620439810240746/full/html
- **Conflict management as an organizational capacity: survey of hospital managers in healthcare organizations**
  https://www-emerald-compresiuniv.knimbus.com/insight/content/doi/10.1108/MBE-01-2020-0008/full/html

Magazine Articles:

- **How Many Of The Top 10 Most Common Organizational Challenges Plague Your Company https://www.forbes.com/sites/forbescoachescouncil/2017/02/24/how-many-of-the-top-10-most-common-organizational-challenges-plague-your-company/?sh=26e09e0c1e79**
- **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

Case Studies:

- JNET Technologies—Nurturing a Leadership Powered Culture
  https://journals.sagepub.com/doi/full/10.1177/2277977918757250
- Molding Conscious Leaders
  https://journals.sagepub.com/doi/full/10.1177/2277977919860282

(**Kindly note**: Student should visit PU library and access the online resources for the same and incorporate the assignment as well as attach the photo of log in and log out in person in the end of the assignment file)

Catalogue prepared by	Dr. Nandini Sinha
Recommended by the Board of Studies on	BOS NO:
Date of Approval by the Academic Council	Academic Council Meeting No. :

Course Code: MBA1020	**Course Title: Marketing Management** **Type of Course: School Core** **Theory Only**	**L- T P- C**	**3**	**0**	**0**	**3**
Version No.	1.0					
Course Pre-requisites	a) Basic communication skills b) MS Office c) Soft Skills - Creativity, Adaptability, Collaboration, Leadership d) Basic analytical ability e) Social Media exposure					
Anti-requisites	NIL					
Course Description	Marketing may be defined as the collection of activities undertaken by the firm to generate profits from the markets. Marketing in the modem context goes beyond its immediate role as a process through which exchange of goods and services takes place and is viewed as an integral part of the total socioeconomic system which provides the framework within which activities take place. This course addresses the management challenge of designing and implementing the best combination of marketing actions to carry out a firm's strategy in its target markets. This course examines the role and importance of marketing activities in the organization and explains the elements of 'Marketing Mix' in detail. This course also helps to understand and appreciate the Sales processes in organizations. The course includes the familiarization of concepts, approaches for personal selling process which is an integral part of marketing functions in a business firm.					
Course Outcomes	On successful completion of this course the students shall be able to: CO 1) Explain the concepts of Marketing (Comprehension) CO 2) Analyze the role of Product & Price in marketing strategies (Analysis) CO 3) Analyze the role of Promotion & Place in marketing strategies (Analysis) CO 4) Demonstrate the personal selling process (Application)					
Course Objective:	The course aims at **SKILL DEVELOPMENT** with respect to Marketing Strategies with					

	PARTICIPATIVE learning activities.			
Module 1	**Concepts of Marketing**	Assignment using E Library (Participative Learning)	Radio Mirchi: Case Study on Segmentation and Targeting	**15 Hours**
Topics: Concept of Marketing, Needs, Wants and Demand, Nature & Importance of Marketing, Marketing Management Philosophies, Marketing Mix, 4Ps of Marketing, Marketing Environment – Macro and Micro Environment, Factors influencing Consumer Behaviour, Consumer Buying Decision Process, Market Segments, Basis of Segmentation, Targeting Strategies, Concept of Positioning.				
Module 2	**Product & Price**	Assignment (Participative Learning)	Make in India: Analyze the PLC strategies of a product	**15 Hours**
Topics: Product – Meaning, New Product Development, Product Mix – Product Line, Length and Depth, Product Line Analysis & Decisions, Product Life Cycle (PLC) – PLC Strategies, Product Brand, Benefits of Branding, Brand Equity, Fifth 'P' - Packaging and Labelling. Pricing – Importance of Pricing, Setting the Price, Pricing Objectives, Steps in Pricing, Types of Pricing, New Product Pricing – Skimming and Penetration pricing Strategies.				
Module 3	**Place & Promotion**	Project (Experiential Learning)	Design promotion strategies for a product	**10 Hours**
Topics: Place - Marketing Channels and their roles, Functions of a channel partner, Types of channels, Levels, Channel Design decisions, Channel Conflict: Reasons and resolution. Promotion Mix Elements and Integrated Marketing Communications (IMC), Pros and Cons of Promotional Mix elements, Steps in Promotional Planning, Role of Advertising, Sales Promotion, Events & Experiences, Direct Marketing and Public Relations & Publicity, Digital Marketing & Social Media Marketing.				
Module 4	**Sales Management**	Assignment (Participative Learning)	Maruti Suzuki India Limited: Case study on Sales strategies	**5 Hours**
Topics: Overview of Sales Management, Nature and Importance of Sales Management, Role & Skills of Modern Sales Managers, Sales Knowledge, and Sales Related Marketing Related Practices; Personal Selling Process: Prospecting and qualifying, Pre-approach, approach, presentation, and demonstration, overcoming objections, closing the Sale, Follow-up.				
Targeted Application & Tools that can be used: NA				
Project work/Assignment:				
Project Work: Collect Advertisements (from Newspapers) pertaining to the various forms of Segmentation, classify them, and make a presentation, with appropriate justification. Assignment 1: Identify 5 products / brands which are in the different Life Cycle Stages of PLC and suggest appropriate Marketing strategies for them. Assignment 2: Identify the Digital and Social Media Marketing strategies adopted by any company of your choice. Assignment 3: Interview a Sales Manager having a minimum experience of five years. Interview should focus on why he/she chose a sales career, what the challenges are in sales career, most memorable and depressing moment, what are the qualities a sales person should possess etc. Demonstration / Role Play: Mock Sales of a given Product / Service				
Text Book: **T1:** Kotler, P., Keller, K.L., Koshy, A., & Jha, M. Marketing Management: A South Asian Perspective. Pearson Education, 2009, 13th ed. **T2**: Krishna K Havaladar, Vasant M. Cavale, Sales & Distribution Management, Tata McGraw Hill, latest edition.				
References **R1:** Ramaswamy,V.S., & Namakumari. Marketing Management: Global Perspective Indian Context. Macmillan Publishers India. **R2**: Digital Selling: Grant Leboff, How to Use Social Media and the Web to Generate Leads and Sell More, Paperback, Latest Edition **R3:** Saxena,R. Marketing Management. TataMcGraw-Hill Education. **R4**: Richard R. Still, Edward W. Cundiff, Norman A.P. Govoni, Sales Management: Decisions, Strategies & Cases, Pearson, latest edition **Online Resources:** https://presiuniv.knimbus.com/user#/home				

Articles:

- Telej, E. and Gamble, J.R. (2019), "Yoga wellness tourism: a study of marketing strategies in India", Journal of Consumer Marketing, Vol. 36 No. 6, pp. 794-805. https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/JCM-07-2018-2788/full/html
- Lysonski, S., Durvasula, S. and Madhavi, A.D. (2012), "Evidence of a secular trend in attitudes towards the macro marketing environment in India: pre and post economic liberalization", Journal of Consumer Marketing, Vol. 29 No. 7, pp. 532-544. https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/07363761211275036/full/html
- Kumar, N. and Kapoor, S. (2014), "Study of consumers' behavior for non-vegetarian products in emerging market of India", Journal of Agribusiness in Developing and Emerging Economies, Vol. 4 No. 1, pp. 59-77. https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/JADEE-05-2013-0016/full/html

Multimedia (Videos):

- Understanding the Marketing Mix https://www.youtube.com/watch?v=d0NMSqeKpVs
- Product Life Cycle https://www.youtube.com/watch?v=GjQRON8LF9g

Case Studies:

- Radio Mirchi: Marketing Strategy for the Bangalore Market By: Anand Kumar Jaiswal, IIM-Ahmedabad, Link: https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FA00108-PDF-ENG%2Fcontent&metadata=e30%3D
- Maruti Suzuki India Limited: Marketing By: Dr. Sanjeev Prashar, Richard Ivey School of Business, Link: https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FW13012-PDF-ENG%2Fcontent&metadata=e30%3D
- Make in India: The operating and Marketing Challenge By: Ivey Publishing Link: https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FW15259-PDF-ENG%2Fcontent&metadata=e30%3D
- Nestle' Maggi: Pricing and positioning a recalled product By: Ivey Publishing Link: https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FW16344-PDF-ENG%2Fcontent&metadata=e30%3D

Catalogue prepared by	Dr. Chithambar Gupta V
Recommended by the Board of Studies on	BOS NO: held on
Date of Approval by the Academic Council	Academic Council Meeting No.

Course Code: MBA2034	**Course Title: Accounting for Managers Type of Course: School Core Theory Only**	**L- T-P- C**	**4**	**0**	**0**	**4**
Version No.	1.1					
Course Pre-requisites	Students are expected to have a minimum of numerical ability and understanding of basic accounting terms					
Anti-requisites	NIL					
Course Description	Accounting is the language of business, because owners/investors, employees, creditors, regulators and others use the result of the accounting process to help their planning, control and decision-making activities related to the achievement of organizational objectives. Financial accounting involves the recording of financial transactions in a systematic way, analysis, and reporting of the financial situation of the firm to the shareholders and other stakeholders, While Management accounting involves providing information to managers for their decision making.					

Course Objective	The objective of the course is to train future managers to understand and interpret the financial statements in a better way and thus they learn the functional importance of accounting. This course introduces students who are new to accounting and helps them to understand the basic concepts and the process of accounting. It equips the students with the concepts, principles and techniques to be applied in the Accounting Cycle. The preparation of the financial statements – Profit and Loss Account, the Balance Sheet which culminates in final accounts. Students understand to analyze and interpret financial statements by using different tools and techniques. Additionally, it equips the budding managers by providing tools and techniques of Management accounting for various decision makings.			
Course Out Comes	On successful completion of the course the students shall be able to: 1. Describe the Accounting process (Comprehension) 2. Summarize the Corporate Financial Statements (Comprehension) 3. Interpret Financial Statements for business decisions (Application) 4. Prepare cost sheet and budget for cost control (Application) 5. Apply marginal costing for Managerial decisions (Application)			
Course Content				
Module 1	Introduction to Accounting and Accounting process	Experiential Learning	Ability to explain the Accounting Concepts, Conventions and Accounting Cycle	15 Hours
Module 1 - Introduction to Accounting and Accounting process: Meaning, objectives and branches of accounting, classification of Assets, Liabilities, Income and Expenses, Generally Accepted Accounting Principles, Accounting cycle, Accounting equation, Journal and Ledger, Preparation of Trial Balance, Depreciation – Causes – Methods of Calculating Depreciation – Straight Line Method, Diminishing Balance Method, Comparison of IFRS and IND-AS.				
Module 2	Corporate Financial Statements preparation	Experiential Learning	Preparation of Corporate Financial Statements with simple adjustments	15 Hours
Corporate Financial Statements preparation: Financial Statements, its components, Preparation of Corporate Financial Statements (IND-AS-1) - Statement of Profit and Loss - Statement of changes in equity - Balance sheet and Statement of Cash Flow (IND-AS-7) with basic adjustments				
Module 3	Analysis and interpretation of Financial Statements	Participative Learning	Ability to analyze of Ratios and Preparation of IFRS	15 Hours
Analysis and interpretation of Financial Statements: Ratio analysis- Liquidity, Profitability, Solvency, Turnover and Market test ratios, DU-PONT analysis, Horizontal and Vertical Analysis. Economic value added, Forensic accounting and Altman's Z-Score.				
Module 4	Cost computation and budgetary control	Participative Learning	Ability to compute cost and prepare different types of budgets for cost control.	10 Hours
Cost computation and budgetary control: Cost and its classification (With special emphasis on Managerial decision costs and cost associated with the product) cost reduction, cost control, preparation of cost sheet including Tenders and Quotations, Budgetary control- preparation of Cash budget and Flexible budget.				
Module 5	Marginal costing	Participative Learning	Ability to apply marginal costing in various decision making	5 Hours
Marginal costing: CVP Analysis – Marginal costing-uses and limitations, problems in calculation of Contributions, P/V Ratio, Break- Even Point, Margin of Safety, Uses of Marginal Costing in business Decisions- Determination of Sales Mix, Make or Buy Decisions, Key or Limiting factor.				
Targeted Application & Tools that can be used: This course enables the students to take various managerial decisions with the help of accounting equation, depreciation ratio analysis, budgetary control, and marginal costing				

Project work/Assignment: Mention the Type of Project /Assignment proposed for this course
1. Student Group Activity – Analysis and interpretation of Financial Statement of a company – Participative Learning 2. Individual Project – Preparing cash budget for a social Program – Experiential Learning 3. Assignment – Computing Altman's Z score for a company 4. Presentation – Analyzing direction and growth of a company through Annual Report – Experiential Learning
Text Book T1: Accounting Principles Jerry J. Weygandt, Paul D. Kimmel & Donald E. Kieso, Wiley, Twelfth Edition
Reference Books R1. Dhamija. S. Financial Accounting for Managers. Pearson, Third edition R2. Peter Atrill, E. J. McLaney, Accounting and Finance for Non-specialists, Pearson, 11th Edition R3. Maheswari S N, Maheswari,A Text Book of Accounting for Management, 4th Edition, Vikas Publishing House [P] Ltd
Web Links and Case Study Links 1. https://nptel.ac.in/courses/106105151/ 2. https://nptel.ac.in/courses/106105151/12 3. https://nptel.ac.in/courses/106105151/15 4. https://swayam.gov.in/nd1_noc19_me38/preview 5. http://iimamritsar.ac.in/faculty/spanda.php

Catalogue prepared by	Dr Pramod Kumar Pandey
Recommended by the Board of Studies on	Mention the BOS Number and the Date of BOS
Date of Approval by the Academic Council	Mention the Academic Council Meeting No. & the date of the meeting:

Course Code: MBA1007	**Course Title: Business Statistics** **Type of Course: School Core and Theory Only**	**L-T-P-C**	**4**	**0**	**0**	**4**
Version No.	1.0					
Course Pre-requisites	NIL					
Anti-requisites	NIL					
Course Description	Business statistics course helps students to analyze and interpret data which aids them in managerial decision making. The course is analytical in nature and enables the students to apply various statistical tools to solve business problems effectively.					
Course Objective	This course is designed to improve learner's **EMPLOYABILITY SKILLS** by using **Problem Solving** techniques.					
Course Out Comes	On successful completion of the course the students shall be able to: 1. Describe the data using descriptive statistics. [Blooms's Level: Comprehension] 2. Solve business related problems involving probabilities [Blooms's Level: Application] 3. Solve business related problems using probability distributions. [Blooms's Level: Application] 4. Test hypotheses using relevant testing procedures. [Blooms's Level: Analysis]					
Course Content:						
Module 1	Measures of Location and Variation	Assignment (Problem Solving)	Data analysis		15 Hours	
Topics: 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).						

Module 2	Correlation, Regression and Probability	Project work	Data analysis	15 Hours
Topics Correlation – Scatter plot, Karl Pearson and Spearman's rank correlation. Simple linear regression. 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.				
Module 3	Random Variable and Probability Distributions	Assignment (Problem Solving)	Data analysis	10 Hours
Topics: Random variable – Discrete and Continuous random variable. Expected value and variance of 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.				
Module 4	Introduction to Testing of Hypothesis	Quiz	Problem solving	05 Hours
Topics: 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.				
Targeted Application & Tools that can be used: Analyze data using Excel and SPSS software				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course				

1. Students who apply to MBA programs must take the Graduate Management Admission Test (GMAT). University admissions committees use the GMAT score as one of the critical indicators of how well a student is likely to perform in the MBA program. However, the GMAT may not be a very strong indicator for all MBA programs. Suppose that an MBA program designed for middle managers who wish to upgrade their skills was launched 3 years ago. To judge how well the GMAT score predicts MBA performance, a sample of 12 graduates was taken. Their grade point averages in the MBA program (values from 0 to 12) and their GMAT score (values range from 200 to 800) are listed here. Compute the coefficient of correlation and Interpret your findings.

GMAT and GPA Scores for 12 MBA Students

GMAT 599 689 584 631 594 643 656 594 710 611 593 683

GPA 9.6 8.8 7.4 10.0 7.8 9.2 9.6 8.4 11.2 7.6 8.8 8.0

2 A hypermarket made a test to see if there was a correlation between the shelf space of a special brand of raison bread and the daily sales. The following is the data that was collected over a 1-month period collected over a 1-month period

Shelf space (m2)	Daily sales units
0.25	12
0.50	18
0.75	21
0.75	23
1.00	18
1.00	23
1.25	25
1.25	28
2.00	30
2.00	34
2.25	32
2.25	40

Required

1. Illustrate the relationship between the sale of the bread and the allocated shelf space.
2. Develop a linear regression equation for the daily sales and the allocated shelf space. What are your conclusions?
3. If the allocated shelf space was 1.50m2, what is the estimated daily sale of this bread?
4. If the allocated shelf space was 5.00m2, what is the estimated daily sale of this bread? What are your comments

about this forecast ?
Text Book Anderson D R, Sweeny D J, Williams T A, Camm J D, Cochran J J (2018), Statistics for Business and Economics,13th edition Cengage learning, New Delhi.
References Levine D M, Stephan D F, Szabat K A (2016) Statistics for Managers, 7th edition, Pearson ,New Delhi

Catalogue prepared by	Dr. JayakrishnaUdupa H
Recommended by the Board of Studies on	Mention the BOS Number and the Date of BOS
Date of Approval by the Academic Council	Mention the Academic Council Meeting No. & the date of the meeting:

Course Code: MBA1021	**Course Title: Data Analytics Using Spreadsheets Type of Course: Theory only**	**L-T-P-C**	**3**	**0**	**0**	**3**
Version No.	4.0					
Course Pre-requisites	Basic computer handling skills: Prior knowledge of using computers and internet will be helpful. Students who have familiarity of using computers and internet, will find it easier to learn when compared to those who have never used a computer. Students who have never used a computer, are expected to be few and the course will provide special support to such students during lab hours. Knowledge of statistics will help the students in appreciating data analysis.					
Anti-requisites	**NIL**					
Course Description	Spreadsheet is one of the most powerful data analysis tools that exist, and it's available to almost anyone. Spread sheets softwares are mostly used in workplace to understand and handle data. Spreadsheets are useful to create and build charts, pivot tables, use formulas, identify patterns and trends in data etc. There are numerous ways in which spreadsheets is useful for business operations like forecasting sales, maintain accounts, preparing budgets, keeping track of expenses, planning for a meeting, organizing client sales list etc. The advanced features and tools in Spreadsheets make it as a Decision Support System (DSS). This course also complements the learning in statistics course through lab practice.					
Course Outcomes	**On successful completion of this course the students shall be able to:** 1. Employ spreadsheet formatting techniques for business documents (Apply) 2. Use formulas and functions on data to perform error free operations (Apply) 3. Demonstrate advanced data visualization, management, and analysis techniques (Apply) 4. Apply data analysis skills to real business scenarios (Apply)					
Course objective	This course will enhance **SKILL DEVELOPMENT** through **EXPERIENTIAL LEARNING** methods.					
Course Content:						
Module 1	**Introduction to Data Analysis and Spreadsheets**	Assignment	Business document creation - Invoice			**13 hours**
Topics: 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						
Module 2	**Formulas and Functions**	Assignment	EDA and Descriptive statistics			**12 hours**
Topics: Introducing Formulas and Functions, using formulas for mathematical and text operations, Using formulas for handling dates and time, Using formulas for matching and lookup, Using formulas for statistical analysis, Using formulas for financial analysis, Understanding and Using Array Formulas, Making Your Formulas Error-Free						

Module 3	**Data Visualization, Management and Analysis**	Assignment	Data reorganization, summarization and visual display	**10 hours**
Topics: Getting Started with Excel Charts, Creating Sparkline Graphics, Using Advanced Charting Techniques, Dashboarding and Implementing Excel Dashboarding Best Practices, Introducing PivotTables and Pivot charts, Analyzing Data with PivotTables, Analyzing Data Using Goal Seeking and Solver, Analyzing Data with the Analysis ToolPak.				
Module 4	**Applying analytics to achieve Business impact**	Assignment	Customer Analytics	**10 hours**
Topics: Introduction to powerpivot and powerquery, 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				

Text Book

Michael Alexander, Richard Kusleika, John Walkenbach.; *Microsoft Excel 2019 Bible: The Comprehensive Tutorial Resource*; John Wiley & Sons Inc.

References

1. Walkenbach J.; *Microsoft Excel 2016 Bible: The Comprehensive Tutorial Resource*; Wiley.
2. Fischer W.; *Excel: Quick Start Guide from Beginner to Expert (Excel, Microsoft Office)*; CreateSpace Independent Publishing Platform.
3. Harvey G., *Excel 2016 for Dummies (Excel for Dummies)*; John Wiley & Sons.
4. Kalmstrom P.; *Excel 2016 from Scratch: Excel course with demos and exercises*; CreateSpace Independent Publishing Platform.
5. Alexandar M.; *Excel Macros For Dummies*; Wiley.
6. Walkenbach J.; *Excel Charts*; John Wiley & Sons.

Web pages

1. https://sites.google.com/view/narayanasrikanthreddy/home/student-home-page/mba-1st-sem
2. Keyboard shortcuts in Excel - Microsoft Support
3. Customer Analytics at Bigbasket - Product Recommendations (hbr.org)
4. Demand Forecasting for Perishable Short Shelf Life Home Made Food at iD Fresh Food (hbr.org)

PU library E –resource

https://www-sciencedirect-com-presiuniv.knimbus.com/journal/journal-of-computational-mathematics-and-data-science

Catalogue prepared by Dr. N Srikanth Reddy	
Recommended by the Board of Studies on	
Date of Approval by the Academic Council	

Course Code: ENG5002	**Course Title: Business Communication** **Type of Course: School Core Theory Only**	**L- T-P- C**	**3**	**0**	**0**	**3**
Version No.	3.0					
Course Pre-requisites	NIL					
Anti-requisites	**NIL**					
Course Description	This course is designed to help students develop skills to communicate effectively and develop sound communication strategies. The skills will enhance their communication with their colleagues, clients and stakeholders. The modules of the course will focus on business communication processes, cross-cultural communication, strategies for effective communication and business writing. The emphasis is placed on understanding and responding to a variety of communication situations with a strong purpose, clear organization, and professional style.					

Course Objective	This course is designed to improve the learners' EMPLOYABILITY SKILLS by using scenario-based and project-based assignments modeled on real life business communication challenges			
Course Outcomes	**On successful completion of this course the students shall be able to:** 1. Explain the business communication process and its challenges. 2. Demonstrate competence in oral business communication. 3. Practice formal written communication 4. Apply different communication strategies relevant to social media communication settings. 5. Identify accurately the main points in business reports and articles			
Module 1	**Introduction to Business Communication**	Project	Business Communication Process	**15 Hours**
Topics: Introduction to Business Communication - the communication process, communication within organizations, context for the emerging significance of Business Communication, objectives of Business Communication Contextual forces influencing Business Communication – Legal and ethical considerations, Diversity and impediments to cross-cultural Communication, Hofstede's theory of cultural dimensions, Strategies for smooth cross-cultural communication, Teamwork and effective communication in teams				
Module 2	**Planning Spoken and Written Messages**	Presentation	Plan, organize and present	**1 Hours**
Topics: 2.1 Steps in formulating written and spoken messages 2.2 Organisational Context and other contextual forces 2.3 Characteristics of channels and how that impacts choice of channel 2.4 Planning an effective business presentation				
Module 3	**Business Writing and Communicating Electronically**	Business Emails	Content Writing and Formatting	**10 Hours**
Topics: 3.1 Use of Technology in Communication; Electronic Mail Communication, Good news, bad news and persuasive emails 3.2 Web Page Communication 3.3 Voice and Wireless Communication				
Module 4	**Social Media in Business Communication**	Business blog	Writing for social media	**05 Hours**
Topics: 4.1 Social Media in Business: How Businesses use social media for internal and external communication 4.2 Tactics for successful social media use, planning and writing social media content, building a social media strategy 4.3 Business blogging; Common business uses of blogging; Tips for successful blog writing				
Module 5	**Reading Business Reports and Articles**	Comprehension passages	Reading skills	**05 Hours**
Topics: 5.1 Understanding business reports: Exposure to business related vocabulary, assimilating information and deriving inferences from reports. 5.2 Reading business articles: Ability to read newspaper and magazine articles that discuss developments in the business world.				
Web Resources: W1: https://presiuniv.knimbus.com/user#/searchresult?searchId=Managerial%20Communication&_t=1655868710491 W2: https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/CCIJ-07-2021-0080/full/html W3: https://geerthofstede.com/				
Project work/Assignment: 1. Interviewing entrepreneurs for insights into strategies for effective cross-cultural communication 2. Group Presentations 3. Writing business emails 4. Creating a business blog on Word Press Platform **5.** Suitable comprehension passage test				

Text Books: **T1:** Lehman, DuFrene, Walker, Business Communication (*B.COM) 10e*. Cengage Learning. New Delhi, 2020 **T 2:** Bovee, John V Thill. *Business Communication Today*. 15th edition, Pearson; New York, 2021.
References: R1: Bovee, John V Thill, Abha Chatterjee. *Business Communication Today*. 10th edition, Pearson Education, 2011 R2: Geraldine E. Hynes, Managerial Communication: Strategies and applications. 6th edition, Sage Publication, California, 2016
Topics relevant to development of 'EMPLOYABILITY SKILLS': Business Writing Skills, Presentation Skills, Effective Speaking Skills. **Topics relevant to development of 'HUMAN VALUES & PROFESSIONAL ETHICS'**: Legal and ethical constraints on communication, Communicating Electronically, Voice and Wireless Communication.

Catalogue prepared by		Dr. Sufiya Pathan
Recommended by the Board of Studies on		
Date of Approval by the Academic Council		

Course Code: MBA1022	**Course Title: Economics for Managers** **Type of Course: School Core Theory**	**L- T-P- C**	**3**	**0**	**0**	**3**
Version No.	1.0					
Course Pre-requisites	NIL. However, students are expected to have a minimum of numerical ability, familiarity with graphs and charts and basic descriptive statistics.					
Anti-requisites	Nil					
Course Description	Managerial Economics course provides a framework for understanding the principles of micro and macroeconomics with its different applications bridging the gaps between theory, policy and practice. The intent of this descriptive course is to introduce economic analysis concepts in such a way that students can apply them in the context of business decisions. Objective of this course is to enhance employability.					
Course Objective	This course is designed to improve the learner's EMLOYABILITY SKILLS by using Class Presentation and Case Study Techniques					
Course Out Comes	On successful completion of the course the students shall be able to: 1) Explain equations and graphs and illustrate economic behavior at the individual, firm and policy levels, characteristics of market structures and their sustainability. 2) Apply concepts of consumption, investment and savings, Aggregate supply, and Aggregate demand in business. 3) Interpret the effect of fiscal instruments and monetary instruments with respect to fiscal policies in India economy on business. 4) Employ the 'economic way of thinking' for managerial decision making.					
Course Content:						
Module 1	Introduction to Microeconomics and Consumption Decision	Assignment	Data collection and application of concept	**15 hours**		
Topics: Introduction to Economics and definitions - Factors of production - The circular flow of economic activity Choice as an economic problem-Opportunity cost, PPF. Law of demand, price quantity relationship, determinants, exceptions - Demand						

schedule, equations and diagrams, shift and movement along the demand curve. Law of supply, determinants, shift and movement, Equilibrium, Elasticity of Demand and supply – Calculating Price Elasticity of Demand, percentage, point, ARC methods. Categories of Price Elasticity of demand, determinants of price elasticity of demand, cross price elasticity, income elasticity.				
Module 2	Theory of Production and Costs	Assignment	Data collection and application of concept	**15 hours**
Topics: Defining production- The production function: short vs long run – Average, marginal and total product, equation, schedule and diagrams – 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, numerical problems, Economies and diseconomies of scale at firm level.				
Module 3	Market Structure	Case Study (Participatory Learning)	Identification of key concept and data analysis	**10 hours**
Topics: Perfect competition-Features - profit maximization - Monopoly, why and how they arise – characteristics Monopolistic competition – Characteristics. Oligopoly –Features.				
Module 4	Key Concepts of Macroeconomics and Theory of Output and Employment , Fiscal policy and Monetary policy	Assignment	Diagrammatic illustration of concepts	**05 hours**
Topics: Importance, issues of Macroeconomics -Circular flow models of economy-Measurement of National Income. Say's law, Keynesian theory of income determination (MPC, MPS, Investment functions) Aggregate Supply-Aggregate demand-The multiplier. Fiscal policy-Fiscal Instruments. Monetary Policy-instruments of monetary policy, Inflation.				

Targeted Application & Tools that can be used:

Students may use data from RBI and Ministry of Finance and develop some models in the corporate sector / FMCG, analyze and interpret using SPSS, etc. This helps in developing and applying the tools of micro and macroeconomic analysis to critically question, analyze, and discuss economic problems and issues;

Develop and strengthen the ability to discuss concepts and thoughts in writing.

Project work/Assignment: Mention the Type of Project /Assignment proposed for this course

1. Assignment (Construction of a demand curve of a consumer who demands particular good at different prices with the help of data)
2. Quiz (30 minutes)
3. Case study: "Booming Business: Indian Hotel Industry". Read it thoroughly and give the answer to the case questions
    a. Do you think the hotel industry is competitive? What all features of the industry are suggestive of the same?
    b. Comment on differentiation offered by hotels in India.

Text Book

T1 Mc. Eachern, W. A & kaur, S. (2016): Micro ECON A South- Asian Perspective, Cengage.

T2: Kaur, S. & Mc. Eachern, W. A: (2018). *Macro ECON A South- Asian Perspective*, Cengage.

References

R1: Salvatore, D., & Rastogi, K. R. (2016). *Managerial Economics: Principles and Worldwide Applications*. Oxford Higher Education.

R2: Mankiw, N. G. & Taylor, M.P. (2017). *Macro Economics,* Cengage.

Web links of E-Library resources in PU

https://www-proquest-com-presiuniv.knimbus.com/abiglobal
https://www-emerald-com-presiuniv.knimbus.com/insight/
https://prowessiq-cmie-com-presiuniv.knimbus.com/
https://www-indiastat-com-presiuniv.knimbus.com/

Catalogue prepared by	Prof. Bipasha Maity
Recommended by the Board of Studies on	Mention the BOS Number and the Date of BOS

Date of Approval by the Academic Council	Mention the Academic Council Meeting No. & the date of the meeting:

Course Code: PPS1013	Course Title: Personality Development I	L- T-P- C	0	0	2	1
Version No.	1.1					
Course Pre-requisites	• Students are expected to understand Basic English. • Students should have desire and enthusiasm to involve, participate and learn. • Students should possess fundamental communication and research skills					
Anti-requisites	**NIL**					
Course Description	This course is designed to enable students of Business management to prepare for corporate & business world. The modules are planned to improve confidence, communication, decision making and networking skills to give the students a competitive advantage and increase chances of success in getting placed. The course will benefit learners in presenting themselves effectively through role play, activities while also learning the importance of self-awareness and team work.					
Course Objective	The objective of the course is skill development of student by using Participative Learning techniques					
Course Outcome	**On successful completion of this course the students shall be able to:** 1. Demonstrate confidence and effective communication 2. Prepare professional LinkedIn account and build business networks 3. Recognize problem solving skills 4. Discuss emotional intelligence components					
Course Content:						
Module 1	Self-awareness and EI	Personality training	Group Tasks	**10 Hours**		
Topics: Johari Window, Emotional intelligence components – Self-awareness, Self-regulation, social skills, empathy and motivation **Activity:** Classroom group activity						
Module 2	PERSONAL BRANDING	Individual Task	Personal brand building	**10 Hours**		
Topics: LinkedIn profile building, network building & its significance, Class room activities. **Activity:** Building LinkedIn account and professional networking						
Module 3	CAMPUS TO CORPORATE	Placement training	Mock hours	**5 Hours**		
Topics: Resume writing, Video resume, GD, PI, Industry expert talks videos. **Activity:** Write, Practice in groups, Perform						
Module 4	PRESENTATION SKILLS	PPT creation	Survey-based presentation	**5 Hours**		
Topics: Presentation skills. Ability to organize PPTs effectively, ability to apply their presentation skills and public speaking skills to make their presentations more effective. Activity: Survey a social scenario and present that in class.						
Additional training: **Every session 30 min speaking activity for all students.** Topics: Current trends, Product pitching, Revision, New job roles and opportunities, Skills required in 2023- 2030 etc. **Workshop/Boot camp**						
Assignments proposed for this course						
1. LinkedIn 2. Presentation						
Text Book						

1. **Me 2.0: Build a Powerful Brand to Achieve Career Success by Dan Schawbel**
2. Jack Canfield, "The Success Principles", 8th Edition, HarperCollins Publishers India, 2015
3. Shiv Khera, "You Can Win", 3d Edition, Bloomsbury India, 2014
4. Stephen R Covey, "7 Habits of Highly Effective People", Simon & Schuster, (2018)
5. Resume Writing: Craft a Resume That Will Knock Their Socks Off! By Alexander Burton
6. **HBR's 10 Must Reads on Emotional Intelligence (with featured article "What Makes a Leader?" by Daniel Goleman)**
7. The presentation secrets of Steve Jobs by Carmine Gallo
8. Talk like Ted by Carmine Gallo
9. Business etiquette made easy- The essential guide to professional success- Myka Meier
10. Leaders eat last- Simon Sinek
11. Ted talk links
    - https://www.ted.com/talks/larry_smith_why_you_will_fail_to_have_a_great_career?language=en
    - https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action?referrer=playlist-the_10_most_popular_tedx_talks&autoplay=true
    - https://www.ted.com/talks/aimee_mullins_my_12_pairs_of_legs?language=en

Movie References

1. The intern
2. The Pursuit of Happiness

E-Resources:

The remote access link to e-resources at Presidency university:
https://presiuniv.knimbus.com/user#/home

Catalogue prepared by	Ms Rajati Mukherjee
Recommended by the Board of Studies on	BOS No.: BOS Date:
Date of Approval by the Academic Council	Academic Council Meeting No.: Date of the meeting:
The DAC meeting number & Date	DAC Dated

II SEMESTER

Course Code: MBA2027	**Course Title: Human Resource Management Type of Course: Program Core Theory Only**	**L- T- P-C**	**3**	**0**	**0**	**3**
Version No.	1.0					
Course Pre-requisites	The students should have basic understanding of management and organizational functions.					
Anti-requisites	NIL					
Course Description	The aim of this course is to enable students to appreciate and apply principles of effective Human Resource Management (HRM). People are the life-blood of any organization and being able to attract, recruit and retain talented staff is at the core of all HRM activity. This course will explore the tools and techniques used in HRM to maximize the employee contribution and how to use HR methods to gain competitive advantage. Students will also consider the growing importance of becoming a flexible organization and flexible manpower and become familiar with latest techniques of job design and concept of modern HRM.					

Course Outcomes	On completion of this course, the student will be able to: CO1-Describe the scope, functions and recent trends in Human Resource Management. (Knowledge) CO2-Explain the methods of training and development as well as appraisal systems in the organizational context. (Comprehension) CO3-Illustrate the concepts of compensation, employee retention, welfare and social security in managing human resources. (Application) CO4-Discuss the practices of industrial relations and discipline at workplace. (Comprehension)				
Course Objectives	Objective of this course is to enhance employability skills using experiential learning methods.				
Course Content:	This course will enhance the organizational people management skills of the students through problem solving, participative learning that will be helpful for managing organizations.				
Module 1	**Introduction to HRM and Procuring Human Capital**	Assignment		Class Discussions	15 Hours
Introduction to HRM- Definition, Scope and Importance and Functions of Human Resource Management (HRM); Evolution and Trends in HRM –Evolution of HRM, HRM Trends - Workforce Diversity, Hybrid Working, David Ulrich Model of Modern HRM, The role of Social media, Artificial Intelligence, Machine Learning, Metaverse & Robotic Process Automation in HRM. **Procuring Human Capital:** Job Analysis, Importance and Process, Job description, Job Specification; Human Resource Planning, Importance and Process; Recruitment (Attraction)- Sources; Selection- Method, Types of Interviews, Types of Tests and Validity; Orientation & Socialization of employees **Bloom level: Knowledge**					
Module 2	**Training & Development, Performance Appraisal**	Assignment		Class Activity	15 Hours
Training & Development- Types of Training, Training Need Assessment, On-the-job and Off-the -Job training Methods, Executive Development Methods, Job-Crafting. **Performance and Potential Appraisal-** Objectives, Methods of Performance Appraisal, Post Appraisal Feedback, Problems with Performance Appraisal. **Bloom level: Application**					
Module 3	**Compensation, Employees' Retention and Welfare**	Case Study		Experiential learning	10 Hours
Compensation Administration and Job Evaluation- Objectives of Compensation Planning, Job Evaluation, Wage and Salary Surveys, Components of Pay Structure in India, Factors Influencing Compensation, Incentives and Fringe Benefits, Payment of Bonus. **Employees' Retention:** Calculation of Attrition rate, Retention Strategies. **Employees' Welfare and Social Security**- Intramural and Extramural Welfare Activities, Statutory Welfare Provisions of Factory Act 1948, Social Security provisions in India. **Blooms Level: Comprehensive**					
Module 4	**Industrial Relations and Discipline**	Case Study		Experiential learning	05 Hours
Industrial Relations: Objectives of Industrial Relations (IR), Types of Industrial Disputes, Causes of Industrial Disputes, Industrial Disputes Settlement Machinery, Collective Bargaining and its process. **Discipline-**Negative and Positive Discipline, Code of Discipline, Disciplinary Action, Types of Punishments **Blooms Level: Comprehensive**					
Targeted Application & Tools that can be used: Human Resources Information System, employee self-service portal, payroll, workforce management, recruitment and hiring, benefits administration and talent management. Professionally Used Software: MS Excel, SPSS, Oracle Taleo, Zoho, Peoplesoft, SAP HR					
Project work/Assignment: Experiential Learning					
Project Assignments: Assignment: 1] Students should choose any two research articles from the references and write a review report and submit. (PU Online Resources) Assignment 2] Individual: Students to select any 10 Job profiles of different organizations in one sector and do a detailed analysis on job description as well as skill set and submit. Assignment 3] Group: 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 do a poster presentation. (Experiential learning)					
Text Book T1: Dessler, Gary & Varkkey, Biju (2020). Human Resource Management, 16th Edition, Pearson Education, New Delhi.					

References R1: VSP Rao(2016). Human Resource Management, 3rd Edition, Excel Books. R2: Durai, Pravin (2020). 'Human Resource Management', 3rd Edition, Pearson Education. R3: Rao, P Subba (2022). Personnel and Human Resource Management, 5th Edition, Himalaya Publishing House.	
Catalogue prepared by	Dr. Anni Arnav
Recommended by the Board of Studies on	BOS NO:
Date of Approval by the Academic Council	Academic Council Meeting No. :

Course Code: MBA2019	**Course Title: Digital Marketing** **Type of Course: Program Core Course** **Theory Only Course**	**L-T-P-C**	**3**	**0**	**0**	**3**
Version No.	1.0					
Course Pre-requisites	Marketing Management MS Office Social Media exposure					
Anti-requisites	NIL					
Course Description	Digital media is hip and happening. This course is for students who wish to learn digital marketing in a short time frame. The course will enable digital marketers to prepare digital marketing strategy. It will also provide an opportunity to understand the tools and techniques and hence the 'how' of digital marketing. This course will give a panoramic view of various digital and social media marketing mediums that businesses can use for escalating growth. It will give deep insights into the art and science of search engine optimization, search engine marketing, social media marketing, Email marketing & Mobile marketing. It will enable deep understanding of key social media such as Facebook, Instagram, LinkedIn, YouTube, Google+, Blogs and Twitter. This course will give insights into how to increase engagement, leads and conversions. The highlight of the course is that participants get to run live campaigns in groups and hence learn by doing. The course provides a good blend of strategy as well as execution.						
Course Outcomes	On successful completion of this course the students shall be able to: **CO 1)** Explain the functioning of a Search Engine and the importance of Search Engine Optimization (Comprehension) **CO 2)** Apply the concept of Search Engine Marketing in creating a digital Ad Campaign (Application) **CO 3)** Illustrate the use of social media in effective digital marketing campaign (Application) **CO 4)** Identify the opportunities of email and Mobile Marketing to leverage the power of mobile devices (Application)					
Course Objective:	The course aims at **SKILL DEVELOPMENT** with respect to Marketing Strategies with **PARTICIPATIVE** learning activities.					
Module 1	**Search Engine Optimization (SEO)**	Assignment using E Library (Participative Learning)		Article: Global Marketing for the Digital Age		**15 Hours**
Topics: Introduction to Digital Marketing, Importance of Search Engine, How Search Engine works, Web Crawler / Spider, Search Engine Algorithm (Page Rank Algorithm), Understanding the SERP, Organic Search Results and SEO, Keywords - Keyword Theory and Research, Choosing the Right Keywords, Keyword Research Tools, SEO Process, On-Page and Off-Page Optimization.						
Module 2	**SEM and DDA**	Assignment (Participative Learning)		Case Study - Pepperfry.com: Marketing to Manage Customer Experience		**15 Hours**

Topics:
Introduction to Search Engine Marketing (SEM), Pay per Click (PPC) – Key Concepts, Benefits, Goals, and Google Ad Words ranking formula, SEO vs. SEM, Google Ad Words Account & Campaign, Keyword match types. Digital Display Advertising (DDA): Platforms, DDA Terminologies, DDA Key Stakeholders and Digital Ad Creation Process, Types of Display Ads, Remarketing.

Module 3	**Social Media Marketing**	Project (Experiential Learning)		Promote a Business Page in Social Media	**10 Hours**

Topics:
Social Media Marketing – Introduction, Classification of Social Media Tools, Importance, Media Types and three key players, Social Media Channels (Facebook, LinkedIn, Twitter, YouTube, Google+), Blogs, Social Media goals. Approaches to Social Media Marketing – Implementation – Listening, Pages, Publishing, Events, Groups, Jobs, Advertising.

Module 4	**Email & Mobile Marketing**	Assignment (Participative Learning)		Case Study - The Vanca: Reworking Digital Marketing Strategy	**5 Hours**

Topics:
Email Marketing – Definition, four stage process, Database & Subscriber Management, Design and Delivery of email, Tools. Mobile Marketing: Opportunities, Challenges, Desktop Websites vs. Mobile Website, Characteristics of effective mobile sites, Advantages of Mobile Sites and Mobile Apps, Advantages of Mobile Apps, SMS Marketing, and SMS Campaign Development Process. Introduction to Affiliate and Content Marketing.

Targeted Application & Tools that can be used: NA

Project work/Assignment:

Project Work: Create a dummy company of any product / service of your choice and use the various social media marketing platforms to promote it.

Assignment 1: Marketing Innovation Strategies: Interactive Learning along with a live group project.
Assignment 2: Identify the Digital and Social Media Marketing strategies adopted by any company of your choice.

Text Book:
T1: The Art of Digital Marketing by Ian Dodson of Digital Marketing Institute.
T2: Puneet Singh Bhatia; Fundamentals of Digital Marketing, Pearson

References
R1: The Google Story by David A. Vise, Pan
R2: Social Media Marketing by Tracy Tuten and Michael Solomon, Sage, 2015

Online Resources:
https://presiuniv.knimbus.com/user#/home

Articles:

- Tse, A. (2000), "Strategic Marketing for the Digital Age", Journal of Consumer Marketing, Vol. 17 No. 4, pp. 358-372. Link: https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/jcm.2000.17.4.358.1/full/html
- Fortin, D.R. (2000), "Global Marketing for the Digital Age", Journal of Consumer Marketing, Vol. 17 No. 4, pp. 358-372. Link: https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/jcm.2000.17.4.358.2/full/html
- Alsukaini, A.K.M., Sumra, K., Khan, R. and Awan, T.M. (2022), "New trends in digital marketing emergence during pandemic times", International Journal of Innovation Science, Vol. ahead-of-print No. ahead-of-print. Link: https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/IJIS-08-2021-0139/full/html

Multimedia (Videos):

- Digital Marketing and You – TED Talk by Ankit Srivastava
  https://www.youtube.com/embed/cBA-itmpR84
- Social Media Marketing for Small Business
  https://www.youtube.com/embed/wtZWt4YzQPU

Case Studies:

• The Vanca: Reworking Digital Marketing Strategy By: Jones Mathew; Banasree Dey, Indisn School of Business (ISB), Link: https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FW17158-PDF-ENG%2Fcontent&metadata=e30%3D • GiveIndia: On the Net for a Cause By: Sanjeev Tripathi, Shashank Bhasker, Indian School of Business (ISB), Link: https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FW16048-PDF-ENG%2Fcontent&metadata=e30%3D • Pepperfry.com: Marketing to Manage Customer Experience By: Gaganpreet Singh; Sandeep Puri; Sanjit Kumar Roy, Ivey Publishing, Link: https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FW17332-PDF-ENG%2Fcontent&metadata=e30%3D • Radio Mirchi: Marketing Strategy for the Bangalore Market By: Anand Kumar Jaiswal, IIM-Ahmedabad, Link:https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FA00108-PDF-ENG%2Fcontent&metadata=e30%3D • Maruti Suzuki India Limited: Marketing By: Dr. Sanjeev Prashar, Richard Ivey School of Business, Link: https://hbsp.harvard.edu/download?url=%2Fcatalog%2Fsample%2FW13012-PDF-ENG%2Fcontent&metadata=e30%3D	
Catalogue prepared by	Dr. Chithambar Gupta V
Recommended by the Board of Studies on	BOS NO: held on
Date of Approval by the Academic Council	Academic Council Meeting No.

Course Code MBA2042	**Course Title: Corporate Finance Course: Program Core Theory only**	**L-T- P- C**	**3**	**0**	**0**	**3**
Version No.						
Course Pre-requisites	Sound knowledge of Bank balance sheet and Basic mathematics.					
Anti-requisites	NIL					
Course Description	This course enables the students to understand the roles and responsibilities of financialmanagers in connection with investment, financing and dividend decisions. This course focuses on the various metrics of investment analysis, measurement of cost of capital, identifying the optimum capital structure, managing working capital, linkage between long- term and short-term source of finance, dividend distribution, company valuation and merger & acquisition. This course helps the students to understand how efficiently companies should manage their finance to enhance the company value.					
Course Outcomes	On successful completion of this course, the students shall be able to:					
Course Objective	1. Know the fundamentals of Finance 2. Analyze the basics of Time value & Capital budgeting Decisions 3. Apply to basic corporate financing decisions					
Course Content						
Module 1	Investment Decisions/Capital Budgeting	Experiential Learning	Lecture	15 Hours		
Time Value of money, Risk & Return, Investment criteria – Accounting Rate of return – Pay Back Period - Net present value –Internal Rate of Return – Profitability Index - Capital rationing - Capital investment process.						
Module 2	Securities Valuation and Cost of Capital	Experiential Learning	Lecture and Discussion	15 Hours		

Cost of capital – Cost of equity – Cost of Debt –Cost of Preference Shares – Cost of Retained Earnings- Securities Valuation: Equity and Bond Valuation- Discounted Dividend Model Approach-Project risk – valuation by certainty equivalents - weighted average cost of capital – Adjusted present value.				
Module 3	Dividend Decisions and Pay-outs	Experiential Learning	Participative Learning	10 Hours
Dividend policy and stock value: Factors influencing dividend policy –Dividend policy models: Traditional position-Miller and Modigliani position; Bonus Shares, Stock Splits, Bonus Shares, -Stock Repurchases-Financial Strategy for growth – Financial Distress – Corporate Restructuring.				
Module 4	Management of Working Capital	Experiential Learning	Lecture and Presentation	5 Hours
Working Capital- Meaning, Need, Determinants - Working Capital Cycle - Estimation of working capital need – Working capital investment and financing policies – Cash management – Marketable securities management - Accounts Receivables management – Inventory management and financing.				
Books 1. Corporate Finance, by Stephen A. Ross, Randoloh W. Westerfield, Jeffrey Jaffe, Bradford D Jordan, RamKumar Kakani, 11e, The McGraw-Hill Education.				
References 1. Principles of Corporate Finance, Richard A. Brealey, Stewart C. Myers, Franklin Allen & Pitabas Mohanty. 2. Fundamentals of Corporate Finance, Jonathan Berk, Peter Demarzo and Jarrad Harford, Pearson Publications. Damodaran, Aswath, Corporate Finance – Theory and Practice -2nd Edition, Wiley India				
Catalogue prepared by	Dr. Prema Sankaran			
Recommended bythe Board of Studies on				
Date of Approval by the AcademicCouncil				

Course Code: MBA2041	**Course Title: Business Analytics for Decision Making** **Type of Course: Analytical Skills Enhancement Course**	**L**	**T**	**P**	**C**
		3	**0**	**0**	**3**
Version No.	2.0				
Course Pre-requisites	Nil				
Anti-requisites	Nil				
Course Description	This course is an application-driven introduction to Business analytics. Every field of study and area of business has been affected as people increasingly realize the value of the incredible quantities of data being generated. But to extract value from those data, one needs to be trained in the proper data analytics skills. The R programming language has become the de facto entry level programming language for beginners in data analytics. Its flexibility, powerful and expressive, which have made it an invaluable tool for data analyst around the world. This course will introduce students to this rapidly growing field and equip them with some of its basic principles and tools as well as its general mindset. Students will learn concepts, techniques and tools they need to deal with various facets of data analytics practice, including data collection and integration, exploratory data analysis, predictive modeling, descriptive modeling, evaluation, and effective communication. The focus in the treatment of these topics will be on breadth, rather than depth, and emphasis will be placed on integration and synthesis of concepts and their application to solving problems.				
Course Objectives	This course is designed to improve the learners' **SKILL DEVELOPMENT** by using **PROBLEM SOLVING TECHNIQUES** like, Mini Projects and Case Study Presentations.				

Course Out Comes	On successful completion of the course the students shall be able to: 1) Define Business Analytics terms and skill sets [Knowledge] 2) Describe latest concepts, tools used in Business Analytics [Comprehension] 3) Apply analytical tools like R (& RStudio) to solve real business problems [Application] 4] Apply basic Machine learning algorithms for Regression, Classification and Forecasting [Application]			
Module 1	**Introduction to Business Analytics**	Class instructions and demo of core concepts	Assignment and Quiz	**15 Hours**
Topics: Objectives of Analytics, Types of Business Analytics, Steps of Analytics Process. Data Collection, Data Preparation, Detecting, treating outliers and missing values. Model Building, Interpretation, Measurement of Model Accuracy. Big Data basics.				
Module 2	**Introduction to R programming and EDA**	R & R Studio fully lab-based tutorials	Refer lab manual. Use of built in and sample datasets in manual.	**15 Hours**
Topics: Data: Data Collection, Data Management, Big Data Management, Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data Visualization, Data Classification				
Module 3	**Business Analytics basic Tools and Techniques**	R & R Studio fully lab-based tutorials. Project.	Refer lab manual. Use of built in and sample datasets in manual.	**10 Hours**
Topics: Overview and Industry Applications of Artificial Intelligence, Machine Learning, Deep Learning. Summarizing data using descriptive statistics, correlation. Simple Supervised Learning techniques: Linear (Simple and Multiple) Regression, Decision Trees. Unsupervised Learning: Clustering using KMeans. Time Series Forecasting, ARIMA.				
Module 4	**Data Management tools & techniques**	Online SQL editors and datasets	Data collection and data analysis	**5 Hours**
Topics: Types of Databases, entity relation diagrams, Structured Query Language, MySQL, Managing data pipeline. Overview of Big Data tools - Hadoop and Spark (non-technical overview) for business applications.				
Targeted Application & Tools that can be used: Course has wide application across all business functions. Data Analysis Supportive tools like Excel/R Programming/Oracle				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course 1. Lectures (30 hours), review and bridging (6 hours) 2. 3 Quizes 3. Assignment with Project Presentations 4. Datasets & code samples provided in the Lab Manual				
Text Book 1. Business Analytics: The Science of Data Driven Decision Making, U. Dinesh Kumar, Wiley, 2020 2. Introduction to Data Science – Practical approach with R & Python: B Uma Maheswari & R Sujatha, Wiley, 2021				
Reference books & Links: **R1:** Data Analytics using R by Seema Acharya, McGraw Hill, 2018 **R2**: R programming for beginners: Sandip Rakshit, Mc Graw Hill Education, Year, **R3:** Stanford Andrew Ng: https://www.youtube.com/channel/UC5zx8Owijmv-bbhAK6Z9apg **R4:** KrishNaik https://www.youtube.com/channel/UCNU_lfiiWBdtULKOw6X0Dig **R5:** Introduction to R & RStudio: https://www.youtube.com/watch?v=lL0s1coNtRk **R6:** R Basic Syntax: https://www.geeksforgeeks.org/introduction-to-r-studio/				
Catalogue prepared by	Prof. Krishna Durbha			
Recommended by the Board of Studies on	BOS NO: BOS held on:			
Date of Approval by the Academic Council	Academic Council Meeting No., Dated:			

Course Code: MBA2043	Course Title: Technology Foundations for Business Type of Course: Professional Core Course	L	T	P	C
		3	0	0	3
Version No.	1.0				
Course Pre-requisites	NIL				
Anti-requisites	NIL				
Course Description	This course introduces students, to modern Information Technology as applicable in organizations today. Starting with basics of Information Technology, definitions, Management Information Systems, Emerging Technology and how managers can use IT to enable success in modern disruptive markets. The course gives an overview of key organizational systems like Customer Relationship Management, Enterprise Resource Planning, Supply Chain Management systems, Digital Marketing, Analytics and eCommerce systems. And it ends with basics of Digital Transformation ie. how to manage changes in organizations using Information Technology,				
Course Outcomes	On completion of this course, the student will be able to: 1. Understand Information Technology concepts **[Knowledge]** 2. Discuss key IT systems and their role in Organizations **[Comprehension]** 3. Describe how IT Systems can be used for competitive advantage **[Comprehension]**				
Course Objective	This is aimed to familiarize students to IT systems and how to integrate IT into any function or role they will perform as managers. This course will enable students to make or influence decisions related to the selection, design and support of Management of Information Technology. To focus on the Information Technology concepts that a modern manager must understand to ensure a sustained competitive advantage for the Organization.				
Module 1	**Basics of Information Technology in business**	**QUIZ** (E-review from library)	**Classroom Discussion and Online Resources**	**15 Hours**	
Topics: Introduction, why IT, business IT interface, SDLC, Agile, business process management, role of IT & CTO					
Module 2	**Key IT systems applications in business**	**Case Analysis & demos**	**Demonstration of key systems using videos & demos.**	**15 Hours**	
Topics: Management Information System, Overview of ERP, HRM, CRM, SCM, E-Business systems. How these systems help build and grow organizations.					
Module 3	**Emerging Tech and IT for Competitive Advantage**	**Case Analysis & demos**	**Demonstration of key systems using online videos & demos.**	**10 Hours**	
Topics: Covers emerging technologies like database management, blockchain, IoT, AI&ML, ARVR, cloud, cyber security, quantum computing, space & biotechnology.					
Module 4	**Managing technological disruptions in key industries**	**Case Analysis & demos**	**Classroom Discussion and Online Resources**	**05 Hours**	
How IT enables business value. How to manage disruption caused by these. Basics of Digital Transformation.					
Targeted Application & Tools that can be used: Students would be encouraged to take up projects and through experiential learning activities in the class they will imbibe the cognitive approaches to understand and apply factors effective to understand Marktech and Adtech.					
Professionally Used Software: KNimbus library access, Online AI&ML tools, YouTube videos					
Project work/Assignment: 1. Lectures (30 hours), review and bridging (6 hours) 2. 3 Quizes 3. Hands-on demo on live tools and assignment with project presentations. 4. Assignment & project presentation					
Text Books: • Management Information Systems – Managing the Digital Firm, 14e, Kenneth C. Laudon and Jane P. Laudon, Pearson, 2017 (Reprint)					

Management Information Systems, 10e, James A O'Brien, George M Marakas and Ramesh Behl, McGraw Hill, 2013 (Reprint)
R2: IT strategy for Business, Parag Kulkarni, Pradeep Chandle, Oxford University Press, 2008
Weblinks :

- A Guide to the Project Management Body of Knowledge https://www.project-management-prepcast.com/pmbok-knowledge-areas-and-pmi-process-groups
- Changing Role of the CIO. https://www.researchgate.net/publication/220500523_The_Emerging_CIO_Role_of_Business_Technology_Strategist
- Business Transformation and the CIO Role: https://hbr.org/resources/pdfs/comm/red%20hat/hbr_red_hat_report_march14.pdf
- Salesforce Lightning CRM demo: https://ap24.lightning.force.com/lightning/page/home
- Oracle ERP introduction: https://www.youtube.com/watch?v=c9HfNg4a_Og
- Tally ERP Retail: https://www.youtube.com/watch?v=VUp1nOli3V4
- 3D Printing: https://www.youtube.com/watch?v=EHvO-MlzAIM&t=26s

Journal

- Information Technology & Management, ISBN 1385-951X
- International Journal of Information Management

Library E-resources:

- **Introduction to Management Information Systems (MIS): A Survival Guide:** https://www.edx.org/course/introduction-to-management-information-systems-mis
- **Industry 4.0 :** https://presiuniv.knimbus.com/user#/searchresult?searchId=Industry%204.0&_t=1680442800030
- **Information Technology and Sustainability:**

Catalogue prepared by	Prof. Krishna Durbha
Recommended by the Board of Studies on	BOS NO: BOS held on:
Date of Approval by the Academic Council	Academic Council Meeting No. , Dated:

Course Code: MBA2033	**Course Title: Business Research Methods** **Type of Course: School Core & Theory only**	**L-T-P-C**	**3**	**0**	**0**	**3**
Version No.	1.0					
Course Pre-requisites	Business Statistics (MBA 1007)					
Anti-requisites	NIL					
Course Description	Business Research Methods provides the theoretical and practical framework to conduct research in Business. It consists of modules, which cover the fundamentals of the Business Research Process. The course enables discussion on different research designs that would be appropriate in different business scenarios. The data analysis sections deals with the relevant statistical tools required to analyze the data which would help in effective decision making.					
Course Outcomes	On successful completion of the course, the students shall be able to: 1. Apply the relevant business research methods for solving business research problems. [Application Level] 2. Use appropriate data collection methods to carry out business research. [Application Level] 3. Employ suitable measurement techniques and sampling designs to elicit data. [Application Level] 4. Analyze the data using appropriate statistical tools. [Analysis Level]					
Course Objectives	Objective of this course is to enhance **Skill Development** using **Experiential Learning** methods.					

Course Content:				
Module 1	Introduction to Business Research Methods	Assignment	Review Literature	15 Hours
Topics: 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.				
Module 2	Data Collection Methods and Qualitative Research	Mini-Project	Data Collection and Data Analysis	15 Hours
Topics: 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. Conversations, semi-structured interviews				
Module 3	Measurement Concepts, Questionnaire design and Sampling	Assignment	Conceptual Knowledge	10 Hours
Topics: 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. Measuring behavioral intention – ranking, sorting. Questionnaire design – Basic considerations – wording questions – guidelines for constructing questions – questionnaire layout – pretesting and revision. 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.				
Module 4	Data Analysis and report writing	Mini-project	Data Analysis	5 Hours
Topics: 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.				
Targeted Application & Tools that can be used: Business research methods is applied to different areas of the management. The broad areas of applications are marketing research, financial markets, behavioural economics, human resources, etc. &Professionally Used Software: MS-Excel/SPSS/Minitab/R				
Project work/Assignment:				
Project/Assignment: Mini-Project on the primary or secondary data collection techniques for the application of suitable statistical models. Assignment 1: Students are required to write a Literature Review Assignment based on any two to three related literature on their research topic of interest. Assignment 2: Students are required to construct the Questionnaire in align with the Problem identification/Research questions and Hypothesis formulation on their research topic of interest. Assignment 3: Written Assignment/Quiz on Research Process or Sampling techniques.				
Text Books				

1. Zikmund, W. G., Babin, B, J., Carr, J.C. & Griffin, M., Business Research Methods: A South Asian Perspective. Delhi: Cengage Learning, Edition 9, 2012.		
References 1. Kothari, C. R. & Garg, G. Research Methodology, Methods and Techniques. New Age International Publishers, Multi-Colour Edition, 2019. 2. Anderson, Sweeney, Williams, Camm and Cochran. Statistics for Business and Economics. Delhi: Cengage Learning., 2016.		
Catalogue prepared by		Dr. Jayakrishna Udupa H
Recommended by the Board of Studies on		BOS NO:
Date of Approval by the Academic Council		Academic Council Meeting

Course Code: MBA2040	**Course Title: Production and Logistics Management** **Type of Course: Program Core, Theory only**	**L-T-P-C**	**3**	**0**	**0**	**3**
Version No.	1.0					
Course Pre-requisites	Business Statistics [MBA1007] Topics : Central tendencies, Deviations and Regression					
Anti-requisites	NIL					
Course Description	This descriptive course introduces the students to the theory and practice of Production Management as a functional area in the management of business enterprise. This course discusses the principles, concepts and basic problems affecting the manufacturing and non-manufacturing firms. It also includes the methods, strategies and application of various quantitative tools in problem solving for production and operations. This course introduces students to problem solving and analysis associated to the design, planning, control, and improvement of manufacturing and service operations. This course also gives a brief introduction to Logistics management and its relevance in business.					
Course Out Comess	On successful completion of the course the students shall be able to: 1] Explain the relevance of Production and Operations Management. 2] Describe the role of production and operations on managerial decision making. 3] Explain how the production function associates with other firm functions. 4] Solve problems in forecasting related to production processes. 5] Explain the relevance and role of Logistics Management in Business					
Course Objectives	Objective of this course is to enhance **Employability Skills** using **Participative Learning** Methods.					
Course Content:						
Module 1	Introduction	Assignment	Data Collection and Classification			15 Hours
Topics: Introduction – History of Production Operations Management POM, Factors affecting POM, Difference between Manufacturing and Service Operations, Concepts of productivity, Operations Strategies. Videos/ Case Study.						
Module 2	Facility Planning	Term paper/Assignment/Case Study	Data Collection, Classification & Report on Planning			10 Hours
Topics: Facilities Planning Process for Manufacturing and Assembly facility- Product Design, Process Design and Service Design, Facility Location, Facility Management - 4 types of layouts based on Produce and Variety. Videos / Case Study.						
Module 3	Time Series	Case Study	Data Collection on Time Series & Analysis			10 Hours
Topics: Concepts of Forecasting, Types of forecasting, Time series methods - Weighted Average, Weighted Moving Average., Qualitative v/s Qualitative methods of Forecasting. Videos / Case Study						
Module 4	Production Planning	Assignment &Case Study	Planning, Scheduling and Report writing			05 Hours
Topics: Types of Production Planning and Control Systems, Planning and Scheduling, Capacity Planning, Overview of Master						

Production Schedule (MPS), Materials Requirement Planning (MRP) I and relevance to Supply Chain Management/ Warehousing, Introduction to Inventory Management and Inventory Models Videos / Case study.				
Module 5	Introduction to Logistics Management	Assignment	Inventory Data Analysis and Interpretation	5 Hours
Topics: Introduction to Logistics Management, Transportation Management and Planning, Warehouse and Distribution Management, Current trends in Logistics management, 3PL and 4PL logistics				
Targeted Application & Tools that can be used: Above concepts are helpful in understanding the entire system of production, planning, layouts, facility, forecasting and inventory appropriate to any manufacturing unit like Automobile assembly, confectionary factory, process designing for various manufacturing units and service centres. Useful Software or tools are Microsoft Excel.				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course				
Assignment type: Case study on listing out various production processes and designing facilities for given product and service requirements.				
Text Book Operations Management, William J Stevenson, McGraw-Hill, 2009. NinthEdition. Available in library Logistics Management by D.K. Agrawal				
References i. Operations Management, Collier/Evans/Ganguly, CENGAGE Learning, 2016, ISBN: 978-81- 315-2809-9. ii. Operations Management for Competitive Advantage, Richard B. Chase, F Robert Jacobs, Nicholas J Aquilano, Nitin K Agarwal, McGraw-Hill; 2009. Eleventh Edition.				
Catalogue prepared by	Name/Names of the Faculty members prepared this catalogue: Dr Praveen Mustoor			
Recommended by the Board of Studies on	Mention the BOS Number and the Date of BOS:			
Date of Approval by the Academic Council	Mention the Academic Council Meeting No. & the date of the meeting:			

Course Code: PPS3022	**Course Title: Aptitude Training Type of Course: Program Core Theory Only**		**L-T- P- C**	**2**	**0**	**2**	**3**
Version No.	1.0						
Course Pre-requisites	**Basic mathematical operations. Basic English.**						
Anti-requisites	**NIL**						
Course Description	The objective of this course is to prepare the trainees to tackle the questions on various topics and various difficulty levels based on Quantitative Ability, Logical Reasoning and Verbal Ability asked during the placement drives. There will be sufficient focus on building the fundamentals of all the topics, as well as on solving the higher order thinking questions. The focus of this course is to teach the students to not only get to the correct answers, but to get there faster than ever before, which will improve their employability factor.						
Course Outcomes	On successful completion of the course the students shall be able to: 1] IDENTIFY the basic concept needed in a question. 2] SOLVE the quantitative and logical ability questions with the appropriate concept. 3] EXAMINE the data given in complex problems. 4] EXAMINE given text sentences and paragraphs for errors and correct them.						
Course Content:							
Module 1	Logical Reasoning	Assignment	Problem solving				**15 Hours**
Topics: Coding & Decoding, Blood Relations, Linear Arrangement, Circular Arrangement, Directions, Syllogisms							
Module 2	Quantitative Ability	Assignment	Problem solving				**15 Hours**
Topics: Percentages, Ratios & Proportions, Averages, Mixtures & Alligation, Data Interpretation							

Module 3	Verbal Ability	Assignment	Comprehension	**15 Hours**
Topics: Articles, Subject Verb Agreement, Synonyms & Antonyms, Verbal Analogies, Ordering of Words, Parajumbles, Sentence Correction, Cloze Test				
Targeted Application & Tools that can be used: Application area: Placement activities and Competitive examinations.				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course				
Assignment: Complete all the questions and solutions covered in the class.				
Text Book 1. Aggarwal, R. S. (2018). A Modern Approach to Verbal & Non-Verbal Reasoning. S. Chand Limited. 2. Aggarwal, R. S. (2017). Quantitative Aptitude for Competitive Examinations. S. Chand Limited. 3. Lewis, N. (1979). Word Power Made Easy. Simon and Schuster.				
References 1. www.indiabix.com 2. www.youtube.com/TheAptitudeGuy/videos				

Catalogue prepared by	Mr. Koustav Nandi
Recommended by the Board of Studies on	BOS No.: BOS Date:
Date of Approval by the Academic Council	Academic Council Meeting No.: Date of the meeting:

III SEMESTER

Course Code: MBA 3052	**Course Title: Corporate Strategy** **Type of Course: Program Core only**	**L- T-P- C**	3	0	O	3
Version No.	1.0					
Course Pre-requisites	[1] Management Concepts and Practices(MBA1015) [2] Microeconomics For Managers(MBA1009)					
Anti-requisites	**NIL**					
Course Description	Corporate Strategy has become a significant point of the modern corporate world. The changing phases of the competition, the political and social changing faces, the invention of new techniques, and new ideas have compelled the corporate world to embrace the corporate strategy concept and come out with the success. This course (Corporate Strategy) is an integral part of the Strategic Management. Strategic Management is involved in many of the decisions that a leader makes. This course includes what is a strategy, corporate direction, environmental scanning, and sources of competitive advantage, BEVUCA, Neurostrategy, strategy formulation, competitive strategies in emerging industries, balanced scorecard, and International Business.					
Course Objective	This course is designed to improve the EMLOYABILITY SKILLS by using participative learning.					

Course Outcomes	**On successful completion of this course the students shall be able to:** 1) Define corporate strategy 2) Identify various factors of competitive advantage 3) Explain various generic competitive strategies 4) Prepare a Balanced Scorecard for an organization.			
Course Content:				
Module 1	Introduction to Strategic Management	**Case**: Strategic Analysis of Starbucks Corporation	**Data Analysis**: Analysis the different tools used in Neurostrategy based on University SCOPUS database (% analysis).	**15 Hours**
Topics: **Module -I Introduction to Strategic Management** What is Strategic Management & Stages of Strategic Management, Integrating Intuition and Analysis, Adapting to Change, Key Terms in Strategic Management, External Opportunities and Threats & Internal Strengths and Weaknesses, Long-Term Objectives, Strategies and Annual Objectives & Policies, The Strategic-Management Model, Benefits of Strategic Management. Corporate Strategy, Directional Strategy, Portfolio Analysis Corporate Parenting. Nero strategy				
Module 2	Environmental Scanning and Industry Analysis	**Case Study**: Southwest Airline	**Data Analysis:** Identification of factors responsible for BEVUCA Environment through questionnaire or from literature.	**15 Hours**
Capabilities and Competencies, Sources of Competitive Advantage: Position and Capability, Value Chain analysis- primary and secondary activities, Internal and External environmental analysis, SWOT, PESTEL analysis, VUCA & BEVUCA, how strategy shapes structure- structuralist and reconstructionist approach- blue and red ocean strategy, Dubai strategy proposition. The Nature of an Internal Audit, Key Internal Forces, The Resource-Based View (RBV) Integrating Strategy and Culture Industry Analysis: The External Factor Evaluation (EFE) The Competitive Profile Matrix (CPM)				
Module 3	**Strategy Formulation**	**Case study:** Class- or Mass(HBR), Idalene F. Kesner and Rockney Walters(2005).	**Data Analysis:** Application of design thinking in industry, based on themes and	**10. Hours**

			sub theme analysis.(Application of spreadsheet with provided database).	

Generic Competitive Strategies- Cost leadership, Differentiation and focus, risk of generic strategy, The Balanced Scorecard, Types of Strategies, Levels of Strategies, Integration Strategies, Forward Integration & Backward Integration, Horizontal Integration, Intensive Strategies, Market Penetration & Market Development , Product Development, Diversification Strategies, Defensive Strategies A framework for competitor analysis- Michael Porter's Five Generic Strategies

Module 4	**Competitive Strategy and corporate advantage**	**Case study: IKEA** (http://aeunike.lecture.ub.ac.id/files/2012/03/Case-Kel.9.pdf)	**Simulation:** Development and simulation of BSC with the help of spreadsheet.	**5 Hours**

Topics:

Competitive Strategy in emerging Industries- the structural environment, early mobility barriers, early mobility barriers, coping with the competitors, which emerging industries to enter. Evolution of global industries, strategic alternatives in global industries, How to Become a Sustainable Company, Balanced Score Card, Digital advantage – SMAC. International Business Strategy- mode of entry in international business, political and country risk in International Business. Implementing Strategies: Management and Operations Issues , Implementing Strategies: Marketing, Finance/Accounting, R&D, and MIS Issues

Targeted Application & Tools that can be used:

1. **Module no 1: Neurostrategy (Analysis of University SCOPUS database with the help of spreadsheet)**
2. **Module no 2: BECUVA (Identification of Factors through SPSS)**
3. **Module no 3: Design Thinking (Themes and sub themes analysis by VOSVIWER)**
4. **Module no 4: Balanced Score Card (Spreadsheet application).**

Project work/Assignment:

1.Quiz: Online quiz in University Edhitch platform(10 marks)
2. Article review
2. Identification of value creation process based on VRIO model of any organization of your choice(20 marks)

Text Book

Bhandari & Verma : *Strategic Management - A Conceptual Framework*, McGraw Hill Higher Education, New Delhi, India.

https://highered.mheducation.com/sites/125902640x/information_center_view0/index.html

References

R1:Strategic Management CONCEPTS AND CASES, Fred R. David Francis Marion University Florence, South Carolina, 13th ed. Pearson Education, Inc., publishing as Prentice Hall

R2: Michael E. Porter: Competitive Strategy, The Free Press, New York.
http://www.mim.ac.mw/books/Michael%20E.%20Porter%20-%20Competitive%20Strategy.pdf.

R3:HBR'S 10 Must Reads on Strategy. Harvard University Press, Boston, Massachusetts.

R3:Paul Leinwand; Cesare Mainardi. *Strategy that works*, Harvard University Press, Boston, Massachusetts. https://www.scribd.com/document/533966997/Strategy-That-Works-How-Winning Companies-Close-the-Strategy-To-Execution-Gap-by-Paul-Leinwand-Cesare-R-Mainardi-Z-lib-org

Additional reading: Preparing your business in Post- Pandemic World(HBR) **https://img1.wsimg.com/blobby/go/a53b688c-293a-4784-a01f-75c9461a886a/HBRs%2010%20Must%20Reads%20on%20Managing%20in%20a%20Downturn%2C%20.pdf**

Presidency University Library link:
https://puniversity.informaticsglobal.com:2293/insight/content/doi/10.1108/TQM-12-2016- 0109/full/html

Catalogue prepared by	Dr. S.FAKRUDDIN ALI AHMED
Recommended by the Board of Studies on	
Date of Approval by the Academic Council	

Course Code: MBA3001	**Course Title: Business Law** **Type of Course: School Core -Theory only**	**L- T-P- C**	**3**	**0**	**0**	**3**
Version No.	1.0					
Course Pre-requisites	**1. Basic knowledge of functioning of a company** **2. Communication skills**					
Anti-requisites	**NIL**					
Course Description	The purpose of the course is to impart knowledge with regard to business laws. The nature of the course is to give right exposure to concerns and expectations of various stakeholders in the context of large scale industrial change due to globalization. Law is an integral part of business. Every major area of business has a legal dimension- sales and advertisement, price and distribution and operations, finance and investment, personnel and industrial relations, export and import, and setting up and winding up of a business. With the increasing complexities of business, knowledge of law is becoming crucial in business management. For the successful management of an organization, it is important that the managers have a fairly good knowledge of the legal provisions affecting upon the business. The course will equip the students to enable the application of various business laws to the real world conflicts and management challenges. To develop the legal- management skills and competencies this includes business law knowledge, planning, problem-solving and communication. It provides an understanding of the legal framework of business and the legal implications of their business decisions. The course will further equip the students with ideas, resources and tools for protecting business assets, resolving legal conflicts, and complying with the law. It guides on the best practices and tools for implementing an effective legal management system.						
Course Objectives	This course is designed to improve the learner's EMLOYABILITY SKILLS by using participative learning through Class participation activities..					
Course Outcomes	**On successful completion of this course the students shall be able to:** **CO 1. State the legal formation of contractual relationships in business.** **CO 2. Infer the concept of contract of sale and about conditions and warranties given by the companies.** **CO 3. Interpret the procedure for the formation of company, it's functioning, managing and winding up.** **CO 4. Explain consumer rights and the procedure for settlement of a dispute in a consumer forum.**					
Course Content:						
Module 1	**The Indian Contract Act, 1872**	Assignment (Experiential Learning)	15 hours			

Topics:

Introduction to the global business and legal environment, Business Law: Meaning, Purpose, sources and classification of Business Law, Essentials of Contract, Classification of Contracts, Offer, acceptance and agreement, Consideration, Capacity to Contract, Free Consent, Legality of Object, Void Agreements, Performance of Contract, Discharge of contract, Remedies for Breach of Contract. Contingent Contract, Special Contracts: Bailment, contract of Indemnity and Guarantee, termination of agency-revocation and partnership Act.

Formation of Contract of Sale, Conditions and Warranties, Transfer of property, Performance of Contract, Rights of an unpaid Seller, "Doctrine of Caveat Emptor".

[12-- Hours.] [Blooms 'level selected: Comprehension Level - 2 ----]

Module 2	**Legal Aspects of E-Payments**	Case Law (Participative Learning)	15 hours

Topics:

Meaning & Definition, Characteristics of E-payments, Types of e-commerce payment systems in use today, Credit card, Debit card, Smart card, Legal aspects of Net-banking in India, other e- payment gateways.

Sale of goods Act, IT Act provisions, Digital Signature, Electronic records, certifying authorities, Banking regulation Act 1949, FEMA Act 1999 and Fundamental of Income tax Act 1961.

[08 Hours.] [Blooms 'level selected: Application Level – 3]

Module 3	**The Companies Act, 2013**	Assignment	10 hours

Topics:

Definition of Company, Characteristics of a Company, Kinds of Companies, Formation of Company, Memorandum of Association, Articles of Association, Prospectus, Share Capital, Shares, Company Management, Meetings and Proceedings, Borrowing Powers, debentures and Charges, Accounts and Auditors, Prevention of Oppression and Mismanagement, Winding up a company.

[12 Hours.] [Blooms 'level selected: Analysis Level 4]

Module 4: **The Consumer Protection Act,1986 and Intellectual Property Rights - (Assignment- Practical case laws) 7 Hours**	Assignment	5 hours

Topics:

Objectives of the Act, Definitions, Consumer Protection Councils, Consumer Disputes Redressal Agencies, The filing of a complaint and the procedure of Hearing in a consumer forum.

Laws related to Intellectual Property Rights: Patents, Trademarks, copyrights, trade and factory design. Geographical Indication.

[07 Hours.] [Blooms 'level selected: Synthesis Level 5]

Project Assignment: Case Law solving assignment- Class of 60 would be divided into 10 groups and each group has to come out with a solution to the case law given, within the time provided.

Assignment: 1] Writing a consumer complaint to consumer forum. – A hypothetical consumer dispute would be given to the student and they have to write a complaint to the respective court to resolve the issue.

Assignment 2: Companies Act.- The provisions relating to formation of a company should be drafted by every student in the class.

1. Kapoor N D: Elements of Mercantile Law: 38th Edition 2020- Sultan Chand & Sons. Educational Publishers, New Delhi.

References:

R1. Ravinder Kumar: Legal Aspects of Business 4e: Cengage Learning India Pvt Ltd. Delhi-110092.

R2. Avatar Singh – Principles of Mercantile Law, Edition 9, 2011, Eastern Book Company, New Delhi 110001

R3. Gulshan & G.K.Kapoor, Business Law, 2018 Edition New Age Publications**,** New Delhi.

E-RESOURCES FROM LIBRARY:

Science Direct: https://www-sciencedirect-com-presiuniv.knimbus.com/search?qs=%22Business%20Law%22

Emerald: https://www-emerald-com-presiuniv.knimbus.com/insight/search?q=%22Business+Law%22&showAll=false&p=1

ProQuest: https://www.proquest.com/abiglobal/results/6405E8F429B44F44PQ/1?accountid=177896

Jstor: https://www-jstor-org-presiuniv.knimbus.com/action/doBasicSearch?Query=%22Business+Law%22&so=rel

EBSCO eBooks: https://web.s.ebscohost.com/ehost/resultsadvanced?vid=2&sid=dbbf2cec-507f-4a8d-a139-be35f74c8182%40redis&bquery=%22Business+Law%22&bdata=JmRiPWUwMDB4d3cmdHlwZT0xJnNlYXJjaE1vZGU9U3RhbmRhcmQmc2l0ZT1laG9zdC1saXZl

WEBLINKS

Case Laws:

1. **Balfaur v/s Balfaur- https://www.legalserviceindia.com/legal/article-4531-balfour-vs-balfour-case-analysis-1919-2kb-571.html**
2. **Mohori Bibi vs Dharmodas Ghose- https://www.legalserviceindia.com/legal/article-232-case-analysis-mohori-bibee-v-s-dharmodas-ghose.html#:~:text=Mohori%20Bibee%20V%2FS%20Dharmodas%20G**
3. **Baldry v/s Marshall - https://www.lawctopus.com/academike/sale-goods-domestic-international-domain/**
4. **Hadley v/s Baxendale - https://www.casebriefs.com/blog/law/contracts/contracts-keyed-to-farnsworth/remedies-for-breach/hadley-v-baxendale/**
5. **Salomon v/s Salomon & Co. Ltd. - https://www.jusdicere.in/salomon-v-salomon-co-jusdicere/#:~:text=Salomon%20v%20Salomon%20is%20the,the%20insolvency%20of%20the%20company.**
6. **Om Prakash v/s Reliance General Insurance 2017- https://indiankanoon.org/doc/122441541**

Catalogue prepared by	Dr. Vijay Vardhan

Recommended by the Board of Studies on	BOS NO:
Date of Approval by the Academic Council	Academic Council Meeting No.

Course Code: PPS3008	**Course Title: Personality Development Advanced** **Type of Course: School Core**	**L-T- P- C**	1	0	2	2
Version No.	1.1					
Course Pre-requisites	• Students are expected to understand Basic English. • Students should have desire and enthusiasm to involve, participate and learn. • Students should possess fundamental communication and research skills					
Anti-requisites	**NIL**					
Course Description	This course is designed to enable students of Business management to prepare for corporate & business world. The modules are planned to improve confidence, communication, decision making and networking skills to give the students a competitive advantage and increase chances of success in getting placed. The course will benefit learners in presenting themselves effectively through role play, activities while also learning the importance of self-awareness and team work.					
Course Objective	The objective of the course is skill development of student by using Participative Learning techniques					
Course Outcome	**On successful completion of this course the students shall be able to:** • Demonstrate confidence and effective communication • Prepare professional LinkedIn account and build business networks • Recognize problem solving skills • Discuss emotional intelligence components					
Course Content:						
Module 1	Self-awareness & EI	Personality training	Group Tasks			**10 Hours**
Topics: Johari Window, Emotional intelligence components – Self-awareness, Self-regulation, social skills, empathy and motivation **Activity:** Classroom group activity						

Module 2	PERSONAL BRANDING	Individual Task	Personal brand building	**10 Hours**

Topics:
LinkedIn profile building, network building & its significance, Class room activities.

Activity: Building LinkedIn account and professional networking

Module 3	CAMPUS TO CORPORATE	Placement training	Mock hours	**5 hours**

Topics: Resume writing, Video resume, GD, PI, Industry expert talks videos.

Activity: Write, Practice in groups, Perform

Module 4	PRESENTATION SKILLS	PPT creation	Survey-based presentation	**5 session**

Topics: Presentation skills. Ability to organize PPTs effectively, ability to apply their presentation skills and public speaking skills to make their presentations more effective.

Activity: Survey a social scenario and present that in class.

Additional training:
Every session 30 min speaking activity for all students.
Topics: Current trends, Product pitching, Revision, New job roles and opportunities, Skills required in 2023- 2030 etc.
Workshop/Boot camp

Assignments proposed for this course

- LinkedIn
- Presentation

Text Book

- **Me 2.0: Build a Powerful Brand to Achieve Career Success by Dan Schawbel**
- Jack Canfield, "The Success Principles", 8th Edition, HarperCollins Publishers India, 2015
- Shiv Khera, "You Can Win", 3d Edition, Bloomsbury India, 2014
- Stephen R Covey, "7 Habits of Highly Effective People", Simon & Schuster, (2018)
- Resume Writing: Craft a Resume That Will Knock Their Socks Off! By Alexander Burton
- **HBR's 10 Must Reads on Emotional Intelligence (with featured article "What Makes a Leader?" by Daniel Goleman)**
- The presentation secrets of Steve Jobs by Carmine Gallo
- Talk like Ted by Carmine Gallo
- Business etiquette made easy- The essential guide to professional success- Myka Meier
- Leaders eat last- Simon Sinek
- Ted talk links

- https://www.ted.com/talks/larry_smith_why_you_will_fail_to_have_a_great_career?language=en
- https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action?referrer=playlist-the_10_most_popular_tedx_talks&autoplay=true
- https://www.ted.com/talks/aimee_mullins_my_12_pairs_of_legs?language=en

Movie References

- The intern
- The Pursuit of Happiness

E-Resources:

The remote access link to e-resources at Presidency university:

https://presiuniv.knimbus.com/user#/home

Catalogue prepared by	Mr. Dhiraj
Recommended by the Board of Studies on	BOS No.: BOS Date:
Date of Approval by the Academic Council	Academic Council Meeting No.: Date of the meeting:
The DAC meeting number & Date	DAC Dated

IV **SEMESTER**

Course Code: **MBA3051**	Course Title: **Entrepreneurship and Business Ethics** Type of Course: General paper	L-T-P-C	3	0	0	3
Version No.	1.1					
Course Pre-requisites	Completion of General subject in **Entrepreneurship and Business Ethics** and basics of General Management					
Anti-requisites	NIL					
Course Description	The purpose of this course is to explore business creation and growth as a multidimensional phenomenon in both independent and corporate (Entrepreneurship) settings. By linking theory and practice the course aims to provide students an *entrepreneurial perspective* and a hands-on experience in the development of new business ventures. The students are given the right exposure to Business ethics, corporate governance & social responsibility, which help them understand new concerns and expectations from various stakeholders in the context of large scale industrial change due to globalization. Opportunities for career progression can happen when there is application of ethical values in everything that one does, which means maintaining transparency and being socially responsible.					

Course Outcomes	On successful completion of the course the students shall be able to: **CO 1.** Identify the entrepreneurial journey. [Knowledge] **CO 2**. Develop business plan using business model canvas. [Application] **CO 3.** Examine the role of technology in business. [Comprehension] **CO 4.** Understand the social responsibility of corporate towards society. [Comprehension]			
Course Objective:	The course is designed to enhance the skill of entrepreneurship and develop the self-sustainability of students with respect to country s economy.			
Module 1	**Entrepreneurial Journey**	Assignment (Participative Learning)	Data Collection and Analysis	15 Hours
Introduction, The Social and economic perspectives of entrepreneurship, Different types of Entrepreneurs, origin, GOI Initiatives, start-up Journey, Key drivers, Entrepreneurial Trinity, Vision- Strategy- Execution Triad, leadership and government framework, steps in entrepreneurial journey, key entrepreneurial characteristics, understanding entrepreneurial risks and rewards, ideation, Prototyping, testing, validation and commercialization				
Module 2	**Business Model Canvas**	Assignment (Experiential Learning)	Application	15 Hours
Understanding and developing business model canvas developed by 'Alexander Osterwalder', Developing and connecting the nine blocks of the canvas, Testing three different companies on the canvas model. Differentiating the nine block conventional canvas with eleven blocks digital canvas.				
Module 3	**Technology, Innovation and Entrepreneurship**	Assignment (Experiential Learning)	Data Collection and Analysis	10 Hours
Topics: Innovation and economic growth, Disruptive technologies, Disruptive Vs sustainable technologies, Startup Idea Generation • The Process of Innovation and Idea Generation • Systems Thinking as a Method for Innovation • Team Formation • Problem Definition and Asset Mapping • Development of Startup Venture Idea • Customer Ethnography as a Method for Idea Validation				
Module 4	**Business Ethics and Social Responsibility**	Assignment (Experiential Learning)	Data Analysis	5 Hours
Introduction to Business Ethics, Ethics vs Morals and relationship between morality, ethics and ethical theory,Globalization and ethics , Relevance of Globalization for Business Ethics ,, Theory and practice, social responsibility of corporate towards society and citizens as a framework of business ethics.				
Targeted Application & Tools that can be used: Exposure to prepare feasible report and techniques used to prepare business plan .				

Project work/Assignment:
Project/ Assignment: Assignment: 1] Refer to recent articles and do the desk research on entrepreneur surveys and analyse the critical factors responsible for feasible report preparation.. (Experiential Learning). (Kindly note: Student should visit PU library and access the online resources for the same and incorporate the assignment as well as attach the photo of log in and log out in person in the end of the assignment file.) Assignment: 2] Identify a global organization and bring out the various strategies of new entrepreneurial development and GOI Initiative s to words development of entrepreneurship in India.and learning of various CSR activities by refering Books and articals . (PPT and do presentation.) (Experiential Learning) •
Text Book T1 Abhik Kumar Mukherjee and Shaunak Roy (Author) Publisher –Oxford Higher Education .
References HBR The Questions Every Entrepreneur Must Answer https://hbr.org/1996/11/the-questions-every-entrepreneur-must-answer HBR Natural Born Entrepreneur- Natural-Born Entrepreneur - Harvard Business Review-https://hbr.org › 2001/09 › natural-born-entrepreneur. HBR The Global Entrepreneur HBR What Entrepreneurs Get Wrong? https://hbr.org/2013/05/what-entrepreneurs-get-wrong Case analysis Case study ENRON Scandal ,World Com, Toshiba, Sat yam, CSR –W ipro, Infosys, BEL and Karnataka Silk Emporium Videos V1 : https://www.youtube.com/watch?v=VO-Z5hxeofE - An Entrepreneur - Ethics V2 : https://youtu.be/yQGaoj9Iwro - India un-Inc : Management lessons from streets of India

Prepared by	Dr. Lathangi
Date of Approval by the Academic Council	Academic Council Meeting No. :

DISCIPLINE SPECIFIC ELECTIVES

Course Code: MBA3053	**Course Title: Applied Artificial Intelligence and Machine Learning** **Type of Course: Discipline Elective**	**L-T-P-C**	L	T	P	C
			3	0	0	3

Version No.	2.0
Course Pre-requisites	• Should have basic mathematics and statistics knowledge • Should have completed Fundamentals of Business Analytics (FBA) Sem2 • Basic familiarity of R Programming – as done in FBA Sem2
Anti-requisites	**Nil**
Course Description	The objective of this course is to prepare the students with basic concepts and industry use cases of Artificial Intelligence and Machine Learning, providing underlying principles and with industry use case demonstration, hands on exercises. Students should understand how these technologies are disrupting business and the huge opportunities and challenges with such technologies. Also an appreciation of the social, ethical impact of AI & ML. There will be an exposure to Python language to demonstrate concepts of AI & ML on real world datasets.
Course Out Comes	On successful completion of the course the students shall be able to: CO1) Identify right tools ie. Algorithms, Python libraries, resources to solve right business problems **[Knowledge]** CO2) Elaborate AI & ML tools to solve business problems. **[Comprehension]** CO3) Apply various tools to specific business situations **[Analysis]** CO4) Analyse how AI & ML impact business value. **[Analysis]**
Course Content:	

Module 1	**Introduction to Artificial Intelligence and Machine Learning**	Lab, Theory & Assignment	Understanding of Artificial Intelligence and Machine Learning core concepts.	**15 hours**
Topics: **Introduction to Artificial Intelligence and Machine Learning:** Introduction –Patterns, definitions, history, how are AI, ML & DL related? How do Machines Learn? Agent & Environment, Memory, Reasoning, Logic, Search. Machine Learning pipeline. Introduction to Python programming language and top online resources.				
Module 2	**Top ML Algorithms concepts and applications**	Lab, Theory & Assignment	Key concepts of Supervised, Unsupervised Learning.	**15 hours**
Topics: **EDA:** Exploratory Data Analysis using Python **Association Rules:** Market Basket Analysis and industry application **Supervised Learning:** Regression and Classification. Concepts, Linear Regression, Decision Trees, Random Forest, Support Vector Machines, KNN. Industry Applications. **Unsupervised Learning:** Clustering for segmentation and other industry use cases.				
Module 3	**NLP, Cognitive Analytics and Reinforcement Learning**	Lab & Theory	Discussion of Case Study of Regression, Classification & Clustering	**10 hours**
Topics: **Cognitive Analytics:** Text, Audio analytics, Computer Vision. Industry applications like sentiment analysis, self-driving cars etc. (sample datasets and demonstration). **Reinforcement Learning:** High level overview of concepts & business applications like optimization, robotics etc. (sample datasets and demonstration). **Introduction to Deep Learning:** Neural Networks & business application (sample datasets and demonstration) including very high overview of latest concepts eg. how ChatGPT works.				
Module 4	Applying AI & ML for a new project or start-up idea.	Project	Students study firms and propose detailed AI & ML solutions and disruptive ideas. This will be in the format of Shark Tank.	**5 hours**

Topics: Application of AI & ML in industry. Presentation by students.
Targeted Application & Tools that can be used: Students do NOT have to gain coding expertise. All demo codes & datasets will be shared for students to understand the logic. Python programming.
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course
• Analyzing data for Retail store bundling using Market Basket Analysis • Presentation on new product or start-up idea using AI & ML technology. **WEB RESOURCES:** • www.kaggle.com for datasets and Python based solutions to industry use cases. • www.github.com • Andrew Ng, Stanford free online course: https://www.coursera.org/specializations/machine-learning-introduction • Krish Naik videos: https://www.youtube.com/channel/UCNU_lfiiWBdtULKOw6X0Dig
Text Book 1. *Artificial Intelligence – A Modern Approach,* 4th e, Stuart Russell, Peter Norvig, Pearson, 2022 2. *Real-World Machine Learning,* 1st e, Henrik Brink, Joseph Richards, M Fetherolf, Manning 2016
References

Catalogue prepared by	Professor Krishna Durbha
Recommended by the Board of Studies on	
Date of Approval by the Academic Council	

Course Code: MBA3016	**Course Title: Applied Business Analytics** **Type of Course: Discipline Elective**	L-T-P-C	L	T	P	C
			3	0	0	3
Version No.	2.0					
Course Pre-requisites	• Students should have the basic mathematics and statistics knowledge • Students should have completed Fundamentals of Business Analytics in Sem 2					
Anti-requisites	**Nil**					
Course Description	Business analytics (BA) is the practice of iterative, methodical exploration of an organization's data, with an emphasis on statistical analysis. Business analytics is used by companies committed to data-driven decision-making. The curriculum is designed to tap into and enhance the problem-solving and critical thinking skills for those students specializing in Business Analytics. Graduates of this applied business analytics degree program are prepared to extract, analyze and interpret data to help and support for effective decision-making within data-driven business environments. Data analysts describe, predict, and inform business decisions in the specific areas of marketing, human resources, finance, and operations, which will develop basic data literacy and an analytic mind-set that will help the students to take strategic decisions based on data.					
Course Out Comes	On successful completion of the course the students shall be able to: CO1) Recall various data analysis tools and techniques for business problems **[Knowledge]** CO2) Understand processes to implement Business Analytics tools & techniques. **[Comprehension]** CO3) Demonstrate how various tools like Excel, R & Python are used in the industry. **[Application]** CO4) Analyse business performance using data for strategic decisions making. **[Analysis]**					
Course Objective:	This course will enhance **SKILL DEVELOPMENT** through **EXPERIENTIAL LEARNING** methods.					

Course Content:				
Module 1	**Introduction to Applied Business Analytics**	Assignment	Students are asked to collect the literature related to Business Analytics and its applications	**15 hours**
Introduction to Business Analytics: Introduction – Overview: Methods- Software, Modelling and Models: Graphical Models – Algebraic Models, others. Types of Business Analytics. Application of Analytics across industry-cases. Spreadsheet Models, Seven-Step Modelling Process.				
Module 2	Exploratory Data Analytics	Lab & Theory	Data Collection/any other such associated activity	**15 hours**
Topics: **Exploratory Data Analytics:** Introduction-Concepts: Data Sets & types of data. Descriptive Statistics, Correlation & Covariance, Visualization tools (Excel & R to demonstrate, scatter plots, bar charts, box plots, heat maps, advanced plotting tools), Data Cleansing – handling outliers and missing values. Exercises: VLookup- HLookup, Visualizations. (datasets, demonstration). **Dimensionality reduction:** Principal component analysis (PCA) need, concepts & industry applications with practical datasets & business applications.				
Module 3	**Top Analytics algorithms, tools & techniques**	Lab Experiments	Discussion of Case Study related to Regression, Classification & Clustering	**10 hours**
Topics: **Regression:** Relationships among variable – Correlation, Covariance. Predictive analytics with Simple Linear Regression, Multiple Regression. Industry applications (datasets, demonstration). **Classification:** Top algorithms like Logistic Regression and (KNN) K Nearest Neighbours with practical datasets & business applications (datasets, demonstration). **Clustering:** Using K Means algorithm to demonstrate clustering with practical dataset & business application (datasets, demonstration).				
Module 4	**Application of analytics tools**	Mini-Project	Students are assigned a Business Problem and datasets to solve using a analytics tools & techniques.	**5 hours**
Topics: Application of tools and techniques learnt in above modules using datasets from Kaggle.				
Targeted Application & Tools that can be used: Data Analysis using Supportive tools like Excel Data Analysis Tool Pack, R.				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course				
• Collecting data for Retail Store information System • Simple algorithm in machine learning for preparing students information system. **Web Resources:** • https://excel-practice-online.com/tools/advanced-filter/ • https://trumpexcel.com/excel-vlookup-function/ • https://spreadsheeto.com/hlookup/ • https://www.google.com/search?q=regression+analysis+practice+problems&sxsrf=ALiCzsZBzWj8z52lRUT4Fj_IEpJKSo2fEA%3A1653969643739&ei=65KVYonXLOSw4-EP1cG68AE&oq=regression+anlaysis&gs_lcp=Cgdnd3Mtd2l6EAEYAjIKCAAQsQMQgwEQCjIHCAAQsQMQCjIECAAQQzIKCAAQsQMQgwEQCjIECAAQCjIKCAAQsQMQgwEQCjIECAAQCjIECAAQCjIECAAQCjIECAAQCjoHCAAQRxCwAzoKCC4QxwEQrwEQJzoHCCMQJxCLAzoFCAAQkQI6CwgAEIAEELEDEIMBOg4ILhCABBCxAxDHARCjAjoUCC4QgAQQsQMQgwEQxwEQ0QMQ1AI6CAguEIAEELEDOgUILhCABDoLCAAQsQMQgwEQkQI6BQgAEIAEOgoIABCxAxCDARBDOggIABCA				

BBCxAzoHCAAQsQMQQ0oECEEYAEoECEYYAFDXCFifI2CTQmgEcAB4AIABkgGIAYgRkgEEMi4xN5gBAKABAcgBCLgBAsABAQ&sclient=gws-wiz • https://www.sciencedirect.com/topics/earth-and-planetary-sciences/autoregressive-moving-average • www.kaggle.com for datasets and Python based solutions to industry use cases.
Text Book 1. Dinesh U Kumar, "*Business Analytics: The Science of Data - Driven Decision Making*", 2nd ed, 2021
References Fader, P. and Hardie B., "*Probability Models for Customer-Base Analysis*", Journal of Interactive Marketing 23 (2009) 61–69.

Catalogue prepared by	Dr. Senthilkumar Ranganathan
Recommended by the Board of Studies on	
Date of Approval by the Academic Council	

Course Code: MBA3055	**Course Title: Story Telling and Business Intelligence** **Type of Course: Discipline Elective** (with Tableau and PowerBI in lab)	L-T-P-C	L	T	P	C
			3	0	0	3
Version No.	1.1					
Course Pre-requisites	• Should have basic mathematics and statistics knowledge • Should have completed Fundamentals of Business Analytics (FBA) Sem2					
Anti-requisites	**NIL**					
Course Description	One of the key skills of Managers is to be able to collate, analyse and present data to accurately reflect the state of the business, take decisions based on data and finally present highly impactful visualizations of the state of business and its future. The course will aim to provide necessary skills to students of Analytics to be able to collate, clean data, derive insights and present compelling visualizations, dashboards using industry top software like Tableau and PowerBI. These are very valuable skills for any Business Analytics professional today. All participants who successfully complete this course will get a certificate of participation by KPMG.					
Course Out Comes	On successful completion of the course the students shall be able to: CO1) Identify right business issues & data required to solve these **[Knowledge]** CO2) Describe relevant aspects of business for management action. **[Comprehension]** CO3) Prepare impactful management reports and dashboards using Tableau and PowerBI. **[Apply]** CO4) Evaluate various business solutions using data and recommend action. **[Analyze]**					
Course Content:						

Module 1	**Introduction to Data Visualization**	**Report – E review**	**Review of Literature for Visualisation**	**15 Hours**
Topic: Data Visualization – Definition Types of data visualizations, Types of Charts, Data Visualization softwares: Tableau software- products and versions, Tableau user interface: start page, data source page, workspace, cards and shelves, PowerBI-Products and versions, PowerBI User Interface, PBI Key components.				
Module 2	**Building basic charts**	**Assignment**	**Basic chart on Titanic**	**15 Hours**

Topic: Visualizing data using real world datasets: Minimum steps for a quick chart using tableau and power bi, Creating basic chart: Recommended charts, Starting with blank chart, chart elements, sizing, moving charts, column, bar, line, pie, combo, Stacked bar chart, Stacked column chart, Clustered bar chart, Clustered column chart, 100% stacked bar chart, 100% stacked column chart				
Module 3	**Advanced Charts**	**Case study**	**Netflix Case study**	**10 Hours**
Topic: Line and stacked column chart, Line and clustered column chart, Area chart, Stacked area chart, Doughnut chart, Treemap, Heat map, Sunburst, Histogram, pareto, Box and Whiskers, Scatter plot, bubble chart, Text tables, Highlight tables, Symbol maps, Ribbon chart, Waterfall chart, Funnel chart, Scatter chart, Map, Filled Map, Gauge, Card, Multirow card, KPI, Dashboard				
Module 4	Project with sample dataset and must present effective reports, dashboards.	**Assignment**	Students demonstrate understanding and application of skills in Tableau & PowerBI.	**5 Hours**
Topics: Topic: Students are provided sample datasets & need to make a individual presentation demonstrating skills in Tableau & PowerBI.				

List of Laboratory Tasks:

Experiment No 1: Connect to data and edit the connection properties
Level 1: with connections to a flat file using live connection and rename the canvas connection
Level 2: with connection to a flat file using extract and rename through edit connection
Experiment No 2: For the given business data related to sales of cycles across the world
Level 1: Create a calculated field on single sheet-based data from within data source
Level2: Create a calculated field based on a multiple data source

Targeted Application & Tools that can be used: Tableau Desktop, Tableau Public, Tableau online, Tableau and PowerBI. *Please note – only free trial versions will be installed in lab computers and not paid versions. IT support and help must be provided to ensure effective delivery of the course using authorized software.*

Project work/Assignment: Mention the Type of Project /Assignment proposed for this course

1. Assignment1: Collect data from open source data sites for a typical business event and apply visualization and analytics techniques
2. Assignment2: Prepare Dashboard report on stock profitability for a given stock exchange
3. Analyzing data for Customer Analytics, Pricing Analytics, Churn etc.
4. Presentation on effective dashboards using Tableau and PowerBI.

Text Book

T1. Information Dashboard Design, 2nd e, Stephen Few, Analytics Press, 2013
T2. Mastering Tableau – David Baldwin, November 2016, Packt Publishing, ISBN: 978-1-78439-769-2

References

1. *Practical Tableau* - Ryan Sleeper, 2018, O'Reilly Media Inc, ISBN 978-1-491-97731-6
2. *Tableau Your Data* - Danieal G Murray, 2013, John Wiley & Sons, ISBN 978-1-18-61204-0
3. *Introducing Microsoft PowerBI* -Alberto Ferrari and Marco Russo 2016, Microsoft Press, ISBN: 978-1-5093-0228-4

Online Resources:

Articles

University E Resources

Jensen, R.W., Limbu, Y.B. and Spong, Y. (2015), "Visual Analytics of Twitter Conversations about Corporate Sponsors of FC Barcelona and Juventus at the 2015 UEFA Final", International Journal of Sports Marketing and Sponsorship, Vol. 16 No. 4, pp. 3-9.
https://presiuniv.knimbus.com/openFullText.html?DP=https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/IJSMS-16-04-2015-B002/pdfplus/html.

Carrizosa, E., Guerrero, V. & Romero Morales, D. On mathematical optimization for clustering categories in contingency tables. Adv Data Anal Classif (2022)
https://link.springer.com/article/10.1007/s11634-022-00508-4

Hoang, T.B.N., Mothe, J. Prediction of brand stories spreading on social networks. Adv Data Anal Classif (2021)
https://link.springer.com/article/10.1007/s11634-021-00450-x

Case study link
https://www.datasciencecentral.com/how-a-good-data-visualization-could-save-lives/

Datasets and Codes for Experiential learning
https://www.kaggle.com/datasets/heptapod/titanic
https://www.kaggle.com/datasets/pavansubhasht/ibm-hr-analytics-attrition-dataset
https://www.kaggle.com/code/mysarahmadbhat/eda-on-netflix/notebook
https://www.kaggle.com/code/aayushmishra1512/netflix-data-analysis-and-visualization/notebook
https://fraud-detection-handbook.github.io/fraud-detection-handbook/Chapter_3_GettingStarted/SimulatedDataset.html
Excellent visualization & reports. *https://www.gapminder.org/*

Videos and Podcast
https://www.youtube.com/watch?v=loYuxWSsLNc
https://podcasts.google.com/feed/aHR0cHM6Ly9kYXRhdml6dG9kYXkubGlc3luLmNvbS9yc3M

Catalogue prepared by	Professor Krishna Durbha
Recommended by the Board of Studies on	Mention the BOS Number and the Date of BOS
Date of Approval by the Academic Council	Mention the Academic Council Meeting No. & the date of the meeting:

Course Code: MBA3017	**Course Title: Business Forecasting** **Type of Course: Discipline Elective**	L-T-P-C	3	0	0	3
Version No.	2.0					
Course Pre-requisites	[1] Basic Statistics 2] Read Graphs and Charts 3] Basic R programming and R codes on data structures and statistical and mathematical operation. Pre-reads: What can be forecasted, Forecasting, planning, and goals Determining what to forecast, Forecasting data and methods, Basic steps in forecasting task: Problem definition, Gathering information, Preliminary (exploratory) analysis, Choosing and fitting, Using and evaluating a forecasting model (materials will be provided to students) (103) Business Forecasting - YouTube					
Anti-requisites	NIL					
Course Description	The purpose of this course is to train future managers to make informed decisions making with the help of various analytical methods. The business Forecasting course will provide a solid framework for understanding different tools of forecasting and their applications. This course aims to provide a conceptual and analytical understanding of various advanced forecasting models. The course allows the students to analyze time-series data to effectively forecast results with the aid of R software. The course help students make informed decisions as forecasting is a decision-making tool used by many businesses to help in budgeting, planning, and estimating future growth.					
Course Outcomes	On successful completion of this course the students shall be able to: CO1) Identify R codes to carry out basic statistical modeling and analysis for forecasting results [Comprehension] CO2) Discuss time series data decomposition and analysis by applying forecasting tools [Comprehension] CO3) Illustrate real-time business situations using advanced forecasting methods [Application] CO4) Apply forecasting results with the domain expertise to make sound managerial decisions [Application]					
Course Content:						
Module 1	**Introduction to Business Forecasting using R Objects**	QUIZ	Programming	15 Hours		
Topics: Introduction to business forecasting, Statistical forecasting perspectives: ts objects in R, Time Plots, Time series pattern-Trend, Seasonal, Cyclic, Random; Seasonal plot, seasonal subseries plot & Scatter Plot, Correlation & Autocorrelation, Lag plots, Trend and seasonality in ACF plots, White noise- no autocorrelation. Forecaster's toolbox –methods, transformations, and residual diagnosis, Moving average smoothing, Classical decomposition, STL decomposition						
Module 2	**Time-series Regression and Exponential smoothing Methods**	Datasets and case studies (from Library Portal	Programming	15 Hours		
Topic: Time-series Regression: The linear model, Least squares estimation, Evaluating the regression model, Forecasting with regression. The taxonomy of exponential smoothing methods: Simple exponential smoothing- no clear trend or seasonal pattern, Holt's linear trend method for data with a trend, and Holt-Winters' seasonal method to capture seasonality.						
Module 3	**ARIMA models & Combining Results**	Video Assignment	Programming	10 Hours		
Topics: ARIMA models- Stationary and differencing, Radom walk model, Unit root tests, Auto regression models, Non-seasonal ARIMA models –ACF & PACF Plots, maximum likelihood estimates Modeling procedure, Seasonal ARIMA models, Practical forecasting issues & Combing Results						
Module 4	**Advanced Forecasting methods**	Experiential Learning Project-Presentation	Programming	5 Hours		

Topics: Complex Seasonality: STL with multiple seasonal periods, STL with multiple seasonal periods, Prophet model, neural network model: Neural network architecture, Neural network autoregression, Prediction intervals and bootstrapping and bagging: Bootstrapping time series, Bagged forecasts.

Project work/Assignment:

1. Lectures (32 hours), review and bridging (4 hours)
2. Quiz- Ts objects
3. Assignment 1: Holt-Winters' seasonal method
4. Self-Learning Topics: Introduction to forecasting and steps in forecasting.
5. Experiential Learning: Cricket IPL/ Covid 19 Data set
6. Participative Learning: Project work on any database of interest
7. Technology Enabled Learning: Video Assignment / Wiki blog on forecasting techniques

Text Book

1)Forecasting: Principles and Practice by Rob J Hyndman and George Athanasopoulous
Forecasting: Principles and Practice (3rd ed) (otexts.com)

References

1. Business forecasting, J.E. Hanke & D.W. Wichern, Pearson international
2. R in Action by Robert I. Kabacoff

Weblinks:

(103) 11.1: Time Series Regression in RStudio - YouTube
(103) R Tutorial. Exponential Smoothing Methods - YouTube
(103) Forecasting in R with Exponential Smoothing - YouTube
(103) Holts Exponential Smoothing Hands On using R - YouTube
(103) Holt Winters Forecasting Model in R - YouTube
(103) Time Series Analysis-ARIMA Model using R software : A step by step approach - YouTube
(103) 8.23: Seasonal ARIMA (SARIMA) models in R - YouTube

Journal

1.International Journal of Forecasting: ISSN:0169-2070, Elsevier
2.Journal of Forecasting: E-ISSN:1099-131X, Wiley-Blackwell
3.Advances in Business and Management Forecasting, ISSN:1477-4070, Emerald

Dataset

- Kaggle
- www.analyticvidhya.com,
- MOSPI
- Central Data Catalog (microdata.gov.in)

Library E-resources:

Policy Analysis in Business Cycle Models (knimbus.com)

Cricket Match Outcome Prediction Using Tweets and Prediction of the Man of the Match using Social Network Analysis: Case Study Using IPL Data | IEEE Conference Publication | IEEE Xplore

India stat

- Cooperatives Statistics on Agricultural Credit Societies, Agriculture Rural Development Banks (indiastat.com)
- Banks and Financial Institutions India - From depositing money to taking loans (indiastat.com)

Catalogue prepared by	Prof. Krishna Durbha
Recommended by the Board of Studies on	BOS NO:

Date of Approval by the Academic Council	Academic Council Meeting No.

Course Code: MBA3054	Course Title: Database Management Type of Course: **Discipline Elective**	L-T-P-C	L	T	P	C
			3	0	0	3

Version No.	2.0			
Course Pre-requisites	Technology Foundations for Business MBA 1018 (Semester 2) Basic understanding of Data and DBMS			
Anti-requisites	**NIL**			
Course Description	The Database Management Course is an industry oriented course focused on providing Data Management and Data world insights. The learner is equipped with Data Management practices and trends in the Industry. Database Management is about monitoring, administration, of databases and data left. Database management involves Data Architecture, Design, Implementation and Support of data. The course involves theory and practical perspective of data management aspects. Open Source tools will be provided for Data Management activities. The lab activities will be performed in the Open Source tool.			
Course Objectives	The Course promotes learners' employability skills through the understanding and application of Relational Database Management Systems (RDBMS), Industry applications in managing data in all business functions across Industry sectors. Laboratory Assignments/ real time Use Cases will be simulated and resolved during the hours. This will involve hands-on experiential learning in the complex datasets in determining probable outcome.			
Course Out Comes	On successful completion of the course the learners are able to: CO1) Describe complex data repositories in organizations **[Comprehension]** CO2) Apply SQL syntax for desired outcomes. **[Apply]** CO3) Illustrate usage of tools to create reporting dashboards and dataplots **[Apply]** CO4) Analyse Databases (including Big Data) as deployed in various industries **[Analysis]**			
Course Content:				
Module 1	**Introduction to Database Management Systems (DBMS)**	Case Study (participative learning)	Case study: DBMS in organizations	**15 Hours**
Topics: Introduction to Database Management Systems – Types and Definitions, Data Normalization, Database architecture, Data mirroring, Role of a DBA,				
Module 2	**Overview of Structured Query Language (SQL), Normalization**	Assignment and Case Study (participative learning)	Case Study: Creation of Tables, Managing data and interrelation Students who complete the course will be equipped to write SQL queries,	**15 Hours**
Topics: Overview of SQL. Installation of Work Packages, Module 2: Building the Database Schema; Creating tables and columns; Building tables with CREATE TABLE; Modifying table structure with ALTER TABLE; Adding columns to an existing table; Removing tables with DROP TABLE				
Module 3	**Models & Database Design (Logical and Conceptual), Database Objects, Big Data overview**	Assignment and Case Study (Experiential learning)	A Case Study	**10 Hours**

<table>
<tr><td colspan="5">Topics:
Relational Model, Entity Relationship Model, Database design and ER Model: overview, ER-Model, Constraints, ER-Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML Relational database model: Logical view of data, keys, integrity rules. Relational Database design: features of good relational database design, atomic domain, Normalization (1NF, 2NF, 3NF, BCNF). Big Data – characteristics, tools to manage Big Data.</td></tr>
<tr><td>Module 4</td><td>Data Modeling Constraints & Data Manipulation; Big Data overview</td><td>Assignment and Case Study & Project</td><td>Students are assigned a project to work using DMBS tools and techniques.</td><td>5 Hours</td></tr>
<tr><td colspan="5">Topics:
What are constraints, types of constrains, Integrity constraints, Views: Introduction to views, data independence, security, updates on views, comparison between tables and views, Big Data – characteristics, tools to manage Big Data.</td></tr>
<tr><td colspan="5">List of Experiments (Embedded Lab - Student's self-study): Practical exercises are done using
1. Creation of Dataset, Tables.
2. Building Data Repositories, Roll Back and Data Updation.
3. Relation building between Dataset, Tables,
4. DBMS Projects Hospital, Library, School, Salary, Hotel, Pharmacy, Student, Payroll, Employee</td></tr>
<tr><td colspan="5">Targeted Application & Tools that can be used:
Open Source DMBS & SQL Tools</td></tr>
<tr><td colspan="5">Project work/Assignment: Mention the Type of Project /Assignment proposed for this course:
Building Databases, Data Structures for these sectors – Education, Banking, Airlines, Universities, Manufacturing and selling, Human resources</td></tr>
<tr><td colspan="5">Text Book
T1: Database Management System (DBMS)A Practical Approach, Rajiv Chopra, S Chand, 5th Ed</td></tr>
<tr><td colspan="5">References:
• R1: Relational model database management – E.F. CODD
• R2: Database Design & Relational Theory: Normal Forms & All That Jazz – C.J. Date
Web resources:
• DBMS basics: https://www.youtube.com/watch?v=3EJlovevfcA
• SQL Basics: https://www.w3schools.com/sql/default.asp
• Learn SQL: https://www.codecademy.com/learn/learn-sql
• Big Data Introduction : https://www.youtube.com/watch?v=bAyrObl7TYE</td></tr>
<tr><td colspan="2">Catalogue prepared by</td><td colspan="3">Prof Kiran Koppada</td></tr>
<tr><td colspan="2">Recommended by the Board of Studies on</td><td colspan="3"></td></tr>
<tr><td colspan="2">Date of Approval by the Academic Council</td><td colspan="3"></td></tr>
</table>

<table>
<tr><td rowspan="2">Course Code: MBA3090</td><td colspan="3" rowspan="2">Course Title: Marketing Analytics
Type of Course: Discipline Elective
(Theory with Embedded Lab)</td><td rowspan="2">L-T-P-C</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
<tr><td>3</td><td>0</td><td>0</td><td>3</td></tr>
<tr><td>Version No.</td><td colspan="8">2.0</td></tr>
<tr><td>Course Pre-requisites</td><td colspan="8">• Students should have the basic mathematics and statistics knowledge
• Students should have a basic algorithm & programming knowledge</td></tr>
<tr><td>Anti-requisites</td><td colspan="8">Nil</td></tr>
<tr><td>Course Description</td><td colspan="8">As big data moves into the mainstream, marketers are seeing the opportunity to make the profession more scientific and numbers-driven than ever before. In addition, with measurement at the Centre of every marketing campaign, marketers have the opportunity to prove the return on investment of their programs with unprecedented accuracy. Yet, this wealth of data can be overwhelming. Every channel has its own metrics, every demographic group's behavior can be mined for targeting information. What are the numbers that matter? And what are they really telling us? How can we best leverage big data and marketing analytics to optimize results? This course explores the growing role of data in marketing. Taking a two-fold approach, the course looks in-depth at the two primary kinds of data available to marketers: internal, or what is called marketing analytics, and external, or big data. Using real-world examples and practical exercises, the course allows students to understand the interactions between both kinds of data, and how best to use both to improve marketing outcomes, demonstrate return on investment, and create increasingly effective marketing campaigns.</td></tr>
<tr><td>Course Objective</td><td colspan="8">The Marketing Analytics course promotes learners' Employability skills through the analytical abilities in various Marketing Analytics Concepts based on laboratory Experiments/Assignments/Exercises/Case Studies involving hands-on experiential learning for solving the related Marketing business problems.</td></tr>
<tr><td>Course Out Comes</td><td colspan="8">On successful completion of the course the students shall be able to:
CO1) Identify appropriate tools, techniques for customer preference model [Comprehension]
CO2) Apply Marketing Analytics tools for decision-making [Application]
CO3) Apply multiple regression model for sales prediction [Application]
CO4) Analyse customer segments with Cluster Analysis & Market Basket Analysis [Analysis]</td></tr>
<tr><td>Course Content:</td><td colspan="8"></td></tr>
<tr><td>Module 1</td><td colspan="2">Introduction</td><td>Assignment (Experiential Learning)</td><td colspan="3">Students are asked to collect the literature related to Business Analytics and its overview</td><td>15 Hours</td></tr>
<tr><td colspan="9">Topics:
Introduction to Marketing Analytics, Importance, Definition and Types of Analytics, Benefits, framework. Marketing Analytics overview, OLAP, OLTP</td></tr>
<tr><td>Module 2</td><td colspan="2">Customer Preference</td><td>Lab & Theory (Problem Solving)</td><td colspan="3">Data Collection/any other such associated activity</td><td>15 Hours</td></tr>
<tr><td colspan="9">Topics:
• Customer Preference: Identifying Customer Preference using Conjoint Analysis – Products, Attributes, and Levels – Using Evolutionary Solver to Generate Product Profiles.
• Discrete Choice Analysis Using CRM Data: Incorporating Price and Brand Equity into Discrete Choice Analysis -Importing files into Excel
• Identifying Semi-Structured and Unstructured Data (Customer Preference model)</td></tr>
<tr><td>Module 3</td><td colspan="2">Sales Prediction</td><td>Lab Experiments</td><td colspan="3">Discussion of Case Study related to Regression Analysis</td><td>10 Hours</td></tr>
<tr><td colspan="9">Topics:
Sales Prediction: Building Multiple Regression model to Forecast Sales, Validating Model Assumptions with Data Analysis Tool Pak – Sales Prediction with S Curve Model.</td></tr>
</table>

Module 4	**Customer Segmentation**	Mini-Project	Students has been assigned a Business Problem, based on that they should develop a model	**5 Hours**

Topics:

Customer Segmentation: Introduction – Identifying the Customer Segmentation – Clustering Method and Market Basket Analysis (MBA)

Targeted Application & Tools that can be used:

Data Analysis using Supportive tools like Advanced Excel

Project work/Assignment: Mention the Type of Project /Assignment proposed for this course

- Collecting data for Retail Store information System
- Simple algorithm in machine learning for preparing students information system.

Web Resources:

- https://presiuniv.knimbus.com/user#/home
- https://www.marketingevolution.com/marketing-essentials/marketing-analytics
- https://journals.sagepub.com/doi/abs/10.1509/jm.15.0413
- https://www.sciencedirect.com/science/article/abs/pii/S0167811612000912

Sample Data Set:

https://www.mygreatlearning.com/blog/free-download-datasets/
https://www.kaggle.com/datasets?fileType=csv

Text Book

1. Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques 1st Edition, Wayne.L.Winston, Wiley

References

- Marketing Analytics: A practical guide to real marketing science Paperback – June 28, 2015 by Mike Grigsby (Author)

Catalogue prepared by	Dr.Senthilkumar Ranganathan
Recommended by the Board of Studies on	
Date of Approval by the Academic Council	

Course Code: MBA 3087	Course Title: Financial Analytics Type of Course: Discipline Elective	L-T-P-C	L	T	P	C
			3	0	0	3
Version No.						
Course Pre-requisites	Students are expected to have the numerical acumen and an understanding of Business Statistics, Business Forecasting, Investment Management, Introduction to Business Analytics and Python / R					
Anti-requisites						
Course Description	To cater to the technology-intensive finance industry's rising demand, this course equips the learners to be financial analysts thereby nurturing their financial, statistical and coding talents to fulfil the needs of banking, insurance and investments. Further, this course enables the aspirants to analyze finance using data-driven algorithms. This course applies Machine Learning techniques and upskills the aspirants in processing data, making inferences using tools of financial analytics to assist in making decisions					
Course Objective	The course promotes learners' Employability skills through the analytical abilities in various Financial Analytics Concepts based on laboratory Experiments/ Assignments/Exercises/ Case Studies involving hands-on experiential learning for solving the related Marketing business problems.					
Course Outcomes	On successful completion of the course, the students should be able to: CO1) Apply portfolio analysis for optimizing the returns [Application] CO2) Employ risk analytics to optimize portfolios. [Application] CO3) Demonstrate regression analysis to make decisions.[Application] CO4) Forecast financial metrics. [Application]					
Course Content						
Module 1	**PORTFOLIO ANALYSIS**				15 hours	
Machine Learning in Finance – Installation – Financial Analysis in Python /R - Capital Asset Pricing Modelling – Analysis using Alpha, Beta and Sharpe Ratio – Case study with real time data.						
Module 2	**RISK ANALYTICS**				15 hours	
Measuring Risk: Assessment of risk - Risk analysis under different scenarios – Case for risk reduction – Portfolio Diversification: Role of diversification – Case Study for portfolio diversification – Risk Mitigation: Strategies to mitigate risk and evaluation – Exercise with dataset using Python/R						
Module 3	**REGRESSION ANALYSIS IN FINANCE**				10 hours	
Simple Regression Analysis: Case analysis – Analysis of parameters using financial dataset – Model evaluation - Multiple Regression Analysis in Finance: Case studies in multivariate and model evaluation.						
Module 4	**FORECASTING IN FINANCE**				5 hours	
Time Series- Visualization and Preparation in *Pandas* – comparison of time-series – Exercise in pandas using financial data– Autocorrelation: Examination of ACF and inferences - Exercises using financial data for forecasting – Case studies						
Targeted Applications & Tools that can be used: Tools: R or Python						
Project work/Assignment:						
1.Assignment 1: Applying portfolio analysis in selected stocks 2.Assignment 2: Applying multi-linear regression on alpha, beta & Sharpe ratio. 3.Assignment 3: Forecasting profits by analyzing financial statements						
Text Book						

Machine Learning using Python, by Manaranjan Pradhan and U Dinesh Kumar, ISBN-978-81-265-7990-7, Wiley Publication, 2019

Reference Books

R1: Machine Learning Applications using Python - Cases Studies from Healthcare, Retail and Finance, by Puneet Mathur, ISBN-978-1-484-24714-3, Apress, 2019

R2: Hands on Python for Finance, by Krish Naik, ISBN-978-1-789-346374 Packt Publishing Ltd, 2019

R3: Python for Probability, Statistics and Machine Learning (2e), Dr Jose Unpingco, ISBN-978-3030185442, Springer, 2019

Web Links and Case Study Links

www.nseindia.com, www.moneycontrol.com, www.bseindia.com, www.analyticvidhya.com.

Catalogue prepared by	Dr. Krishnan Hariharan, Prof. Krishna Durbha
Recommended by Board of Studies on	BOS Number
Date of Approval by the Academic Council	Academic Council Meeting No.

Course Code: MBA3093	Course Title: **DESIGN THINKING FOR BUSINESS INNOVATION** Type of Course: **Discipline Elective**	**L-T-P-C**	L	T	P	C
			3	0	0	3
Version No.	1.0					
Course Pre-requisites	Decision making and problem-solving abilities.					
Anti-requisites	NIL					
Course Description	Innovation is the mantra of many fast moving and successful companies, especially in this world of high-speed interconnectivity. The question organizations face to stay relevant in today's environment is how to establish a culture of innovation and creative problem solving. Design thinking, an approach to both innovation and creative problem solving is becoming the go to approach for forward thinking organizations. What is design thinking? Design thinking is an iterative approach to solving problems with cross-functional teams led by facilitators. This course presents an introduction to the design thinking approach and mindset using highly interactive exercises that give the participants a flavor for some of the techniques and methods of design thinking that waken the innovative and problem-solving abilities. Throughout the course students will work on three different challenges; one focused on product design, one focused on service design and one focused on systems or business design. By starting with a very tangible challenge around product design, students will be able to hone their skills in the process before moving into more complex challenges around business and systems level design. All challenges will be addressed in partnership with a local business that poses a problem they are currently facing. In pilot programs for this class, businesses have implemented a number of ideas developed by students. The course will be teamwork-oriented, but students will also complete readings and independent activities that support the group work and ensure individual depth of knowledge.					
Course Objective	To improve employability skills with experiential learning by immersing students into the world of innovation as a systematic process of tackling relevant business and/or social problems and provide a social and thinking space for the recognition of innovation challenges and the design of creative solutions through experiential and participative learning that develops employability and entrepreneurial skills.					
Course Out Comes	On successful completion of the course the students shall be able to: C.O.1 Understand the concepts of design thinking approaches **[Knowledge Level]** C.O.2 Create physical prototypes / a visual representation of an idea **[Comprehension]** C.O.3 Apply critical thinking and design thinking in parallel to solve problems **[Application Level]** C.O.4 Apply some design thinking concepts to their daily work **[Analysis Level]**					
Course Content:						
Module 1	**Design Thinking Overview and General Approaches to Design Thinking**	Quiz	Design Thinking Skills, Design Thinking Mindset, Principles and Steps of Design Thinking			15 Hours
Topics: Introduction to Design thinking, Introduction to Design Research Strategies, Design Thinking in the Workplace, Design Thinking Skills, Design Thinking Mindset, Principles of Design Thinking and case-based exercise						
Module 2	**Design Thinking Approaches and Stages**	Articles & Case Study Discussion	Application of Concept with (Article Link are mention below)			15 Hours
Topics: The Basis for Design Thinking, Design Thinking Frameworks, Building a Design Thinking Framework, Design Thinking Team, Design Thinking Workshops and Meetings, Characteristics, Types of Workshops. Introduction to Synthesis, empathize with the Customers and/or Users, Define the Problem, Ideate, Prototype Alternate Solutions, Test the Solutions, Ideation and Prototyping Strategies, User Testing, and case-based exercises						

Module 3	**Design Thinking Techniques and Practices**	Assignment	Report on Prototype, Test Techniques, Visualization, Diagrams, & Story Telling Techniques.	10 Hours
Topics: Listening and Empathizing Techniques, Define and Ideation Techniques, Prototype and Test Techniques, Visualization Techniques and Diagrams, Story Telling Techniques, Pitfalls and Cautions in Design Thinking Workgroups, case-based exercises				
Module 4	**Business & Systems Design**	Participative Learning	Business Simulation games on Product and Service Design, finding the gaps and filling the gaps and concept mapping from ideation to implementation.	5 Hours
Topics: Product and Service Design, finding the gaps and filling the gaps, Design Research - tools for observation and immersion, Business Model Canvas and Design Research, Journey of mapping from ideation to implementation, Developing Final Presentations, case-based exercises				

Targeted Application & Tools that can be used:
This course helps in understanding the decision-making mindset of an individual through the application of design thinking knowledge.

Project work/Assignment: Mention the Type of Project /Assignment proposed for this course

Assignment based on self-study topics (Articles & Case Analysis as shown in course handouts)

Text Book

Maurício Vianna and Ysmar Vianna, Design Thinking for Business Innovation, 1st Edition, 2013, MJV Press, ISBN-13: 978-9332511170

A practical guide to design thinking, by Moritz Gekeler, 2nd Edition, 2019 – ISBN-10: 0138018812

Research Articles & Case Study References:
Sources: Presiuniv.knimbus.com, Sage Publications, SCI Elsevier & HBR

Article 1 - B2B Design Thinking: Product Innovation when the User is a Network
https://thisisdesignthinking.net/2021/03/b2b-design-thinking-redesigning-product-innovation-when-the-user-is-a-network/

Article 2 - IBM: Design Thinking Adaptation and Adoption at Scale
https://thisisdesignthinking.net/2019/07/ibm-design-thinking-adaptation-adoption-at-scale/

Article 3 - Building Trust with Prototypes: An IoT solution at Piller
https://thisisdesignthinking.net/2019/07/ibm-design-thinking-adaptation-adoption-at-scale/

Article 4 - Design Thinking as an Entrepreneurs' Mindset.
https://thisisdesignthinking.net/2014/06/design-thinking-as-an-entrepreneurs-mindset/

Case 1 - Taking Risks, Earning Trust and Including Co-Workers: User-Centered Design at Deutsche Bahn Operations
https://thisisdesignthinking.net/2018/07/design-at-deutsche-bahn-operations/

Case 2 - How Design Thinking Turned One Hospital into a Bright and Comforting Place
https://thisisdesignthinking.net/2017/01/rotterdam-eye-hospital/

Case 3 - Reinventing Solar Energy Supply for Rural Africa: A Design Thinking Approach
https://thisisdesignthinking.net/2016/05/reinventing-solar-energy-supply-for-rural-africa/

Case 4 - How Design Thinking Enabled MLP to Speak the Customer's Language

https://thisisdesignthinking.net/2015/09/taking-off-the-tie-how-design-thinking-enabled-mlp-to-speak-the-customers-language/

Videos for Reference:

- Introduction to Design Thinking and Innovation https://www.youtube.com/watch?v=3RemkU4BH8U
- Design Thinking and Innovation At Apple – HBS Case Study https://www.youtube.com/watch?v=ir3E-TEUk48
- Speed up Innovation with Design Thinking, Guido Stompff | TEDxVenlo https://www.youtube.com/watch?v=ZBxZC9I6xyk
- The art of innovation | Guy Kawasaki | TEDxBerkeley https://www.youtube.com/watch?v=Mtjatz9r-Vc

Catalogue prepared by	Dr. S.Fakruddin Ali Ahmed
Recommended by the Board of Studies on	BOS Number:
Date of Approval by the Academic Council	Academic Council Meeting:

Course Code: MBA3064	Course Title: **HR Analytics** Type of Course: **Discipline Elective**	L-T-P-C	L	T	P	C
			3	0	0	3

Version No.	1.0
Course Pre-requisites	**HUMAN RESOURCE MANAGEMENT**
Anti-requisites	NIL
Course Description	The disruptive, dynamic and continuously evolving environment has changed the way Human Resources have to be managed. New age HR practices need to keep pace and evolve by providing value-adding practices that assist in building the right set of competencies in the organization. Organization requires efficient human resource (HR) data analytics to make more informed HR decisions. The program is unique as it lays equal emphasis on explaining the business rationalities in which the role of HRM practitioner is embedded. The HR analytics course is a practical oriented course which provides an insight towards having an analytical perspective towards HR data. With this course, the students will gain insights on the using HR analytics. This course aims to build competencies and skills of representing, analyzing and managing HR data through hands on exercises. The course enables the students to address both tactical and strategic level HR issues by offering insights into the use of analytical tools.
Course Out Comes	On successful completion of the course the students shall be able to: CO1) Describe concepts and theories of HR Analytics. **[Knowledge]** CO2) Explain various matrices with examples to improve HR processes. **[Comprehension]** CO3) Apply different matrices to improve HR processes. **[Application]** CO4) Analyse the data to develop and streamline HR policies of organization. **[Analysis]**
Course Objective:	This course aims to enhance the employability skill using experiential teaching methods that include representing, analysing and managing HR data through hands on exercises and experiential learning for employability skills.

Module 1	**Introduction to HR Analytics**	Practical Hours/ Experiential Learning	Assignment	15 Hours
Topics: Introduction, Importance and significance of HR Analytics, Benefits of HR Analytics, HR Analytics and changing role of HR managers, Reinforcement of HR strategy factors with HR Analytics, Steps to implement HR Analytics with business goals and strategies [5 hours][Blooms: Knowledge]				
Module 2	**Laying Foundation for HR Analytics**	Practical Hours/ Experiential Learning	Assignment	15 Hours
Topics: Sources of Data, Defining HR Metrics-Descriptive, Diagnostic, Predictive, Prescriptive Data Collection and Analysis, HR Analytics framework and models, Understanding Variable and Construct, Measurement, Hypothesis Construction and Testing in HR Analytics [8 Hours] [Blooms: Comprehension]				
Module 3	**Understanding the Usage of HR Analytics**	Practical Hours/ Experiential Learning	Assignment	10 Hours
Topics: Application of HR Analytics in Recruitment and Selection, Training and Development, Performance Appraisal (PA), Compensation Management. HR Bench Marking- Introduction, scope; Performance goal setting-KPA's and KPI's, Providing performance feedback. [Blooms: Application]				
Module 4	**HR Data Visualization with MS-Excel**	Practical Hours/ Experiential Learning	Assignment	05 Hours
Topics: Key excel functions, creation of HR Dashboards through Tableau, HR data descriptive analysis, correlation, Regression, T-test and ANOVA, Factor Analysis and Introduction to ORANGE software. [Blooms: Analysis]				
Targeted Application & Tools that can be used: MS Excel				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course				
1. Assignments– Practice Exercises 2. Case study – Interpretation of data				

Self- Learning Topics: Browse Analytics and Exercises content selected by the Human Resource Today. Identify few companies' data to study the level of HR analytics adoption in organizations.

Participative Learning: Using primary and secondary data, study the benefits of HR analytics.

Technology Enabled Learning: Assignments and Videos

REFERENCE MATERIALS:

Text Books and Reference Books:

- T1: Banerjee P., Pandey J., Gupta M. (2019). *Practical Application of HR analytics,* SAGE

Essential Reading/ Recommended Reading:

- Bhattacharyya D. (2017). *HR Analytics: Understanding Theories and Applications*, Sage
- Yadav R., Maheshwari S. (2021). *HR Analytics: Connecting Data and Theory*, Wiley
- Camm J., Cochran J., Fry M., Ohlmann J., Anderson D., Sweeney D., Williams T., (2015) Cengage Learning

WEBLINKS OF RESEARCH ARTICLES FOR FURTHER STUDY

1. DiClaudio, M. (2019), "People analytics and the rise of HR: how data, analytics and emerging technology can transform human resources (HR) into a profit center", *Strategic HR Review*, Vol. 18 No. 2, pp. 42-46. https://doi.org/10.1108/SHR-11-2018-0096
   https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/SHR-11-2018-0096/full/html
2. (2017), "HR analytics: A study into the current state of HR analytics and predictions for its future", *Human Resource Management International Digest*, Vol. 25 No. 7, pp. 9-11. https://doi.org/10.1108/HRMID-08-2017-0137
   https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/HRMID-08-2017-0137/full/html
3. Mayo, A. (2018), "Applying HR analytics to talent management", *Strategic HR Review*, Vol. 17 No. 5, pp. 247-254. https://doi.org/10.1108/SHR-08-2018-0072
   https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/SHR-08-2018-0072/full/html

4. Shrivastava, S., Nagdev, K. and Rajesh, A. (2018), "Redefining HR using people analytics: the case of Google", *Human Resource Management International Digest*, Vol. 26 No. 2, pp. 3-6. https://doi.org/10.1108/HRMID-06-2017-0112
https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/HRMID-06-2017-0112/full/html
5. Durai D., S., Rudhramoorthy, K. and Sarkar, S. (2019), "HR metrics and workforce analytics: it is a journey, not a destination", *Human Resource Management International Digest*, Vol. 27 No. 1, pp. 4-6. https://doi.org/10.1108/HRMID-08-2018-0167
https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/HRMID-08-2018-0167/full/html

Harvard Business Case Study

Google's Project Oxygen: Do Managers Matter? **By David A. Garvin, Alison Berkley Wagonfeld, Liz Kind**

https://hbsp.harvard.edu/product/313110-PDF-ENG

E-journals for reference

1. Indian journal of Industrial Relations
2. South Asian Journal of Human Resource Management
3. Global Business Review

Catalogue prepared by	Dr. Farhat Ali Syed
Recommended by the Board of Studies on	
Date of Approval by the Academic Council	

Course Code: MBA3082	Course Title: **FinTech** Type of Course: **Discipline Elective**	**L-T-P-C**	**L**	**T**	**P**	**C**
			3	**0**	**0**	**3**

Version No.	2.0			
Course Pre-requisites	NIL			
Anti-requisites	NIL			
Course Description	This course is for students wishing to explore the ways in which new technologies are disrupting the financial services industry—driving material change in business models, products, applications and customer user interface. Amongst the significant technological trends affecting financial services into the 2020's, explore AI, deep learning, blockchain technology, open APIs.			
Course Outcomes	On completion of this course, the student will be able to: CO1) Describe concepts of Fintech and key technologies and interface **[Comprehension]** CO2) Illustrate basics of Blockchain and use cases like Cryptocurrency **[Application]** CO3) Analyse potential areas of disruption across payments value chain **[Analysis]**			
Course Objective:	The aim of this course is to develop employability skills of the students based on the shifting nature of the financial sector and gain a holistic understanding of the technologies set to shape the future of finance and business.			
Module 1	**Fintech Introduction**	Pre-reading and classroom discussion		15 Hours
Topics: BFSI Value chain- How FinTech changed BFSI- Modern Banking Landscape- Introduction to BankTech- Introduction to InsureTech. Introduction to the Fintech landscape- FinTech Architecture- FinTech Technologies- Latest Trends and future of FinTech- Applications of FinTech- Use cases of FinTech in banks- Fintech startups- Fintech unicorns and business models. Introduction to Machine Learning - Introduction to				

Cloud Computing.				
Module 2	**Blockchain, Cryptocurrencies, Payment Gateways, Equity trading platforms**	Case studies and online demonstrations	Case Study	15 Hours
Topics: Blockchain Foundations- Blocks and Blockchain, the Chain, Nodes and Network- Types – Private, Public and Federated blockchain, Cryptocurrencies, Smart contracts. Non Fungible Tokens, Ethereum, Comparison of top platforms, Payment stacks, UPI.				
Module 3	**Banktech, Insurtech, Regtech, Credit Scoring and Rating.**	Case study & secondary research to analyse disruptions.	Project report and presentations	10 Hours
Topics: BANKTECH- Regulatory Framework for Product Pricing, loan origination and servicing- Social media-based profiling, Credit rating, Risk management & underwriting- Utilizing data science tools and machine learning for data mining. INSURTECH- How does InsurTechwork- Business model disruption- Aggregators- AI/ML in InsurTech- IoT and InsurTech - Risk Modeling- REGTECH- Evolution of RegTech- RegTech Ecosystem- Smart Regulation. Fraud Detection-Processing claims and Underwriting, Consumer and Corporate Credit Rating				
Module 4	Strategies to manage disruptions in BFSI industry using Fintech	Case study & secondary research to analyse disruptions.	Project report and presentations	5 Hours
Secondary research on chosen BFSI organizations to study how the industry has been disrupted and specific strategies of each firm to manage the challenges. Detailed analysis must be conducted on specific firms allotted and report must be presented in class.				
Targeted Application & Tools that can be used: Exposure to the various business models.				
Project work/Assignment:				
1. Credit Risk Modelling/Credit Card Fraud Detection 2. Crypto currency Trading 3. Risk based pricing using ML				
Text Book T1. Disrupting Finance: FinTech and Strategy in the 21st Century, Edited by Theo Lynn · John G. Mooney, Pierangelo Rosati · Mark Cummins				
References 1. Fintech Innovation by Paolo Sironi, Wiley Publications 2. FinTech: The impact and influence of Financial Technology and Banking and the Finance Industry. By Richard Hayen 3. FinTech and Blockchain by Jacob William 4. The FinTech Book: The financial technology handbook for investors, entrepreneurs and visionaries. B Susanne Chishti and JanosBarberis 5. Blockchain: The ultimate guide to understanding Blockchain, Fintech, Bitcoin and other cryptocurrencies by Anthony Tu. Published by Createspace Independent publishing platform. **Digital Articles:** • https://assets.kpmg.com/content/dam/kpmg/pdf/2016/06/FinTech-new.pdf • https://www.linkedin.com/pulse/fintech-booms-india-factors-driving-growth-disruption-t-nihar-prasad/ • https://www.tradefinanceglobal.com/posts/5-factors-driving-rise-fintech-financial-services-industry/ • https://www.leewayhertz.com/blockchain-development-key-concepts/ • https://home.kpmg/xx/en/home/insights/2022/01/top-fintech-trends-in-h2-2021.html • https://www.ey.com/en_in/consulting/seven-key-trends-shaping-the-future-of-fintech-industry				

- https://www.pwc.in/assets/pdfs/consulting/financial-services/fintech/point-of-view/pov-downloads/evolving-business-models-in-the-payments-industry.pdf
- https://www.adb.org/sites/default/files/publication/885336/adb-brief-245-managing-fintech-risks.pdf
- https://www2.deloitte.com/us/en/pages/regulatory/articles/fintech-risk-management-regulation.html
- https://www2.deloitte.com/content/dam/Deloitte/us/Documents/regulatory/us-aers-the-evolving-fintech-regulatory-environment.pdf

Case Studies:

- https://paytm.com/blog/investor-relations/our-business-model-explained/
- https://lumosbusiness.com/business-model-canvas-payments/

Videos

- What is fintech? https://www.youtube.com/watch?v=-EoNrg_DR3s
- How FinTech is Shaping the Future of Banking : https://www.youtube.com/watch?v=pPkNtN8G7q8
- The future with FinTech, Crypto and AI https://www.youtube.com/watch?v=ft75f3Iaa-s

Podcast:

- https://indiafintechdiaries.com/2022/11/42-techfin-in-conversation-with-anup-nayar-ceo-domestic-in-solutions-global/
- https://indiafintechdiaries.com/2022/09/39-fintech-investments-in-conversation-with-sandeep-patil-partner-qed-investors/

Catalogue prepared by	Prof. Krishna Durbha
Recommended by the Board of Studies on	BOS NO:
Date of Approval by the Academic Council	Academic Council Meeting No. :

Course Code: MBA4088	**Course Title: Retail Analytics** **Type of Course: Discipline Elective**	**L-T-P-C**	**L**	**T**	**P**	**C**
			2	**0**	**0**	**2**

Version No.	2.0
Course Pre-requisites	Familiarity with fundamental business concepts, such as marketing, finance, and operations. Retail analytics involves solving business problems using data, which requires basic critical thinking and problem-solving Skills.
Anti-requisites	**NIL**
Course Description	This course is designed to equip students with the skills and knowledge necessary to leverage data for solving complex business challenges in the retail industry. Participants will learn to apply analytical techniques to make informed decisions, optimize operations, and enhance the overall performance of retail businesses
Course Outcomes	**On successful completion of this course the students shall be able to:** CO1) Describe functions of retail industry, consumer behaviour, and global trends. **[Comprehension]** CO2) Demonstrate ability to extract insights from e-Commerce data with help of analytics tools. **[Application]** CO3) Apply analytical tools to optimization challenges like store operations, inventory, and pricing for efficiency and profitability **[Application]**
Course objective	This course will enhance SKILL DEVELOPMENT through EXPERIENTIAL LEARNING methods using tools like R/excel/python/tableau/power bi etc.

<table>
<tr><td>Course Content:</td><td colspan="4"></td></tr>
<tr><td>Module 1</td><td>Introduction to Retail Analytics</td><td>Assignment</td><td>Understanding Retail Business</td><td>10 hours</td></tr>
<tr><td colspan="5">The Evolution of Retailing, Retail Industry Structure and Formats, Understanding Consumer Behavior, Global Retailing and Emerging Markets.
Retail Marketing and Branding- Retail Marketing Strategy and Channel Management, Customer Relationship Management, RFM Analysis</td></tr>
<tr><td>Module 2</td><td>E-Commerce Analytics in Retail</td><td>Assignment</td><td>Analysis of retail e-commerce data</td><td>10 hours</td></tr>
<tr><td colspan="5">Web Analytics - Track trends related to your industry, compare your brand with competitors, Traffic analysis, Product Analytics - Product analytics framework, Product Analysis using A/B Testing, Customer Segmentation - Identify and group customers based on behaviour.</td></tr>
<tr><td>Module 3</td><td>Retail Analytics Use cases</td><td>Assignment</td><td>Application of retail data analytics to solve retail business issues</td><td>10 hours</td></tr>
<tr><td colspan="5">Sales Analytics -Demand Forecasting, Inventory Analytics – Supply Chain Management, Pricing Optimization, Recommendation system, SCANPRO and models to optimize Sales
Retail Operations and Logistics – Trade Area Analysis, Store Location and Design, Managing Store Operations and Customer Service, Purchasing, Inventory and Pricing.</td></tr>
<tr><td colspan="5">Targeted Application & Tools that can be used:
Above concepts are helpful in understanding the analytical techniques that will help managers to interpret Retail bith physical & eCommerce business challenges and solutions, through activities related to decision making, optimization, visualization, interpretation, recommendation etc.. Students will understand the techniques that are required to solve practical problems.</td></tr>
<tr><td colspan="5">Project work/Assignment: Multiple datasets from open sources like Kaggle will be used.</td></tr>
<tr><td colspan="5">Assignment type : Case study on eCommerce and retail analytics, Trade Area Analysis, Location Analytics. Will require the use of large datasets and tools like Excel, Python & other visualization tools.</td></tr>
<tr><td colspan="5">Textbook
Retail Analytics: The Secret Weapon Book by Emmett Cox;</td></tr>
<tr><td colspan="5">References
1. Analytics for Retail: A Step-by-Step Guide to the Statistics Behind a Successful Retail Business by Rhoda Okunev
2. Retailing: Integrated Retail Management" by James R. Ogden, Mark E. Goh, and Denise T. Ogden
3. Web Analytics for Beginners by Stephan Schwarz
4. Data Science for Business and Decision Making" by Robert Nisbet, Gary Miner, and Ken Yale
5. Microsoft Excel 2019 Bible: The Comprehensive Tutorial Resource; John Wiley & Sons Inc.
6. The Art of R Programming – A Tour of Statistical Software Design Written By – Norman Matloff
7. Fischer W.; Excel: Quick Start Guide from Beginner to Expert (Excel, Microsoft Office); CreateSpace Independent Publishing Platform.
8. Data Analytics using Python by Bharti Motwani (Author)
Web pages
1. https://www.udemy.com/course/retail-for-business-analysts-and-management-consultants/
2. https://www.udemy.com/course/marketing-analytics-marketing-strategy-models-in-excel/
3. https://www.udemy.com/course/product-analytics/
4. https://www.researchgate.net/publication/332795401_Big_Data_and_Analytics_in_Retailing
Library E –resource</td></tr>
<tr><td>Catalogue prepared by</td><td colspan="4">Prof. Visvesaran V and Prof. Krishna Durbha</td></tr>
<tr><td>Recommended by the Board of Studies on</td><td colspan="4"></td></tr>
</table>

Date of Approval by the Academic Council	

Course Code: MBA3122	**Course Title: Digital Transformation** **Type of Course: Discipline Elective**	**L-T-P-C**	L	T	**P**	**C**
			2	0	0	2
Version No.	1.0					
Course Pre-requisites	Technology Foundations for Business					
Anti-requisites	NIL					
Course Description	This course introduces business strategy and fundamentals of Digital Transformation. This is focused on real world examples of digital disruption and a playbook with tools for Digital Transformation. It covers why and how digital technologies (mobile, social, cloud, big data, internet of things, 3D printing, etc.) are reshaping value creation, growth, and delivering products or services around the world and how to master Digital Disruption. This course links business strategy, business models and digital features to develop students' business strategy and execution skills and critical thinking embedding digital knowledge and equips them with simple tools to manage Digital Disruption. The spread and scale of the topic is so significant that digital acumen is nowadays a core component of business strategy.					
Course Outcomes	On completion of this course, the student will be able to: CO1) Describe impact of digital technologies on organizations **[Comprehension]** CO2) Apply frameworks and tools to effectively plan Digital Transformation **[Application]** CO3) Outline the steps to effectively manage Digital Transformation **[Analysis]**					
Course Objective	This course promotes learners' employability skills using experiential learning with an understanding on the power and impact of digital for strategy analysis, design and execution, and equips learner with tools to manage business disruption in an organization. Digital Transformation is taught through Assignments/ Exercises/ Case Studies/ Projects.					
Module 1	**Key trends in Emerging Tech**	**Quiz** (E-review from resources)	Assignment and online demos	10 Hours		
Topics: Introduce the latest advances in technology and implications, applications for business and SDLC. High level overview of disruptive technologies like mobile, social, AIML, cloud, big data, internet of things, AR&VR, 3D printing, Fintech, Blockchain, Marktech, Quantum Computing, Space, Biotech etc. Explain key reasons and drivers behind the rise of emerging technology. Discuss application and use cases of AI&ML in organization.						
Module 2	**Business Value Disruption**	**Case Analysis (Experiential learning)**	Practical tools for Managing Digital Disruption	10 Hours		
Topics: Driving Digital Strategy. Harness Customer Networks, Build Platforms - Not Just Products, Turn Data Into Assets, Innovate by Rapid Experimentation, Adapt Your Value Proposition- Model of business value - VRIO framework, Mastering Disruptive Business Models**.**						
Module 3	**Managing Tech based Digital Transformation.**	**Case Analysis**	Strategy and the Internet (hbr.org)	10 Hours		
Topic: Framework for Reinventing Your Business - Reimagine your business, Re-evaluate your value chain, Reconnect with your customer & Rebuild your Organization.						

Targeted Application & Tools that can be used:
Students would be encouraged to take up live projects and through experiential learning activities in the class they will imbibe the cognitive approaches to understand and apply factors effective to understand project management.

Professionally Used Software: KNimbus library access, Online AI&ML tools

Project work/Assignment:

1. Lectures (20 hours), review and bridging (4 hours)
2. Assignment 1 with Project Presentations
3. Assignment 2 with Project Presentations
4. Case studies & how to use tools for Managing Digital Transformation

Text Books:
T1: Rogers, David L. The digital transformation playbook: Rethink your business for the digital age. Columbia University Press, 2016.

References
Driving Digital Strategy:A Guide to Reimagining Your Business By Sunil Gupta Published by Harvard Business Review Press

Journal

- The right digital strategy for your business: an empirical analysis of the design and implementation of digital strategies in SMEs and LSEs | SpringerLink
- Journal of Business Research
- International Journal of Information Management

Library E-resources:

- https://presiuniv.knimbus.com/openFullText.html?DP=https://www.emerald.com/insight/content/doi/10.1108/S1745-886220180000013009/pdfplus/html
- IB and Strategy Research on "New" Information and Communication Technologies: Guidance for Future Research | Emerald Insight
- Amazon,Alibaba: Internet Governance, Business Models, and Internationalization Strategies | Emerald Insight

Weblinks :

- Understanding Digital Strategy (hbr.org)
- The Digital Matrix with Venkat Venkatraman - YouTube
- (226) David Rogers - Create Your Digital Transformation Playbook - YouTube

Online Resources: https://presiuniv.knimbus.com/user#/home

Research Articles:

- Joel Mero, Anssi Tarkiainen, Juliana Tobon, Effectual and causal reasoning in the adoption of marketing automation, Industrial Marketing Management, Volume 86, 2020, Pages 212-222, ISSN 0019-8501. https://doi.org/10.1016/j.indmarman.2019.12.008
- Silva, S.C., Corbo, L., Vlačić, B. and Fernandes, M. (2023), "Marketing accountability and marketing automation: evidence from Portugal", EuroMed Journal of Business, Vol. 18 No. 1, pp. 145-164. https://doi.org/10.1108/EMJB-11-2020-0117
- Guercini, S. (2023), "Marketing automation and the scope of marketers' heuristics", Management Decision, Vol. 61 No. 13, pp. 295-320. https://doi.org/10.1108/MD-07-2022-0909

Multimedia (Videos):

- https://www.youtube.com/watch?v=G6c4-28FsAs
- https://www.youtube.com/watch?v=XXwaX0_rPp4
- https://www.youtube.com/watch?v=9qfKppGr2Uo
- https://www.youtube.com/watch?v=8m2StWkHwh0

Case Studies: • https://www.mayple.com/blog/marketing-automation-case-studies • https://www.linkedin.com/pulse/power-marketing-automation-real-world-case-studies-maryam-she-her-/ • https://www.markempa.com/marketing-automation-4-case-studies/	
Catalogue prepared by	Prof. Krishna Durbha
Recommended by the Board of Studies on	BOS NO:
Date of Approval by the Academic Council	Academic Council Meeting No.

Course Code: MBA3120	**Course Title: Deep Learning** **Type of Course: Discipline Elective**	**L-T-P-C**	**L**	**T**	**P**	**C**
			2	0	0	2
Version No.	1.0					
Course Pre-requisites	• Students should have the completed Fundamentals of Business Analytics course in Semester 2 • Students should have completed Programming for Analytics course in Semester 3 and have python programming knowledge					
Anti-requisites	**Nil**					
Course Description	The objective of a deep learning course is to equip MBA students with the latest Artificial Intelligence tools and techniques that are taking the world by storm and disrupting industries. The students will get a foundational understanding of how neural networks work, the concepts, mathematics and algorithms that are applied in basic deep learning models. The will be able to apply the concepts and code to large datasets effectively using Deep Learning tools like TensorFlow, Keras, Pytorch etc. and learn concepts behind Computer Vision, Large Language Models, applications to various industries and use cases. Throughout the course, students explore various deep learning concepts, methods, including those related to natural language processing (NLP) and neural networks. They gain practical experience by working with publicly available libraries and datasets, which helps them develop the skills needed for independent research and study. **Understand the basics of Deep Learning:** MBA students would learn the fundamental concepts of deep learning, including binary classification, logistic regression, gradient descent, derivatives, computation graphs, and vectorization. This foundational knowledge helps them grasp the underlying principles of deep learning techniques. **Implementing simple Deep Learning Models:** MBA students would gain practical experience by implementing various deep learning models to solve real-world problems. They would learn how to apply these models effectively, analyse optimization techniques, and understand generalization principles. **Practical Aspects and Applications:** MBA students would explore practical aspects of deep learning, such as handling train/dev/test sets, addressing bias/variance trade-offs, regularization, and dealing with vanishing/exploding gradients. Additionally, they would delve into specific applications like logistic regression, convolutional neural networks (CNNs), recurrent neural networks (RNNs), and backpropagation.					
Course Objectives	This course promotes learners' employability skills using experiential learning using actual datasets, demonstrations of python code and online resources and hands-on practical examples done by students.					
Course Out Comes	On successful completion of the course the students shall be able to: CO1) Describe core concepts of how Deep Learning works **[Comprehension]** CO2) Demonstrate how computer vision, NLP models work.**[Comprehension]** CO3) Apply DL algorithms on some real world use cases **[Application]**					

<table>
<tr><td>Course Content:</td><td colspan="4"></td></tr>
<tr><td>Module 1</td><td>Introduction</td><td>Demonstration of Computer Vision (Experiential Learning)</td><td>Students are taught how Deep Learning works and asked to summarize their understanding</td><td>10 Hours</td></tr>
<tr><td colspan="5">Topics: Introduction to Deep Learning and Neural Networks: learn the history, definitions and basics of deep learning, including neural network mathematics, activation functions, and backpropagation. Topics covered include feedforward neural networks, gradient descent, and the role of deep learning in business applications</td></tr>
<tr><td>Module 2</td><td>Recurrent Neural Networks (RNN), and Natural Language Processing (NLP)</td><td>Lab & Theory (Problem Solving)</td><td>Using public datasets and python codes to build basic models for RNNs & NLP</td><td>10 Hours</td></tr>
<tr><td colspan="5">Topics: RNNs are essential for sequence data, such as time series or text. In this module, students would delve into RNN architectures and their applications.
NLP techniques, including word embeddings, sentiment analysis, and chatbots, would also be covered. Overview of Transformers & Generative Pretrained Transformers.</td></tr>
<tr><td>Module 3</td><td>Computer Vision</td><td>Lab Experiments</td><td>Using public datasets and python codes to build basic models for CNNs</td><td>10 Hours</td></tr>
<tr><td colspan="5">Topics: Convolutional Neural Networks (CNNs) for Image Analysis: This module focuses on CNNs, which are widely used for image classification, object detection, and other visual tasks.
Also Single Shot Detectors, GANs. YOLO and other real time computer vision techniques.</td></tr>
<tr><td colspan="5">Targeted Application & Tools that can be used:
Python, TensorFlow, Keras (GoogleColab), PyTorch</td></tr>
<tr><td colspan="5">Project work/Assignment: Mention the Type of Project /Assignment proposed for this course</td></tr>
<tr><td colspan="5">• Taking up publicly available datasets like MNIST, image datasets etc. for Computer Vision
• Realtime traffic identification using YOLO etc.
• Demonstration of NLP Tools like sentiment analysis on YouTube comments etc.
• Using RNNs and LSTM on forecasting stock prices, crypto currencies etc.
WEB RESOURCES:
• https://presiuniv.knimbus.com/user#/home
• Deep Learning crash course for beginners https://www.youtube.com/watch?v=VyWAvY2CF9c
• Neural Network in 5 minutes. https://www.youtube.com/watch?v=bfmFfD2RIcg&list=PLEiEAq2VkUUIYQ-mMRAGilfOKyWKpHSip&index=2
• Sample Data Sets from https://www.kaggle.com/datasets/hojjatk/mnist-dataset</td></tr>
<tr><td colspan="5">Text Book
• Deep Learning with Python, Second Edition, by Francis Chollet, Manning Publications</td></tr>
<tr><td colspan="5">References
• Deep Learning From Scratch: Building with Python from First Principles by Seth Weidman published by O'Reilly</td></tr>
<tr><td>Catalogue prepared by</td><td colspan="4">Prof. Krishna Durbha</td></tr>
<tr><td>Recommended by the Board of Studies on</td><td colspan="4"></td></tr>
<tr><td>Date of Approval by the Academic Council</td><td colspan="4"></td></tr>
</table>

<table>
<tr><td rowspan="2">Course Code: MBA3129</td><td colspan="3" rowspan="2">Course Title: Healthcare Pharma IT & Analytics
Type of Course: Discipline Elective</td><td rowspan="2">L-T-P-C</td><td>L</td><td>T</td><td>P</td><td>C</td></tr>
<tr><td>2</td><td>0</td><td>0</td><td>2</td></tr>
<tr><td>Version No.</td><td colspan="8">1.0</td></tr>
<tr><td>Course Pre-requisites</td><td colspan="8">MBA2020 Fundamentals of Business Analytics</td></tr>
<tr><td>Anti-requisites</td><td colspan="8">NIL</td></tr>
<tr><td>Course Description</td><td colspan="8">Information technology (IT) plays a crucial role in pharmaceuticals and healthcare management, addressing challenges related to data quality, integrity, integration, confidentiality, and security. As India launches its nationwide Digital Health Platform and Highway through the National Digital Health Mission, students studying healthcare and pharma management, IT, and informatics will become acquainted with specialty-specific informatics within an integrated digital framework. Integrating technology into healthcare prevents medical errors, enhances decision-making, facilitates medical data collection and research, and safeguards patient privacy. Join this dynamic field and contribute to global healthcare. This knowledge will empower future management professionals in healthcare and pharma industries to serve in diverse capacities and contribute to reimagining digital healthcare.</td></tr>
<tr><td>Course Outcomes</td><td colspan="8">On completion of this course, the student will be able to:
1) Describe the pivotal role of modern technologies including analytics in Healthcare & Pharmaceutical industry. [Comprehension]
2) Apply tools to various functions and use cases in Healthcare & Pharmaceutical Industry. [Application]
3) Analyze real case studies where IT & Analytics have transformed small & large firms in Healthcare & Pharmaceuticals. [Analysis]</td></tr>
<tr><td>Course Objective</td><td colspan="8">This Healthcare and Pharma IT & Analytics elective, gives students a blend of knowledge, practical experiences and hands-on training in tools, frameworks and techniques in applying the latest IT platforms and tools to enhance business efficiency and success of Healthcare & Pharmaceutical organizations. This course is meant to skill professionals with conceptual, technical and managerial skill sets that give their future careers in Healthcare & Pharma industries, the growth it needs.</td></tr>
<tr><td>Module 1</td><td colspan="2">Core functions of Healthcare and Pharma organizations</td><td>Quiz (E-review from resources)</td><td colspan="3">Assignment and online demos</td><td>10 Hours</td></tr>
<tr><td colspan="9">Topics:
Core functions and processes in Healthcare & Pharma Industry and how latest technologies are being used to enhance patient outcomes, enhance efficiency, reduce cost and provide healthcare to the vulnerable population.</td></tr>
<tr><td>Module 2</td><td colspan="2">Digital Innovation in Healthcare and Pharma</td><td>Case Analysis (experiential learning)</td><td colspan="3">Practical tools for Managing Digital Disruption</td><td>10 Hours</td></tr>
<tr><td colspan="9">Topics:
1. Pharmaceutical Analytics: Drug Discovery and Development: Data analytics accelerates drug discovery by identifying promising compounds from vast chemical collections. Machine learning and AI analyze biological data to pinpoint potential drugs that precisely target diseases. For example, Insilico Medicine used AI to advance the first AI-designed drug into clinical trials for Idiopathic Pulmonary Fibrosis (IPF) within 18 months1.
2. Clinical Trial Optimization: Predictive analytics tools analyse patient data (genetic information, clinical outcomes, biomarkers) to design more targeted and effective clinical trials, reducing time and costs.</td></tr>
</table>

3. Clinical Trials: Patient Recruitment and Trial Optimization: Data analysts use real-time monitoring through IoT devices (wearables) to optimize clinical trials. This streamlines drug development process.
4. Success Rate Prediction: Predictive analytics helps estimate clinical trial success rates, aiding in decision-making and resource allocation.
5. Disease Trend Prediction: Healthcare Data Analytics: By analysing patterns in healthcare data, pharma companies can predict disease trends. This enables better preparation for future health challenges and effective resource allocation2.

Module 3	**Practical frameworks & tools to implement IT & Analytics in Healthcare & Pharma.**	Demos, videos & datasets with code to demonstrate IT & analytics.	Kaggle and other online resources to demonstrate these concepts.	10 Hours

Use of Analytics for predictive healthcare use cases, study of various frameworks and platforms in healthcare, overview of AI&ML application in genomics & drug discovery, application of CRISPR and other cutting-edge technologies.

Targeted Application & Tools that can be used:
Students would be encouraged to take up projects and through experiential learning activities in the class they will imbibe the cognitive approaches to understand and apply factors effective to understand project management.

Professionally Used Software: KNimbus library access, Online AI&ML tools, YouTube videos

Project work/Assignment:
1. Lectures (22 hours), review and bridging (4 hours)
2. 2 Quizes
3. Assignment with Project Presentations
4. Datasets & coding for disease prediction

Text Books:
Understanding Health Information Systems for the Health Professions, JA Balgrosky, Jones & Bartlett Learning, 2019

References
- Healthcare Data Analytics, Chandan K. Reddy, Charu C. Aggarwal, Chapman and Hall/CRC, June 2019

Journal
- The use of Big Data Analytics in healthcare | Journal of Big Data | Full Text (springeropen.com)
- Data Science and Advanced Analytics in Commercial Pharmaceutical Functions: Opportunities, Applications, and Challenges | SpringerLink
- Data Analytics in Healthcare: A Tertiary Study | SN Computer Science (springer.com)

Library E-resources:
- The use of Big Data Analytics in healthcare | Journal of Big Data | Full Text (springeropen.com)

Weblinks :
- https://ai-cases.com/health/
- Pharma Analytics: 7 Transformative Use Cases in the Industry (pixelplex.io)
- 8 Use Cases For Data Analytics In Pharmaceutical Industry (polestarllp.com)https://cen.acs.org/physical-chemistry/computational-chemistry/Insilico-reveals-soup-to-nuts-process-for-AI-generated-lung-fibrosis-drug/102/web/2024/03#:~:text=Insilico%20Medicine%2C%20a%20developer%20of,idiopathic%20pulmonary%20fibrosis%20(IPF).

Online Resources:
https://presiuniv.knimbus.com/user#/home

Research Articles:

Multimedia (Videos): • https://www.youtube.com/watch?v=OUE6CgXx_N0 • https://www.youtube.com/watch?v=PBq8QJYrvWc **Case Studies:** • https://swayamhealth.com/ • https://pharmeasy.in/	
Catalogue prepared by	Prof. Krishna Durbha
Recommended by the Board of Studies on	BOS NO:
Date of Approval by the Academic Council	Academic Council Meeting No.

Course Code: MBA3123	**Course Title: Marktech and Adtech** **Type of Course: Discipline Elective**	**L-T-P-C**	**L**	**T**	**P**	**C**
			2	0	0	2
Version No.	1.0					
Course Pre-requisites	Marketing Management					
Anti-requisites	NIL					
Course Description	MarkTech (Marketing Technology): MarkTech refers to specific software applications used to build, automate, track, and enhance marketing efforts. It empowers marketers to streamline their work across various channels and gain valuable insights into campaign success. AI&ML has brought in huge disruption especially with the latest GenerativeAI tools. With nearly 10,000 applications across 49 categories, MarTech continues to expand rapidly. Some common MarkTech tools are: • Machine Learning in Marketing, • AI for Content Creation and Management, • Customer segmentation, • Recommendation systems, • Store management • Price optimization, etc. AdTech (Advertising Technology): focuses on technology used in advertising and media. It includes tools for programmatic advertising, data-driven targeting, and ad campaign optimization, media planning, audience measurement, ad operations, new age advertising including Outdoor, events and experiential marketing. AdTech professionals analyze data to create effective ad strategies. Key areas include: • Programmatic Advertising: Automated buying and selling of ad space. • Data Analytics and Targeting: Using data to reach the right audience. • Ad Campaign Optimization: Maximizing ad performance. Both MarTech and AdTech play pivotal roles in modern marketing, making them essential topics for MBA students aiming to excel in the dynamic digital landscape.						
Course Outcomes	On completion of this course, the student will be able to: 1) Describe the Value chain & functions of Marketing & Advertising industry **[Comprehension]** 2) Apply online tools and platforms to solve marketing & advertising use cases **[Application]** 3) Analyse real-life Marketing & Advertising campaigns and recommend actions. **[Analysis]**					

<table>
<tr><td>Course Objective</td><td colspan="4">Gain access to practical tools and frameworks for MarkTech like recommendation engines, segmentation, creating and optimizing campaigns, marketing spends, price discounts etc. Also understanding the workflow and technologies used in Advertising, and how technology is enabling much more effective advertising campaigns. Understanding these technologies can open doors to exciting career opportunities in evergreen areas of Marketing & Advertising!</td></tr>
<tr><td>Module 1</td><td>Marktech use cases and tools</td><td>Hands on use of online tools</td><td>Quiz and projects based on online platforms</td><td>10 Hours</td></tr>
<tr><td colspan="5">Topics:
Discuss functions and use cases of Marketing technology. Familiarize students with online tools like Google Advertising, Facebook Ad manager, recommendation engines, sentiment analysis, Goolge Analytics etc.</td></tr>
<tr><td>Module 2</td><td>Adtech use cases and tools</td><td>Quiz and demos of online resources</td><td>Quiz based on online platforms</td><td>10 Hours</td></tr>
<tr><td colspan="5">Topics:
1. Understanding the traditional & digital Advertising Industry value chain
2. Key trends impacting advertising industry
3. Audience measurement in TV & Broadcasting industry
4. Media planning and management
5. Tools for Optimizing advertising spends
6. Technology transforming Outdoor, events etc.</td></tr>
<tr><td>Module 3</td><td>Practical Applications Marktech & Adtech.</td><td>Demos, videos & online platform to demonstrate tools and techniques.</td><td>Google Analytics, Google Ads, Facebook Ad Manager, etc.</td><td>10 Hours</td></tr>
<tr><td colspan="5">Hands-on experience with Google Analytics, Google Ads, Facebook Ad Manager, generative AI content creation tools. Tools like SCANPRO to optimize ad spend etc. Segmentation, Sentiment Analysis & other tools to enhance marketing effectiveness.</td></tr>
<tr><td colspan="5">Targeted Application & Tools that can be used:
Students would be encouraged to take up projects and through experiential learning activities in the class they will imbibe the cognitive approaches to understand and apply factors effective to understand Marktech and Adtech.</td></tr>
<tr><td colspan="5">Professionally Used Software: KNimbus library access, Online AI&ML tools, YouTube videos</td></tr>
<tr><td colspan="5">Project work/Assignment:
1. Lectures (22 hours), review and bridging (4 hours)
2. 2 Quizes
3. Industry free certification in GoogleAds Professional
4. Hands-on demo on live tools and assignment with project presentations.
5. Datasets & coding for segmentation, recommendation engines,</td></tr>
<tr><td colspan="5">Text Books:
• Marketing 5.0: Technology for Humanity, Philip Kotler (Author), Wiley, 2021</td></tr>
<tr><td colspan="5">References
• The AdTech Book by Clearcode | The Platforms, Processes, and Players

Journal
• The CMO’s Guide to Marketing Technology (Martech) | Gartner
• Adtech Market Research Report 2019 (ICO, Ofcom) - GOV.UK (www.gov.uk)
• Data Analytics in Healthcare: A Tertiary Study | SN Computer Science (springer.com)

Library E-resources:
• https://presiuniv.knimbus.com/</td></tr>
</table>

Weblinks :

- https://ai-cases.com/retail/
- The power of AdTech and MarTech in modern marketing (deloitte.com)
- Strategic investments, tech, creativity, sustainability emerge as 4 megatrends: Deloitte marketing trends 2023
- AdTech Market 2024 Size, Growth Analysis Report, Forecast to 2031 (omrglobal.com)

Online Resources:

- https://skillshop.docebosaas.com/pages/16/skillshop-home-page . Students are required to complete at least 1 certification of the 4 ie. Google Ads search, Google Ads display, AI-Powered Performance Ads Certification, and Google Ads – Measurement Certification

Research Articles:

- Joel Mero, Anssi Tarkiainen, Juliana Tobon, Effectual and causal reasoning in the adoption of marketing automation, Industrial Marketing Management, Volume 86, 2020, Pages 212-222, ISSN 0019-8501. https://doi.org/10.1016/j.indmarman.2019.12.008
- Silva, S.C., Corbo, L., Vlačić, B. and Fernandes, M. (2023), "Marketing accountability and marketing automation: evidence from Portugal", EuroMed Journal of Business, Vol. 18 No. 1, pp. 145-164. https://doi.org/10.1108/EMJB-11-2020-0117
- Guercini, S. (2023), "Marketing automation and the scope of marketers' heuristics", Management Decision, Vol. 61 No. 13, pp. 295-320. https://doi.org/10.1108/MD-07-2022-0909

Multimedia (Videos):

- https://www.youtube.com/watch?v=zuf4NnRym0Q
- https://www.youtube.com/watch?v=oELlw_z3wQc
- https://www.youtube.com/watch?v=oELlw_z3wQc
- https://newdelhi.ad-tech.com/

Case Studies:

- https://www.linkedin.com/pulse/case-studies-how-companies-have-used-martech/
- https://www.hansacequity.com/news-knowledge/people-set/

Catalogue prepared by	Prof. Krishna Durbha
Recommended by the Board of Studies on	BOS NO:
Date of Approval by the Academic Council	Academic Council Meeting No.

Course Code: MBA3141	Course Title: Website Data Analytics Type of Course: Discipline Elective	L-T-P-C	L	T	P	C
			2	0	0	2

Version No.	2.0			
Course Pre-requisites	Digital Marketing Course			
Anti-requisites	NIL			
Course Description	Web analytics course covers the basics concepts of digital marketing, eCommerce and drives students into learning digital analytics from both a managerial and technical perspective. It examines a variety of digital tools, definitions, techniques and properties that can be applied across various channels including Google Analytics web platform other online tools including Adobe Analytics. Students will be assigned topics on which they will provide analytics using Adobe and Google Analytics software and create use cases for analytics. The course will consist of both lectures and hands on project. Students will learn essential and advanced areas in web analytics dealing with set-up, implementation, tag management, funnels, KPI's, conversions and campaign tracking and best practices. Students will be encouraged to complete Google Ads Measurement course online & get certified.			
Course Outcomes	On completion of this course, the student will be able to: CO1) Describe basic measures and concepts of web Analytics. **[Comprehension]** CO2) Apply web analytics tools for various real-world business cases. [**Application]** CO3) Apply Website metrics using Google Analytics (GA4) to solve business scenarios [**Application]**			
Course Objective:	The course web aims to enhance Employability Skills of students using Experential Learning tools including example of analytical tools used to serve as a business metric for promoting specific products to the customers who are most likely to buy them and to determine which products a specific customer is most likely to purchase. This can improve ratio of revenue to marketing costs.			
Module 1	**Introduction: Definition and concepts**	Interactive Discussion and Online Resources	https://skillshop.withgoogle.com/	10 Hours
Topics: Definitions in Analytics, Digital Marketing, Why Web Analytics, Web 1.0 vs. 2.0, Theory of Customer Value, Buyer Psychology, Tracking and Cookies, Types of data, Funnel B2C & B2B [Blooms Level: Comprehension] Digital Marketing, Why Web Analytics, Web 1.0 vs. 2.0, Theory of Customer Value, Buyer Psychology, Tracking and Cookies, Types of data, Funnel B2C & B2B [7 hours - Blooms Level: Comprehension]				
Module 2	**KPI's, Metrics, Data collection, benchmarking**	Interactive Discussion and Online Resources	Analysis of Real World Data	10 Hours
Topics: KPIs & metrics web, Digital Ads and eCommerce, Visit & Content, Conversion metrics, ML Pipeline & missing values, Data Collection, Scraping data – tools, Eg: YouTube Sentiment analysis, online resources for benchmarking, [7 hours – Blooms: Application]				
Module 3	**Web Analytics platforms & GA4**	Assignment	Hands on training on Google Analytics	10 Hours
Topics: Hits, Page views, Visits, Unique visitors, Unique page views, Bounce, Bounce rate, Page/visit, Average time on site, New visits; Optimization (e-commerce, non e-commerce sites): Improving bounce rates, Optimizing adwords campaigns; Real time report, Audience report, Traffic source report, Custom campaigns, Content report, Google analytics, Introduction to KPI, characteristics, Need for KPI, Perspective of KPI, Uses of KPI.				
Project work/Assignment:				
Project/ Assignment: **Assignment: 1]** Calculate ROI from Web Data Analytics – case study from Text book				

Assignment: 2] Google Analytics 4: Measure Google Merchandize metrics, funnel measurement, etc.
Assignment: 3] Google Analytics Reports : Google Analytics: Reports, Actionable Data with GA4 Platform Principles ,Google Analytics: Using Google Analytics Data,
Experiential Learning Activity: Demonstrate learning by doing project work using tools

Text Book

T1. Clifton B., Advanced Web Metrics with Google Analytics, Wiley Publishing, Inc.2nd ed.

References Books:

1. R1 Kaushik A., Web Analytics 2.0, The Art of Online Accountability and Science of Customer Centricity, Wiley Publishing, Inc. 1st ed.
2. R2 Sterne J., Web Metrics: Proven methods for measuring web site success, John Wiley and Sons

PU Library References :Web Analytics

- E1. EBSCO: https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/IJRDM-06-2017-0130/full/html
- E2. https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/JSOCM-06-2014-0043/full/html
- E3. https://www-emerald-com-presiuniv.knimbus.com/insight/content/doi/10.1108/IJTC-03-2021-0039/full/html
- E4. https://zerogravity.photography/locations/wedding-photographers-in-bangalore/

Blogs and other sources

- https://blog.hubspot.com/marketing/guide-to-web-analytics-traffic-terms
- http://neilpatel.com/ubersuggest/
- https://www.huffpost.com/entry/10-ways-to-use-analytics_b_9254166
- https://moz.com/
- https://www.semrush.com/
- https://experienceleague.adobe.com/docs/analytics-learn/tutorials/overview.html
- https://skillshop.withgoogle.com/
- https://github.com/

Catalogue prepared by	Prof. Krishna Durbha
Recommended by the Board of Studies on	BOS NO:
Date of Approval by the Academic Council	Academic Council Meeting No. :

Course Code: MBA4035	Course Title: SUPPLY CHAIN ANALYTICS Type of Course: Discipline Elective - Theory	L	P	C
		2	0	2

Version No.	**1.0**
Course Pre-requisites	**1. Basics of Production and Operations Management** **2. Basics of Probability theory and regression analysis**
Anti-requisites	**Nil**
Course Description	Many companies are faced with the problem of analyzing the data that is piling up day by day. Data serves as a useful source of information to be analyzed that will help managers to take decision and plan for the future. Various theories and concepts are modelled to understand and analyze the supply chain processes. Through this course students will learn how do forecast demand, how to sequence various jobs on machines to minimize the waiting and idle time. Students will also understand the vendor process and the methodology used to evaluate and select the vendors.
Course Out Comes	On successful completion of the course the students shall be able to: CO1) Analyze the demand in supply chain using various Forecasting methods. [Bloom – Analysis] CO2) Calculate least time for job scheduling in supply chains. [Bloom - Analysis] CO3) Interpret various vendor strategies using game payoffs.[Bloom-Application]
Course Objective	The objective of this course is to make the students understand various aspects of Supply Chain Analytics through experiential mode of learning with the help of practical cases. Students will learn through cases the techniques to deal with practical situations which will enhance their employability.
Course Content:	

Module 1	Supply Chain Demand Forecasting	Assignment/Quiz Participative learning	Programming/Simulation/Data Collection/any other such associated activity	08 Hours
Introduction to Forecasting, methods of forecasting, moving average method, weighted moving average method, regression method for demand forecasting, linear and non-linear analysis, constructing normal equations, understanding replacement time based on variations in forecasted demand, case study on demand forecasting.				
Module 2	Supply Chain Job Sequencing & Assignment	Case Study Experiential learning	Programming/ Simulation/Data Collection/any other such associated activity	10 Hours
Sequencing basics, modeling Nx2 machine problems, modeling Nx3 machine problems, Calculating Make-Span of sequences, preparing Job Flow Charts, Job Scheduling, Calculating Idle time and Waiting time, Optimal Assignment of Jobs to Machines/Managers/Salesman NxN and MxN problems using HUNGARIAN method, Exercise and Case study: Traveling Salesman.				
Module 3	Vendor Evaluation and Selection	Case Study Experiential learning	Programming/ Simulation/ Data Collection/ any other such associated activity	08 Hours
Identifying vendors, Criterions for selection of vendors, Choice of suppliers by applying Game analysis technique, analysing payoffs for multiple strategies between 2 suppliers, 2-person-zero-sum game, Vonn Neumann method, Saddle				

point problems. Maximin and Minimax criterion, Mixed and Pure strategy problems, Order distribution to vendors. Case Study.
Targeted Application & Tools that can be used: Above concepts are helpful in understanding the analytical techniques that will help managers to interpret Supply Chain problems through activities related to job sequencing, job assignment, vendor evaluation and forecasting. Students will understand the techniques that are required to solve practical problems.
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course
Assignment type : Case study on forecasting, job sequencing and vendor payoff analysis
Text Book Supply Chain Management: Strategy, Planning and Operation – by Chopra, Mendl & Kalra, 4th edition, Pearson
References i.Operations Research-An Introduction, By Hamdy A Taha, 8th Edition, Pearson Education, Prentice Hall i.Supply Chain Management – Concepts, Practices and Implementation- by Sunil Sharma, Oxford University Press i. Operations Research – J K Sharma Lib-e-resource-links: from Presidency University A. https://www.proquest.com/docview/2681641810/6B6EF8E078A34195PQ/1?accountid=177896 B. https://www.proquest.com/docview/2621365162/6B6EF8E078A34195PQ/4?accountid=177896 C. https://www.proquest.com/docview/2578264845/9E24ADE6888B43F3PQ/2?accountid=177896 D. https://www.proquest.com/docview/2621470142/3529C4DB879745F2PQ/1?accountid=177896 E. https://www.proquest.com/docview/2557517590/80FB5D355CED46CFPQ/2?accountid=177896

Catalogue prepared by	Name/Names of the Faculty members prepared this catalogue Prof Krishna Durbha
Recommended by the Board of Studies on	Mention the BOS Number and the Date of BOS
Date of Approval by the Academic Council	Mention the Academic Council Meeting No. & the date of the meeting:

Course Code: MBA4036	**Course Title: Text Mining Type of Course: Lab Based Course**	**L- T-P- C**	**2**	**0**	**0**	**2**
Version No.	**1.1**					
Course Pre-requisites	**NIL. Students are expected to have numerical ability and understanding of Basic Statistics and either R or Python Code**					
Anti-requisites	**NIL**					
Course Description	This course will cover the major techniques for mining and analyzing text data to discover interesting patterns, extract useful knowledge, and support decision making, with an emphasis on statistical approaches that can be generally applied to arbitrary text data in any natural language with no or minimum human effort. Detailed analysis of text data requires an understanding of natural language text, which is known to be a difficult task for computers. However, a number of statistical approaches have been shown to work well for the "shallow" but robust analysis of text data for pattern finding and knowledge discovery. You will learn the basic concepts, principles, and major algorithms in text mining and their potential applications					
Course Objective	This course will enhance EMPLOYABILITY through EXPERENTIAL LEARNING through lab tutorials.					

Course Out Comes	On successful completion of the course the students shall be able to: CO1) Describe how text is handled in Python[Comprehension] CO2) Apply basic natural language processing methods [Application] CO3) Illustrate text-based advanced data processing and visualization.[Application] CO4) Analyse how latest AI tools are being used in Industry [Analysis]			
Course Content				
Module 1	Introduction to Mining	Text Mining characteristics	Ability to identify the patters	10 Hours
Text Mining - characteristics, trends -Text Processing using Base Python & Pandas, Regular Expressions-Text processing using string functions & methods-Understanding regular expressions - Identifying patterns in the text using regular expressions Text Mining With R/Python				
Module 2	Initial Data Processing	Reading Data from Folder/File	Finding Associations	10 Hours
Reading data from file folder/from text file, from the Internet & Web scrapping, Data Parsing -Cleaning and normalization of data-Sentence Tokenize and Word Tokenize, Removing insignificant words("stop words"), Removing special symbols, removing bullet points and digits, changing letters to lowercase, stemming /lemmatization/chunking - Creating Term-Document matrix- Tagging text with parts of speech - Word Sense Disambiguation - Finding associations - Measurement of similarity between documents and terms- Visualization of term significance in the form of word clouds				
Module 3	Advanced data processing and visualization with R/ Python	Assignment	Data Pre Processing for Text Analytics	06 Hours
Vectorization (Count, TF-IDF, Word Embedding's) - Sentiment analysis (vocabulary approach) - Name entity ecognition (NER) - Methods of data visualization - word length counts plot - word frequency plots - word clouds, correlation plots, letter frequency plot, Heat map, Text Summarization				
Module 4	Examples in Text Mining	Assignment/Mini Project	Practical Examples	04 Hours
Practical and Business applied examples and case studies with Text Analytics				
Targeted Application & Tools that can be used: Targeted Application: Text Analytics Tools: R or Python				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course				
1. Assignment 1: Reading and capturing text 2. Assignment 2: Collecting Journal Articles as input text 3. Assignment 3: Text Mining Methods, Preparing Word Cloud				
Text Book Blueprints for Text Analytics Using Python: Machine Learning-Based Solutions for Common Real World (NLP) Applications Jens Albrecht , Sidharth Ramachandran, O'Reilly				
Reference Books R1: Applied Text Analysis with Python, Benjamin Bengfort Oreilly R2: Text Mining with R, A tidy Approach , Julia Silge, O'Reilly				
Web Links and Case Study Links				
Catalogue prepared by	R Muruganandham			
Recommended by the Board of Studies on	Mention the BOS Number and the Date of BOS			
Date of Approval by the Academic Council	Mention the Academic Council Meeting No. & the date of the meeting:			

Course Code: MBA3083	**Course Title: PROGRAMMING FOR ANALYTICS** **Type of Course: DISCIPLINE ELECTIVE**	**L- T-P-C**	**3**	**0 0**	**3**

	(Theory with Embedded Lab)				
Version No.	**2.0**				
Course Pre-requisites	**Fundamentals of Business Analytics is inclusive pre-requisite for this Course. In addition, Critical thinking, reasoning, and analytical skills are required.**				
Anti-requisites	**NIL**				
Course Description	The course "Programming for Analytics" is to empower the Non analytics students with programming skills in Python. The programming skills with strong foundation towards analytics in business environment will be cultivated right from fundamentals to writing programs. This Course is covering competencies to handle data structures, file handling and essential skills for data analytics. Additionally addressing modeling issues for equipping the participants to couple judiciously with programming skills, in extracting data for business analytics. Participants' learning ranges from how to organize the work given, dissecting them and to refining the codes.				
Course Objectives	The Programming for Analytics course develops EMPLOYABILITY SKILLS through EXPERIENTIAL LEARNING methods				
Course Out Comes	On successful completion of the course the students shall be able to: CO1) Demonstrate programming skills in Python for business analytics. CO2) Solve messy data problems across data structures using Pandas CO3) Develop model for decision making and Visualization using Python CO4) Solve a business problem using python programming				
Course Content:					
Module 1	Introduction to Python	Quiz	Data types and Decision statements	15 Hours	
Python Language and programming basics, Google colab, Jupyter and Ipython, Understanding Data types, Datastructures and functions, Introduction to numpy arrays, Indexing and slicing in numpy, Computation on numpy arrays, Aggregation and Statistical methods, Advanced numpy operations					
Module 2	Data wrangling	Assignment and Case Study	Data Wrangling	15 Hours	
Introduction to pandas data structures, Data indexing, selection and filtering, Handling missing data and data transformation, Data wrangling: combining and reshaping datasets, Summarising data and descriptive statistics, Data loading storage and file formats, Timeseries analysis, Pandas for data visualization					
Module 3	Model Development and Evaluation	Experiential Learning	Modelling Project	10 Hours	
Introduction to data visualization with matplotlib, Plotting with matplotlib, Customizing matplotlib Data visualization with seaborn, Introduction to Machine Learning and Scikit learn, Model validation and Hyperparameter tuning, Feature engineering and naive bayes classification, Advanced machine learning techniques					
Module 4	Real world applications and datasets	Experiential Learning	Capstone Project	5 Hours	
Introduction to Real world applications and projects, Market Analysis Project, Financial Reports Project, Employee Data Project, Sales Dataflow Project, Supply chain Analysis project, Capstone Project					
List of Experiments (Embedded Lab - Student's self-study): These experiments can be done using Python - NumPy, Pandas and Matplotlib Lab Experiments are to be conducted on the following topics Experiment1: Understanding data types Experiment2:The basics of Numpy Arrays Experiment3:Computation on arrays Experiment4:Introduction to pandas Experiment5:Data indexing and selection Experiment6:Working with Strings, Date and Time Experiment7:Data Wrangling Experiment8:Modelling					

Targeted Application & Tools that can be used:
Using NumPy, Pandas, Matplotlib, Seaborn, SciPy, Scikit learn or any other relevant Libraries to arrive at a model, students can employ the dataset which shall either be publicly available or primary in nature. The learners can use any algorithm for modelling

Project work/Assignment: Mention the Type of Project /Assignment proposed for this course

The MT & ET evaluations will be based on the two Individual Projects on modelling with presentation. The Project and the Presentation will have 70:30 split in the evaluation in this respect.
The Project should be original and shall be using any dataset either secondary or primary source. However, the process of analysis and the conclusions should be original. The Project shall foot on either classification or regression problems. Project can include self learning components depending on the project but should be related to Business and Analytics domain. Students are encouraged to choose topics relevant to their specialization and are not allowed to take up any project that is not related to Business.

Text Book
T1: Python for Data Science: A Hands-On Introduction , Yuli Vasiliev, 2022, no starch press, ISBN-13: 9781718502208,

References:
R1 Machine Learning with Python Cookbook: Practical Solutions from Preprocessing to Deep Learning-Chris Albon, ISBN 978-1491989388
R2 Python for Probability, Statistics and Machine Learning (2e), Dr Jose Unpingco, ISBN-978-3030185442, Springer, 2019

Online Resources:

Articles

University E Resources
Yentl Van Tendeloo, Hans Vangheluwe, Romain Franceschini, December 2019 ,WSC '19: Proceedings of the Winter Simulation Conference Pages 1415–1429 , An introduction to modeling and simulation with (Python(P))DEVS
https://presiuniv.knimbus.com/openFullText.html?DP=http://dl.acm.org/doi/10.5555/3400397.3400511

Carrizosa, E., Guerrero, V. & Romero Morales, D. On mathematical optimization for clustering categories in contingency tables. Adv Data Anal Classif (2022)
https://link.springer.com/article/10.1007/s11634-022-00508-4

Hoang, T.B.N., Mothe, J. Prediction of brand stories spreading on social networks. Adv Data Anal Classif (2021)
https://link.springer.com/article/10.1007/s11634-021-00450-x

Case study link
https://www.futurelearn.com/info/courses/data-analytics-python-data-wrangling-and-ingestion/0/steps/186670
https://livebook.manning.com/book/think-like-a-data-scientist/chapter-4/17
https://www.projectpro.io/article/python-projects-for-data-science/462

Datasets and Codes for Experiential learning
https://www.kaggle.com/datasets/heptapod/titanic
https://www.kaggle.com/datasets/pavansubhasht/ibm-hr-analytics-attrition-dataset
https://www.kaggle.com/code/mysarahmadbhat/eda-on-netflix/notebook
https://www.kaggle.com/code/aayushmishra1512/netflix-data-analysis-and-visualization/notebook
https://fraud-detection-handbook.github.io/fraud-detection-handbook/Chapter_3_GettingStarted/SimulatedDataset.html

Videos and Podcast
https://www.youtube.com/watch?v=G9NmACvXh8w
https://podcasts.google.com/feed/aHR0cHM6Ly9yZWFscHl0aG9uLmNvbS9wb2RjYXN0cy9ycHAvZmVlZA

Catalogue prepared by	Dr N Srikanth Reddy
Recommended by the Board of Studies on	
Date of Approval by the	

Academic Council	

Course Code: MBA3046	Course Title: Game Theory in Business Type of Course: Open Elective Theory Only Course	L – T – P - C 3 – 0 – 0 - 3
Version No.	1.0	
Course Pre-requisites	Economics Statistics for Research Quantitative Techniques	
Anti-requisites	NIL	
Course Description	**Game theory** is the study of **strategic decision-making** used to analyze competitive and cooperative scenarios among individuals or organizations. This course provides students with the tools to **evaluate** and **strategize** interactions involving multiple decision-makers, emphasizing its practical applications in **business contexts** such as **market competition, negotiations, pricing strategies,** and **decision-making under uncertainty.**	
Course Outcomes	**On successful completion of this course, students will be able to:** CO1**: Explain** fundamental concepts of game theory and their applications in business (Knowledge Level). CO2: **Analyze** and solve strategic decision-making scenarios using game theory principles (Analysis Level). CO3: **Develop** optimal strategies in complex and uncertain environments using tools such as Nash equilibrium and Bayesian games (Application Level). CO4: **Critically** evaluate cooperative and competitive interactions to improve business outcomes (Evaluation Level).	
Course Objective	1. Introduce students to the fundamental concepts and tools of game theory. 2. Enhance students' analytical and strategic thinking abilities to evaluate complex business interactions. 3. Provide experiential learning opportunities through case studies and simulations to apply game theory in real-world business contexts.	

Module 1	**Strategic Thinking and Simultaneous Games**	Assignment (Participative Learning)	Hands-on learning	**09 Hours**
Topics: Introduction to strategic thinking, Interdependence in decision-making, Types and elements of games, Simultaneous-move games (Prisoner's Dilemma, Dominated Strategies), Best Responses, and Iterated Elimination. Case Studies: Analyzing market competition scenarios. Delivery: Lecture, Case Study Analysis, Group Activities.				
Module 2	Games of Coordination	Assignment (Participative Learning)	Hands-on projects	**12 Hours**
Topics: Topics: Coordination challenges, Sharing the Pie, Assurance Game, Payoff Dominant Equilibria, Cooperative Games, Chicken Game, Hawk-Dove Game. Application of game theory in pricing strategies and resource sharing. Hands-On Activities: Role-playing games to understand payoff structures.				
Module 3	**Randomized Strategies and Mixed Strategies**	Assignment (Participative Learning)	Workshops	**12 Hours**
Topics: Randomized Strategies in games, Expected Value Calculation, Mixed and Pure Strategy Equilibria, Strategic Randomization, Monitoring Games, War of Attrition. Case Studies: Game-based decision-making under uncertainty.				

Module 4	**Dynamic Sequential-Move and Bayesian Games**	**Assignment (Participative Learning)**	Simulation exercises	**12 Hours**

Topics: Game Tree Structures, Subgame Perfect Nash Equilibrium, Sequential-Move Games, Bayesian Games, Risk Sharing, Limit Pricing Strategies. Application in business scenarios such as market entry and pricing wars.
Activities: Simulation exercises and real-world application projects.

Targeted Application & Tools that can be used:

Students would be encouraged to take up live projects and through experiential learning activities in the classroom.
Professionally Used Software: N/a
Delivery Procedure: This course follows a student-centric pedagogy involving interactive Hours, case-based learning, and experiential projects.
Methods include:
1. Conceptual Lectures: Introduction to theoretical frameworks.
2. Case Studies: In-depth analysis of real-world applications.
3. Group Discussions: Collaborative learning and problem-solving.
4. Simulation Exercises: Hands-on activities to practice game theory applications.
5. Project Work: Individual projects focusing on competitive strategies using game theory.

Project work/Assignment:
Assignment 1:
Ptalk.com conducted;

a) Ad campaign of 180 × 150 banner size to its client Whitefield Volkswagen Bangalore and the Cost per 1000 impression is Rs.25 and the impressions to be served is 600000, what will be the actual cost to the advertiser?
b) Ptalk.com did an Ad campaign having 728 × 90 banner size having served 20000 impressions and has generated 200 clicks, calculate the CTR of that Ad?
c) Ptalk.com is ready to spend Rs.20000 for Display Ad campaign having 160 × 600 size banner with number of clicks the Ad generated is 200, so what will be the Cost per Click?
d) If Ptalk.com PPC is worth Rs.10, number of Impressions is 20000, CTR is 6% and CR is 3%. Calculate the CPA to an advertiser?
e) Ptalk.com spends Rs.10,000 and media buy at Rs.10 CPM, to serve 500000 impressions and CTR on the ad is 0.1% with Landing Page Conversion Rate = 10%, calculate the number of leads and CPL? **Assignment 2:**

Amazon.com conducted a Ad campaign of 200 × 180 banner size to its client Whitefield Volkswagen Bangalore and the Cost per 5000 impression is Rs.15 and the impressions to be served is 900000, what will be the actual cost to the advertiser?

b) Amazon.com did an Ad campaign having 900 × 100 banner size having served 40000 impressions and has generated 500 clicks, calculate the CTR of that Ad?
c) Amazon.com is ready to spend Rs.80000 for Display Ad campaign having 260 × 900 size banner with number of clicks the Ad generated is 900, so what will be the Cost per Click?
d) Amazon.com PPC is worth Rs.40, number of Impressions is 80000, CTR is 8% and CR is 5%. Calculate the CPA to an advertiser?
e) Amazon.com spends Rs.50,000 and media buy at Rs.50 CPM, to serve 500000 impressions and CTR on the ad is 0.5% with Landing Page Conversion Rate = 50%, calculate the number of leads and CPL?

Text Books:
T1: Display Advertising (An Hour a Day) By David Booth and Corey Koberg, John Wiley & Sons, Inc. 2013.

References:

R1. Chadha A. (2016). Game Theory for Managers: Doing Business in a Strategic World. PHI Learning.
R2. Barron E.N. (2014). Game Theory: An Introduction. Wiley India Pvt Ltd.

Online Resources:

https://presiuniv.knimbus.com/user#/home Research Articles:

- Abedian, M., Amindoust, A., Maddahi, R. and Jouzdani, J. (2022), "A game theory approach to selecting marketing-mix strategies", Journal of Advances in Management Research, Vol. 19 No. 1, pp. 139-158. https://puniversity.informaticsglobal.com:2068/10.1108/JAMR-10-2020-0264 Download as .RIS
- https://puniversity.informaticsglobal.com:2293/insight/content/doi/10.1108/JAMR-10-2020-0264/full/html
- https://webpages.math.luc.edu/~enb/gamebook.pdf
- https://mathematicalolympiads.files.wordpress.com/2012/08/martin_j-_osborne-an_introduction_to_game_theory-oxford_university_press_usa2003.pdf
- http://www.ru.ac.bd/wp-content/uploads/sites/25/2019/03/405_01_Thie_An_Introduction_to-linear-programming-and-game-theory.pdf
- https://www.nature.com/articles/s41598-022-11654-2

Case Studies:

The right Game: Use Game Theory to Shape Strategy (HBR).
http://thuvien.bkc.vn/Ebook/Ebook-2/Kinh-Te-Quan-Tri/Tieng%20Anh/Harvard%20-%20Business%20-%20Game%20Theory%20-%20Using%20Game%20Theory%20to%20Shape%20Strategy.pdf.

Ma Making game theory work for Manager (McKinsey & Company,2009).
http://thuvien.bkc.vn/Ebook/Ebook-2/Kinh-Te-Quan-Tri/Tieng%20Anh/Harvard%20-%20Business%20-%20Game%20Theory%20-%20Using%20Game%20Theory%20to%20Shape%20Strategy.pdf.

F From Strategy to Business Models and to Tactics (HBR, Working Paper).
https://www.hbs.edu/ris/Publication%20Files/10-036.pdf

Catalogue prepared by	Dr. Rajib Sanyal
Recommended by the Board of Studies on	BOS NO: BOS held on 13-01-2024
Date of Approval by the Academic Council	Academic Council Meeting No., Dated

Course Code: MBA3047	**Course Title: Data Story Telling (with Tableau and PowerBI)** **Type of Course: Open Elective (Theory with Embedded Lab)**	L	P	T	C
		3	0	0	3
Version No.	1.1				
Course Pre-requisites	• Should have basic mathematics and statistics knowledge • Should have completed Fundamentals of Business Analytics (FBA) Sem2				
Anti-requisites	**NIL**				
Course Description	One of the key skills of Managers is to be able to collate, analyse and present data to accurately reflect the state of the business, take decisions based on data and finally present highly impactful visualizations of the state of business and its future. The course will aim to provide necessary skills to students of Analytics to be able to collate, clean data, derive insights and present compelling visualizations, dashboards using industry top software like Tableau and PowerBI. These are very valuable skills for any Business Analytics professional today. All participants who successfully complete this course will get a certificate of participation by KPMG.				

Course Out Comes	On successful completion of the course the students shall be able to: CO1) Identify right business issues & data required to solve these **[Knowledge]** CO2) Describe relevant aspects of business for management action. **[Comprehension]** CO3) Prepare impactful management reports, dashboards using Tableau and PowerBI. **[Apply]** CO4) Evaluate various business solutions using data and recommend action. **[Analyze]**			
Course Content:				
Module 1	**Data Visualization and Charts using PowerBI**	**Report – E review**	**12 Hours**	**Knowledge**
Introduction to PowerBI Interface, Connecting data sources in PowerBI and Key components, filters - visual level, page level and report level, Charts- Line and stacked column chart, Line and clustered column chart, Doughnut chart, Heat map, Histogram, pareto, Box and Whiskers, Scatter plot, bubble chart, Text tables, Scatter chart, Map, Filled Map, Gauge, Card				
Module 2	**Data cleansing and Dashboard using PowerBI**	**Assignment**	**10 Hours**	**Comprehension**
Data cleaning in power BI, report building using Power BI, DAX expression and Dashboard Creation in PowerBI				
Module 3	**Data Visualization, Charts using Tableau**	**Practical**	**12 Hours**	**Application**
Introduction and Importance of Data Visualization, Introduction to Tableau Interface, creating user profiles and cloud interface, Connecting data sources in Tableau. Types of charts in visualization (Line and stacked column chart, Line chart, Area chart, Histogram)				
Module 4	**Building Advance Charts& Dashboard using Tableau**	**Assignment**	**11 Hours**	**Analysis**
Types of charts in visualization (pareto, Box and Whiskers, Scatter plot, bubble chart, Text tables), Basic and advanced filters in Tableau,Creating calculated fields, Parameters, sets and groups in Tableau, Data joins and Data blending, Dashboard Creation in Tableau (Layout, Designs, Elements, Objects, filters on dashboard) Story cards in Tableau				
List of Laboratory Tasks: Experiment No 1: Connect to data and edit the connection properties Level 1: with connections to a flat file using live connection and rename the canvas connection Level 2: with connection to a flat file using extract and rename through edit connection Experiment No 2: For the given business data related to sales of cycles across the world Level 1: Create a calculated field on single sheet-based data from within data source Level2: Create a calculated field based on a multiple data source				
Targeted Application & Tools that can be used: Tableau Desktop, Tableau Public, Tableau online, Tableau and PowerBI. *Please note – only free trial versions will be installed in lab computers and not paid versions. IT support and help must be provided to ensure effective delivery of the course using authorized software.*				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course 1. Assignment1: Collect data from open source data sites for a typical business event and apply visualization and analytics techniques 2. Assignment2: Prepare Dashboard report on stock profitability for a given stock exchange 3. Analyzing data for Customer Analytics, Pricing Analytics, Churn etc. 4. Presentation on effective dashboards using Tableau and PowerBI.				
Text Book *T1. Information Dashboard Design,* 2nd e, Stephen Few, Analytics Press, 2013 *T2. Mastering Tableau* – David Baldwin, November 2016, Packt Publishing, ISBN: 978-1-78439-769-2				
References 1. *Practical Tableau* - Ryan Sleeper, 2018, O'Reilly Media Inc, ISBN 978-1-491-97731-6 2. *Tableau Your Data* - Danieal G Murray, 2013, John Wiley & Sons, ISBN 978-1-18-61204-0 3. *Introducing Microsoft PowerBI* -Alberto Ferrari and Marco Russo 2016, Microsoft Press, ISBN: 978-1-5093-0228-4				
Online Resources: **Articles** **University E Resources** Jensen, R.W., Limbu, Y.B. and Spong, Y. (2015), "Visual Analytics of Twitter Conversations about Corporate Sponsors of FC Barcelona and Juventus at the 2015 UEFA Final", International Journal of Sports Marketing and Sponsorship, Vol. 16 No. 4, pp. 3-9. https://presiuniv.knimbus.com/openFullText.html?DP=https://www-emerald-com-				

presiuniv.knimbus.com/insight/content/doi/10.1108/IJSMS-16-04-2015-B002/pdfplus/html. Carrizosa, E., Guerrero, V. & Romero Morales, D. On mathematical optimization for clustering categories in contingency tables. Adv Data Anal Classif (2022) https://link.springer.com/article/10.1007/s11634-022-00508-4 Hoang, T.B.N., Mothe, J. Prediction of brand stories spreading on social networks. Adv Data Anal Classif (2021) https://link.springer.com/article/10.1007/s11634-021-00450-x **Case study link** https://www.datasciencecentral.com/how-a-good-data-visualization-could-save-lives/ **Datasets and Codes for Experiential learning** https://www.kaggle.com/datasets/heptapod/titanic https://www.kaggle.com/datasets/pavansubhasht/ibm-hr-analytics-attrition-dataset https://www.kaggle.com/code/mysarahmadbhat/eda-on-netflix/notebook https://www.kaggle.com/code/aayushmishra1512/netflix-data-analysis-and-visualization/notebook https://fraud-detection-handbook.github.io/fraud-detection-handbook/Chapter_3_GettingStarted/SimulatedDataset.html Excellent visualization & reports. *https://www.gapminder.org/* **Videos and Podcast** https://www.youtube.com/watch?v=loYuxWSsLNc https://podcasts.google.com/feed/aHR0cHM6Ly9kYXRhdml6dG9kYXkubGlc3luLmNvbS9yc3M	
Catalogue prepared by	Dr. Varalakshmi Dandu
Recommended by the Board of Studies on	Mention the BOS Number and the Date of BOS
Date of Approval by the Academic Council	Mention the Academic Council Meeting No. & the date of the meeting:

Course Code: MBA3048	**Course Title: Environmental Sustainability and Value Creation Type of Course: Open Elective & Theory only**	**L- P- T-C**	3	0	0	3
Version No.	1.0					
Course Pre-requisites	**Knowledge of basic concepts of Economics and business management is an advantage.**					
Anti-requisites	**NIL**					
Course Description	This course provides an overview of topics related to business sustainability with a focus on how environmentally sustainable approaches can create value for the firm. We will explore trends in corporate practices and consider specific examples to examine the interactions between the firm and the environment. This course has three objectives: to increase students' knowledge of sustainability practices and their impact on firm performance; to teach students to think strategically and act entrepreneurially on environmental issues; to help students design business approaches to improve environmental outcomes, while simultaneously creating value.					
Course Objectives	This course is designed to improve the learners' **ENTREPRENUERSHIP SKILLS** by using **PARTICIPATIVE LEARNING** techniques.					
Course Outcomes	On successful completion of this course the students shall be able to: (1) Discuss important topics associated with Sustainability, Business and Policies for sustainable business 2) Apply the environmental impact assessment on real-time problems 3] Estimate climate-based risk to the business sector and strategize adaptation and resilient measures 4] Summarize the circular economy concept for eco-entrepreneurship					
Course Content:						
Module 1	Sustainability, Business, and Public Policy	Assignment (Participative Learning)	Track your carbon footprint for a week.	**10 Hours**		

Topics: Basic concept of Sustainability, Sustainable business, policy initiatives at the international and national level, Definition of sustainability in the business context, Triple Bottom Line (TBL): Economic, Environmental, and Social Sustainability, The global sustainability agenda: UN SDGs and the role of business, Concepts and approaches for accessing the sustainability of Business, Sustainability Metrics**,** Sustainable competitive advantage: theory and practice, The role of leadership in driving sustainability

Module 2	Measuring the Environment	Off class room activity (Experiential Learning)	Zero Trash Day and evaluate the value proposition	**10 Hours**

Topics:
Understanding the environmental impact of business operations, Concepts in measuring the environment value. Benefit-Cost Analysis, Contingent Valuation Method: Travel Cost Method, Hedonic Price method, Preventive Expenditure method, Surrogate Markets, Property Value method, Wage-differential Approach, and Opportunity Cost Method, Assessing environmental risk and the cost of inaction, Sustainable competitive advantage: theory and practice, Companies successfully using sustainability as a competitive tool.

Module 3	Managing Climate Risks	QUIZ	Climate adaptation strategy	**13 Hours**

Topics:
Climate change preparedness and Business sector, Types of risks, resource depletion, and biodiversity loss Economic risk of climate change, Climate Adaptation and Resilience, Crisis Management and Communication, Managing climate risks, Enterprise risk management, Financial risk management, climate risk mitigation strategies, Adaptation strategies, Policy engagement and advocacy, KPI's for managing climate risks, Tools and frameworks for managing climate risks.

Module 4	The Circular Economy	Mini Project (Experiential Learning)	**Eco-entrepreneurship Business Idea challenge**	**12 Hours**

Topics: Basic Concepts of circular economy and business reality, Linear Vs circular economy model, Value propositions generation and creation, Design Innovation and Eco-entrepreneurship, Challenges of eco-entrepreneurship. Opportunities for eco entrepreneurship, Sustainable Business Model- Product-service systems, cradle-to-cradle, and B Corp models, Sustainable competitive advantage: theory and practice, Value creation through eco-efficiency and innovation, Corporate Social Responsibility (CSR) and its evolution to strategic sustainability.

Targeted Application & Tools that can be used:
Application Area is SMEs, Large corporates and Social Entrepreneurship

Project work/Assignment:

Project Assignment: Track your carbon footprint for a week:carbonfootprint.com - Carbon Footprint Calculator
Zero Trash Day and evaluate the value proposition
Climate Variability and Business -Quiz
Eco-entrepreneurship Business Idea challenge

Corporate Sustainability: Samuel O. Idowu & Rene´ Schmidpeter,Springer

References

1) https://www.goodreads.com/book/show/21913812-this-changes-everything
2) https://www.goodreads.com/book/show/56268863-the-book-of-hope
3) https://www.goodreads.com/book/show/54870131-the-day-the-world-stops-shopping
Towards the Circular Economy: Business Rationale for an Accelerated Transition, Ellen MacArthur Foundation, 2015
Sustainability's deepening imprint | McKinsey
A Road Map for Natural Capitalism (hbr.org)
How Do Economists Really Think About the Environment? (rff.org)
(66) How to be a sustainable entrepreneur Part 1 - YouTube
(66) The Story of EcoPreneurship - YouTube
(66) Eco preneurship Opportunities & Challenges By Prof Manoj Kumar Pandey - YouTube
(66) Explaining the Circular Economy and How Society Can Re-think Progress | Animated Video Essay - YouTube
THE 17 GOALS | Sustainable Development (un.org)

Case Studies:

https://www.patagonia.com/activism/
https://www.unilever.com/files/92ui5egz/production/16cb778e4d31b81509dc5937001559f1f5c863ab.pdf
https://ijefm.co.in/v5i12/10.php#:~:text=Tesla%20is%20considered%20the%20leading,2)%20Armstrong%2C%20M.%20(

Videos:
Unilever : https://www.youtube.com/watch?v=OalF6p5sLSA

Tesla : https://www.youtube.com/watch?v=GQ_fF6kFQlk IKEA: https://www.youtube.com/watch?v=FY9H-Jxxn0o University Library links The Tragedy of the Commons on JSTOR

Catalogue prepared by	Dr.Akhila R Udupa
Recommended by the Board of Studies on	
Date of Approval by the Academic Council	

Course Code: MBA3049	**Course Title: Industry 4.0** **Type of Course: Open Elective – Theory Only Course**	**L-P-T-C**	3	0	0	3
Version No.	1.0					
Course Pre-requisites	No prior technical background is required.					
Anti-requisites	NA					
Course Description	The world is on the verge of the Fourth Industrial Revolution, which will be fueled by advances in decision-making and process automation. Advances in information and communication technology (ICT) have resulted in significant increases in computational capacity and move towards complete digital transformation, as well as improved capabilities in connecting the dots in an increasingly networked society. Cloud-based digital platforms are ideal for developing new business models and using intelligent algorithms to analyze data and derive information for usage by Cyber-Physical Systems (CPS), Internet of Things (IoT), and Industrial IoT. This course covers the role of data, production systems, various Industry 4.0 technologies, applications, and case studies, among other topics which will enhance and enable the students to understand the need for business analysis and observation in the current industrial revolution 4.0. In particular, to understand the opportunities and challenges brought about by Industry 4.0, as well as how organizations and knowledge workers may better prepare to benefit from this transformative revolution.					
Course Out Comes	On successful completion of the course the students shall be able to: **1.** Understand the drivers and enablers of Industry 4.0 **[Comprehension Level]** **2.** Demonstrate the knowledge on smart manufacturing, smart products, and services, while making complex business decisions **[Application Level]** **3.** Recognise the opportunities, challenges brought about by Industry 4.0 and how organizations and individuals should prepare to reap the benefits **[Comprehension Level]** **4.** Formulate the deep insights on how smartness is being harnessed from data and appreciate what needs to be done to overcome some of the challenges. **[Application Level]**					
Course Objective	The main objective of the course is to develop both employability and entrepreneurial skills through participative learning and experiential learning using case study and article reviews.					
Module 1	**Introduction and pavement to Industry 4.0**	Quiz	Smart Business Transformation, Internet of Things (IoT), Industrial Internet of Things (IIoT)	09 Hours		
1.1 Concepts of Various Industrial Revolutions, Digitalization and the Networked Economy, Drivers, Enablers, Compelling Forces of Industry 4.0, The Journey so far: Developments in India, USA, China, European and other countries. **1.2** Trends on Smart Business Transformation, Internet of Things (IoT), Industrial Internet of Things (IIoT), Internet of Services (IoS), Internet of People (IoP), Internet of Everything (IoE), Smart Manufacturing, Smart Logistics, Smart Devices / Goods and Services, Smart Cities, Smart Cities and Geospatial Technology.					
Module 2	**Systems and Technologies Enabling Industry 4.0**	Articles & Case Study Discussion	Link in the Reference description below	12 Hours		
2.1 Concepts of Cyber-Physical Systems (CPS), Internet of Things (IoT) Architecture & Infrastructure, Cloud Computing (Fundamentals), Collaborative Platform and Product Lifecycle Management in Industry 4.0 **2.2** Digital Technologies - Robotics, Robotic Process Automation, Data Analytics, Artificial Intelligence and Machine Learning, Blockchain, Augmented Reality (AR) and Virtual Reality (VR), 3D Printing, 5G Net, and Cyber Security, Disruptive						

Inventions supporting Industry 4.0 - Digital and Social Media Services, Internet & Mobile, Industry 4.0 Value Creation & Value Innovation.				
Module 3	**Role of Data, Information, and Knowledge in Industry 4.O World and Application Domains of Industry 4.O**	Assignment	Report Writing on Application Domains of Industry 4.O with reference to any industry as specified below.	12 Hours
3.1 Concepts of Resource-Based View of a Firm, Data, and Information as a Resource for Organizations, Harnessing and Sharing Knowledge in Organizations, Linked with Cloud Computing. **3.2** Application Domains of Industry 4.O: Engineering, Design and Development, Sales, Inventory Management, Quality Control, Plant Safety and Security, Facility Management and Customer Service.				
Module 4	**Opportunities, Challenges and Strategies in Industry 4.0 and Future Industrial Revolution 5.0**	Experiential Learning	Interacting with industry technology experts and submitting report on Strategies for Competing in an Industry 4.0 World, Skills for Workers in the Industry 4.0 & 5.0	12 Hours
4.1 Opportunities and Challenges, Strategies for Competing in an Industry 4.0 World, Skills for Workers in the Industry 4.0 **4.2** Concept on Future Industrial Revolution (Industry 5.0), Future of Works and Skills for Workers in the Industry 5.0 era				
Targeted Application & Tools that can be used: This course helps in understanding contemporary aspects of innovation for business to sustain in the market.				
Project work/Assignment: Mention the Type of Project /Assignment proposed for this course				
Assignment based on self-study topics (Articles & Case Analysis as shown in the course handouts)				
Text Book T1: Alp Ustundag and Emre Cevikcan (2018). *Industry 4.0: Managing the Digital Transformation.* Springer Publishers.				
References R1: Klaus Schwab (2017). *The Fourth Industrial Revolution*. Portfolio Penguin Publisher R2: Alasdair Gilchrist (2016). *Industry 4.0: The Industrial Internet of Things*. Apress Publishers, R3: Sudip Misra, Anandarup Mukherjee and Chandana Roy (2020). *Introduction to Industrial Internet of Things and Industry 4.0.* CRC Press **(Kindly note: Student should visit PU library and access the online resources for the same and incorporate the assignment)** **Research Articles in Journals** **https://presiuniv.knimbus.com/user#/home** Research Articles & Case Study References Sources: Presiuniv.knimbus.com, Sage Publications, SCI Elsevier & HBR 1. Moving from Industry 2.0 to 4.0 in India https://www.sciencedirect.com/science/article/pii/S235197891830209 2. Opportunities of Sustainable Manufacturing in Industry 4.0 https://www.sciencedirect.com/science/article/pii/S221282711600144X 3. Pros & Cons of Implementing Industry 4.0 for the Organizations https://www.tandfonline.com/doi/full/10.1080/21693277.2020.1781705?cookieSet=1 4. A Complexity View of Industry 4.0 https://journals.sagepub.com/doi/full/10.1177/2158244016653987 **5.** Industry 4.0: The Future of Productivity & Growth in Manufacturing Industries https://www.bcg.com/publications/2015/engineered_products_project_business_industry_4_future_productivity_growth_manufacturing_industries **6.** Characteristics and Skills of Leadership in the Context of Industry 4.0 https://www.sciencedirect.com/science/article/pii/S2351978920307472 **7.** Renault - An Industry 4.0 Case Study https://www.thedigitaltransformationpeople.com/channels/the-case-for-digital- transformation/renault-an-industry-4-0-case-study/ **8.** Revisiting Industry 4.0 with a Case Study				

https://ieeexplore.ieee.org/document/8726697

9. Industry 4.0: Optimize Operations and Shape Future Innovation Industry 4.0: Optimize Operations and Shape Future Innovation.
https://www.ptc.com/en/solutions/digital-manufacturing/industry-4-0#:~:text=Industry%204.0%20is%20the%20application,additive%20manufacturing%2C%20and%20IoT%20analytics.

10. Challenges and Driving Forces for Industry 4.0 Implementation
https://www.mdpi.com/2071-1050/12/10/4208

11. How Leaders are Navigating the Fourth Industrial Revolution
https://hbr.org/sponsored/2019/03/how-leaders-are-navigating-the-fourth-industrial-revolution

12. Manufacturing Next
https://hbr.org/sponsored/2019/11/manufacturing-next#:~:text=Manufacturing%20is%20in%20the%20midst,internet%20of%20things%20(IoT).

Videos for Reference:

- What is the Fourth Industrial Revolution? | CNBC Explains
https://www.youtube.com/watch?v=v9rZOa3CUC
- Industry 4.0 – KPMG
https://www.youtube.com/watch?v=IMmnSZ7U1qM

Catalogue prepared by	Dr. Aurobindo K S
Recommended by the Board of Studies on	BOS NO: xxth. BOS held on dd/mm/yyyy
Date of Approval by the Academic Council	Academic Council Meeting No. 14, Dated dd/mm/yyyy

Value Added Courses

Course Code: **MBA1034**	**se Title:** Data Analysis for Managers using IBM SPSS **of Course:** Value Added Course (VAC) – 15 Hours			
ion No.				
se Pre-requisites	1. Should know basic descriptive and interferential statistics 2. Should have Laptop with SPSS Installed in it.			
-requisites				
se Description	This course is aimed at better understanding the application of statistical concepts in research during data analysis stage which can enable the the budding managers to take data driven marketing decisions. It gives an understanding about the nature of data, its source, types and how to use it by analyzing them using IBM SPSS to take effective managerial decision in different marketing scenarios. The students shall gain a practical exposure on solving real time managerial problem using data.			
se Outcomes	On successful completion of this course the students shall be able to: **CO1.** Describe the basics of data analysis for decision making. [Understanding] **CO2.** Employ suitable measurement techniques to elicit data. [Applying] **CO3.** Apply quantitative analysis to take appropriate marketing decision backed by data. [Applying]			
se Content:	The course is designed to learn how to take data driven managerial decision using statistical tools like IBM SPSS. Both descriptive and inferential statistics has been covered in details with special emphasis on testing hypothesis using various statistical techniques.			
ule 1	**duction to E-**	nment	s-on on E-Mail Campaign	**08 Hours**

	mail Campaigning			

cs:
Introduction to Data Analysis – Role of data analysis in Research – Introduction to SPSS for data analysis – Handling Data with SPSS-Importing & Data entry in SPSS – Handling missing data, outliers, inappropriate codes etc – Descriptive statistics – Data representation- Bar chart, Pie chart, Box plot etc

ule 2	**ting, Delivering, and Tracking E-mail Campaign**	gnment	s-on on E-Mail Campaign	**08 Hours**

cs:
Inferential statistics – Introduction to hypothesis- Association techniques – correlation – Regression – Parametric vs Non Parametric test for testing hypothesis –Comparing means – Independent sample t test, Paired Sample t test, ANOVA etc

ule 3	**duction to Affiliate Marketing**	ct	ate Marketing	**08 Hours**

cs:
Data Reduction technique – Factor Analysis- Segmentation Technique- Clustering technique- IP Mapping- Mediation & Moderation technique using SPSS.

eted Application & Tools that can be used:

SPSS

osoft Excel

ect work/Assignment:

Project Work: Mini Project on Data Analysis using SPSS

gnment: : IBM SPSS Certificate course by Udemy

Text Books:

T 1: Zikmund, W. G., Babin, B, J., Carr, J.C. & Griffin, M. Business Research Methods: A South Asian Perspective. Delhi: Cengage Learning.
T2: Malhotra, Naresh K & Das, S. (2015). Marketing Research. 7th Ed. Pearson Education.
T3: Chawla, D. (2018). Research Methodology Concepts and Cases. New Delhi: Vikas Publications.

rences:

R 1: Kothari, C. R. & Garg, G. Research Methodology, Methods and Techniques. New Age International Publishers.
R 2: Anderson, Sweeney, Williams, Camm and Cochran. Statistics for Business and Economics. Delhi: Cengage Learning.

ne Resources:

https://www.youtube.com/watch?v=HtCiN28OlVk&t=6s
https://www.youtube.com/watch?v=Ql7elffRhX0
https://www.youtube.com/watch?v=LBQqGKY2dJ0&t=26s
https://www.udemy.com/course/data-analysis-using-ibm-spss-for-beginners

EL Video Lecture Sessions:

Hypothesis & Statistical Testing:

https://nptel.ac.in/courses/110/107/110107080/

Catalogue prepared by	Dr. Ameer Hussain A
Recommended by the Board of Studies on	NO: BOS held on
Date of Approval by the Academic Council	emic Council Meeting No., Dated

Course Code: **MBA1031**	**rse Title: How To Analyze Data - Using Microsoft Excel Add Inns** **Type of Course: VAC**	**L- T - P- C**	1	)		0
on No.						
se Pre-requisites	Business Statistics					
requisites						
se Description	This course is intended to enhance the data analysis skills using Microsoft Excel. Emphasis will be on the analysis and interpretation of data. Data analysis will be carried out incorporating different add inns in excel for the calculations. Parametric and non-parametric inferential procedures will be discussed.					
se Objective	This course is designed to improve the learner's EMLOYABILITY SKILLS by using skill development					
se Outcomes	On successful completion of the course the students shall be able to: 01. Interpret data using parametric test procedures 02. Use excel add inns to analyze and interpret data					
se Content:						
ule 1	**metric Test for means**	nment	excel Add-inn		**8 Sessions**	
s: Meaning of Statistical hypotheses – Null and alternative hypotheses – Type I and Type II errors– level of significance- testing procedure. Test for single mean (known and unknown variance) – Test for equality of two means (known and unknown variances) – paired t test – one way ANOVA						
ule 2	**for Variances and proportions**	nment	excel Add-inn		**7 Sessions**	
s: or single variance – test for equality of two variances. Test for single proportion and test for equality of two proportions. Test for correlation and regression coefficients.						
ct work/Assignment:						
Solving testing of hypothesis problems						
Text Book: 1. Levine David M (2017) Statistics for Managers, Using Microsoft Excel, Eighth Edition, Pearson, New Delhi.						
Catalogue prepared by	Dr. Jayakrishna Udupa					
Recommended by the Board of Studies on						
Date of Approval by the Academic Council						

se Code: MBA1030	se Title: **Personal and Professional Business Networking Skills** of Course: VALUE ADDED COURSE	– P – C	1 – 0 – 0 – 0
ion No.			
se Pre-requisites	f) Self-Discipline g) Personal quests to learn and improve themselves h) Basic communication skills i) Marketing Management j) Organizational Behaviour		
requisites			
se Description	The key to personal and professional success in today's fast-paced, linked world is cultivating strong networks. Opportunities, insights, and support for reaching your goals may all materialize through a strong network. Nevertheless, it takes intentional efforts and careful preparation to construct such a network. In this post, we will go into proven methods for building and growing your network, supported by practical examples to show how they work This value-added course is being conducted as a **Personal Growth Lab Program.** The purpose of this enriching course is to provide students with the tools they need to succeed in their personal and professional lives; it is part of the Personal Growth Lab Program. A person's holistic self-improvement is the focus of Personal Growth Lab. A person can achieve this goal to the best of their abilities when they have self-awareness, know their own strengths and areas for improvement, conquer their fears, adapt to new situations and environments, think creatively and push their limits, cultivate an optimistic outlook, and ultimately become the most esteemed and valued versions of themselves. ▪ In their respective families, ▪ In the Organizations that they intend to work for ▪ In the Society that they live and finally ▪ To Our Country at large. In a lab, students work in a structured environment with dedicated Professor as Faculty and other experimenters who provide constant feedback and assistance. Students should take stock of their personal, interpersonal, professional, and life objectives before jumping headfirst into networking skills, both on the personal and professional fronts whether they are seeking a Job, Career advancement, mentorship, or start their own business. Caselets, presentations, weekend assignments, and a mini-project with lots of		

	learning interaction and personal engagement support the course's overall experiential learning approach.
rse Outcomes	On successful completion of this course the students shall be able to: 1) Learn and develop the art of interacting with Professionals 2) Create a strong network of Professional connections in the sector of your choice 3) Develop relationships that last long 4) Showcase one's abilities, qualities, assess others qualities 5) Develop Strategic networking that will help the student to discover secret employment markets, industry events, and special business prospects. 6) Use networking to investigate other job routes, get mentoring, and get direction that could assist quicken your professional journey.
rse Objective:	The sole objective of the course is on building, improving, developing, sustaining long lasting personal and professional contacts to ameliorate their career and life.

LIST OF ACTIVITIES / TOPICS : 15 Sessions

CS/ ACTIVITIES/ LAB THEMES

1. **Introduction to personal and professional business networking [1 Session]**
   Test your networking skills - paper and pencil test, ice breaker on how to interact

2. **Your Network is your net worth – Opportunities to Explore [1 Session]**
   Activity – Identify, Approach, Establish Networks across your personal and peer circles - Individual and Group Network abilities – CA – 20 Marks (1 Week time).

3. **How to develop your INDIVIDUAL NETWORKING SKILLS – [5 Sessions]**
   A. Personal Branding – What's your PBA, Learn to make your IKIGAI? Activity
   B. Networking with confidence
   C. Picking up the right people
   D. Goal Setting
   E. Networking with people who could let you down - Cutting ties with those that do not meet your standards.
   F. Engaging in both proactive and reactive approaches to building your network connections.
   G. Who should typically be in your personal and professional network?
   H. What should be the optimal size of your personal and professional network

4. **How to improve your networking skills [1 Session]**
   - The 3 Ps personal networking - prepare practice and pull yourself together.
   - Approachability, Availability

5. **HOW NETWORKING AND INTERPERSONAL RELATIONS [3 Sessions]**

A. INTERPERSONAL RELATIONS LAB – BASIC LAB - THEME
How to interact with people

B. INTERPERSONAL RELATIONS LAB – THEME LAB
The sensitive art of praising/ appreciating to win over people
C. INTERPERSONAL RELATIONS LAB – THEME LAB
How to take an insult with a smile and learn to move ahead in life towards success

6. PROFESSIONAL NETWORKING - Business Networking [3 Sessions]

Definition, Industry – eco-system, its partnerships and its various stakeholders – key account holders, partners, suppliers, alliances, Draw a net map of your current network, Practice and receive Practise and receive feedback on initiating conversations with people you don't know

7. NETWORK CONTROL [1 Session]

Network challenges, Effective Control and the perfect networker profile **[1 Session]**

eted Application & Tools that can be used: NA

ct work/Assignment:

1. **This course has a field assignment based on which the student will be evaluated for 100 marks**
2. **No special social media tools or skills will be imparted in this program**
3. **Non-Serious Students** will be expelled from the course and no attendance will be given to them. They will be declared fail in the VAC and they need to explore if any other Value-Added Course would suit them in developing themselves.
4. **In addition to the above, a note will be sent to their Parents, and higher Authorities on Campus with a special note to the placement department that they are unfit for placements.**
5. **Non-serious students are those as under:**
   - Not coming to the class on time
   - Sleeping in Class
   - Class disturbers
   - Watching mobile while the session is on
   - Absentees without information
   - Not participating in the Activities/ Lab Sessions
   - Not producing the required field-based Project Work / Assignment

Activity: Assessment Test: Areas to Improve

Assignment 1: Identify, build and develop their first circle of contacts to network

Assignment 2: Presentation: What are the various factors that limit or inhibit them and skills to gain for personal and professional networking

Assignment 3: Oral/ Written Note: Sharing Experiences: Interpersonal Relations

Assignment 4: Develop a strategic plan to leverage networking for securing a desired corporate job, obtaining industry mentorship, and gaining guidance to enhance professional development.

Project Work: The student will identify and explore across his references and contacts and builds his/her personal networking contacts and submits the same as an assignment.

This project work will carry 50 marks
Assignments: 50 Marks

The above assignments will carry 10 marks each totaling 40 marks and another 10 marks for class discipline, learning enthusiasm, interaction and timely submission of assignments.

Text Book:

NO SELECT PRESCRIBED TEXT BOOK IS AVAILABLE N THE CHOSEN VALUE ADDED COURSE

References

1. Tools for Handling Tough Conversations by Patterson, K. Grenny, J. McMillan, R. and Switzler, A.
2. Patterson, K., Grenny, J., McMillan, R., and Switzler, A. (2002). Crucial conversations: tools for talking when stakes are high. New York: McGraw-Hill. ISBN: 0-07-140194-6
3. Scott, Susan. (2002). Fierce conversations – achieving success at work and in life, one
4. conversation at a time. New York: Berkley Publishing. ISBN: 0-425-19337-3
5. Douglas Stone (Author) , Bruce Patton (Author) , Sheila Heen (Author) & 1 more (1999). Difficult Conversations: How to Discuss What Matters
6. New York: Penguin. ISBN: 0 14 02.8852X Penguin Books
7. Brehm, S. S., Miller, R. S., Perlman, D., & Campbell, S. M. (2001). Intimate Relationships (3rd Edition). New York: McGraw-Hill. ISBN: 978-0-07-337018-7
8. Interaction Ritual (Paperback)Author: Erving Goffman
9. Publisher: Knopf Doubleday Publishing Group (1982)
10. Skill with people by Les Giblin ISBN: 0-9616418-0-6
11. Give and take by Adam Grant
12. Giftology by John Ruhlin
13. Super Connector by Scott Gerber and Ryan Paugh
14. Never Eat Alone by Keith Ferrazzi and Tahl Raz
15. The Corporate Culture survival guide by Edgar H Schien, Published by Jossey-Bass, Wiley Imprint
16. **How to Win Friends and Influence People** by Dale Carnegie
17. How to Speak How to Listen by Mortimer J. Adler (Author)
18. **Skill with People** by Les Giblin

Articles:

Select articles would be shared to students to enhance their learning to the practice

Case Studies:

Select live scenarios/ examples from the Course Instructors experiences/ SDPs/ MDPs conducted, would be shared with the students in the class session. Students would investigate and engage in class by hearing about the experiences of the instructors.

Catalogue prepared by	Dr Ravi Prakash Kodumagulla, Professor, School of Management, Presidency University
Recommended by the Board of Studies on	NO: held on 28-12-2024
Date of Approval by the Academic Council	emic Council Meeting No.

<table>
<tr><td>Course Code: MBA1033</td><td colspan="3">Course Title: Personal Branding: Aligning Values with Career Success
Type of Course: Value Added Course</td><td>L – T – P - C
1 – 0 – 0 - 0</td></tr>
<tr><td>Version No.</td><td colspan="4">1.0</td></tr>
<tr><td>Course Pre-requisites</td><td colspan="4">• Communication and Interpersonal Skills
• Career Planning and Development</td></tr>
<tr><td>Anti-requisites</td><td colspan="4">NIL</td></tr>
<tr><td>Course Description</td><td colspan="4">This course focuses on the critical role of personal branding in aligning one's values, aspirations, and strengths with career success. It explores the intersection of personal identity and professional branding, emphasizing self-awareness, strategic communication, and effective networking. Students will gain the skills needed to articulate their unique value propositions confidently and authentically to potential employers and professional networks. The course integrates theoretical concepts with practical tools to enable students to develop a coherent, impactful personal brand.</td></tr>
<tr><td>Course Outcomes</td><td colspan="4">On completion of this course, the student will be able to:

CO1: Define the concept of personal branding and its relevance to career development. [Remember]
CO2: Evaluate the role of core values and strengths in shaping a personal brand. [Evaluate]
CO3: Design a personal brand narrative using strategic communication techniques. [Create]
CO4: Implement effective networking strategies for career growth. [Apply]</td></tr>
<tr><td>Course Objective</td><td colspan="4">This course is designed to enhance learners' EMPLOYABILITY SKILLS by using PARTICIPATIVE LEARNING techniques.</td></tr>
<tr><td>Module 1</td><td>Introduction to Personal Branding</td><td>Assignment (Participative Learning)</td><td>Self-Reflection Report</td><td>03 Hours</td></tr>
<tr><td colspan="5">Topics:
Understanding Personal Branding; The Role of Values, Strengths, and Aspirations; Components of a Personal Brand; Traditional vs. Modern Career Planning; The Importance of Authenticity in Professional Branding.</td></tr>
<tr><td>Module 2</td><td>Strategic Communication for Personal Branding</td><td>Assignment (Participative Learning)</td><td>Personal Brand Narrative Development</td><td>03 Hours</td></tr>
<tr><td colspan="5">Topics:
Crafting Your Story; Leveraging Communication Tools; Tailoring Messages for Different Audiences; Aligning Professional Documents with Branding Goals (Resume, Cover Letters, and Portfolios).</td></tr>
<tr><td>Module 3</td><td>Networking Skills and Strategies</td><td>Assignment (Experiential Learning)</td><td>Networking Strategy Plan</td><td>05 Hours</td></tr>
</table>

Building a Meaningful Network; Identifying Key Professional Contacts; Using Social Media Platforms Effectively; The Power of Informational Interviews; Creating Opportunities through Networking.

Module 4	**Personal Branding in Action**	Assignment (Experiential Learning)	LinkedIn Profile Optimization and Mock Interviews	**04 Hours**

Topics:
Demonstrating Your Brand in Interviews; Enhancing Online Presence; Aligning Personal and Professional Goals; Case Studies of Successful Personal Branding; Overcoming Challenges in the Job Market.

Targeted Application & Tools that can be used:

Students would be encouraged to take up live projects and through experiential learning activities in theclassroom.

Professionally Used Software: LinkedIn and Canva

Project work/Assignment:

- Self-Reflection Report (20 marks): Reflective essay on personal values, strengths, and career goals.
- Personal Brand Narrative Assignment (25 marks): Develop and present a personal brand story.
- Networking Strategy Plan (15 marks): Create and present a networking roadmap.
- Mock Interview (20 marks): Simulate an interview demonstrating personal branding alignment.
- Resume & LinkedIn Profile Optimization (10 marks): Update resume and LinkedIn profile based on personal branding principles.
- Class Participation & Engagement (10 marks): Active involvement in discussions and peer feedback.

Text Books:

T1: You Are The Brand: The 8-Step Blueprint to Showcase Your Unique Expertise and Build a Highly Profitable, Personally Fulfilling Business – Mike Kim, Morgan James Publishing, 2021.
T2: Digital You: Real Personal Branding in the Virtual Age - William Arruda, Association for Talent Development, 2019.

References:

R1: Dare to Lead: Bold Work. Tough Conversations. Whole Hearts. – Brené Brown, Random House, 2018.
R2: The Long Game: How to Be a Long-Term Thinker in a Short-Term World - Dorie Clark, Harvard Business Review Press, 2021.

Online Resources:

- "Introduction to Personal Branding" – Coursera (https://www.coursera.org/learn/personal-branding?utm_source=chatgpt.com)
- **Building a Professional Brand on LinkedIn – (**https://alison.com/course/building-a-professional-brand-on-linkedin)
- How to build a Personal Brand on LinkedIn | Creator Masterclass (https://www.youtube.com/watch?v=h6LF1Anx9kc)
- Building Your Personal Brand on LinkedIn: A Step-by-Step Course (https://taplio.com/blog/linkedin-personal-brand-crash-course)

Catalogue prepared by	Dr. Uttam Chakraborty
Recommended by the Board ofStudies on	
Date of Approval by the Academic Council	

Course Code: **MBA1032**	se Title: **Python Programming** of Course: VAC	P- C		0	0	0
on No.						
se Pre-requisites	NO prerequisites					
requisites						
se Description	This Python programming course is designed to provide learners with a comprehensive understanding of Python's capabilities, ranging from the basics to advanced applications. The course emphasizes practical learning through hands-on exercises, real-world projects, and industry-relevant use cases. Participants will explore Python's versatility in data analysis, web scraping, automation, and machine learning, making it ideal for aspiring programmers, data analysts.					
se Objective	This course aims to equip learners with a strong foundation in Python programming, covering essential concepts, practical applications, and advanced topics.					

<table>
<tr><td>se Outcomes</td><td colspan="4">1. Demonstrate basic programming skills in Python for business analytics.
2. Solve messy data problems across data structures using Pandas and Numpy.
3. Develop solutions using Python Object Oriented Programming.
4. Solve a business problem using Python</td></tr>
<tr><td>se Content:</td><td colspan="4">Solve messy data problems across data structures using Pandasand Numpy</td></tr>
<tr><td>ule 1</td><td>Develop solutions using Python Object Oriented Programming</td><td>ning to fundamentals</td><td>Programming concepts</td><td>3 Hours</td></tr>
<tr><td colspan="5">Topics:.Overview of Python. Installation and Setup. Syntax, Variables, and Data Types Input and Output Operations.</td></tr>
<tr><td>ule 2</td><td></td><td>ning to fundamentals</td><td>Programming concepts</td><td>4 Hours</td></tr>
<tr><td colspan="5">Basic Operators (Arithmetic, Relational, Logical, Assignment, Bitwise).Decision-Making Statements (if, elif, else).Loops (for, while, nested loops) Break, Continue, and Pass. Functions (Built-in, User-defined, Lambda, Recursion)

• Libraries Introduced:
o Collections (Counter, defaultdict, OrderedDict, namedtuple, deque)
o os, shutil, csv</td></tr>
<tr><td>ule 3</td><td>Data Structures, OOP, and File Handling</td><td>ramming</td><td>ramming Concepts</td><td>4 Hours</td></tr>
<tr><td colspan="5">• Topics:.Lists, Tuples, Sets, Dictionaries, List and Dictionary Comprehensions, Strings and String Methods, Iterators and Generators, Mutable vs. Immutable Data Structures.
• Libraries Introduced:
o Collections (Counter, defaultdict, OrderedDict, namedtuple, deque)
o os, shutil, csv</td></tr>
<tr><td>Module 4</td><td>Data Structures, OOP, and File Handling</td><td>ramming</td><td>ramming Concepts</td><td>4 Hours</td></tr>
</table>

Object-Oriented Programming (Classes, Objects, Inheritance, Polymorphism, Encapsulation),Working with Files (Read, Write, Append, CSV Handling),Exception Handling (Try, Except, Finally, Custom Exceptions) • **Libraries Introduced:** o Collections (Counter, defaultdict, OrderedDict, namedtuple, deque) o os, shutil, csv				
ct work/Assignment:				
Assignment 1:TBD				
Book **T 1:•Core Python Programming** Author: Nageswara Rao R Focus: Detailed coverage of Python fundamentals, object-oriented programming, exceptions, data structures,				
References **Books: •Introduction to Python Programming** Authors: S. Gowrishankar and A. Veena Focus: Beginner-friendly, covering fundamental concepts in Python programming. **•Python Programming** Authors: Dr. Jisu Elsa Jacob and Bharath Viswam S Focus: Comprehensive coverage of data types, control flow, functions, and object-oriented programming. **•An Introduction to Python Programming: A Practical Approach** Authors: Dr. Krishna Kumar Mohbey and Dr. Brijesh Bakariya Focus: Practical approach with examples, covering Python basics to advanced topics. **•Python Programming** Author: Rupesh Nasre Focus: Basics to web application development, suitable for beginners and intermediate learners. **dly note: Student should visit PU library and access the online resources for the same and incorporate the assignment as well as attach the photo of log in and log out in person in the end of the assignment file.)** **Research Articles in Journals** **https://presiuniv.knimbus.com/user#/home** **Videos**				

•Corey Schafer

- Comprehensive tutorials on Python, covering beginner to advanced topics.
- Watch here

•freeCodeCamp.org

- Extensive Python tutorials, including long-form courses on data analysis, machine learning, and more.
- Watch here

•Programming with Mosh

- Engaging Python tutorials focusing on real-world applications, perfect for beginners and professionals.
- Watch here

•Tech with Tim

- Project-based tutorials that guide you in building practical Python applications, including games and automation scripts.

Catalogue prepared by	Dr P. A Manoj Kumar & Dr. Varalakshmi Dandu
Recommended by the Board of Studies on	NO:
Date of Approval by the Academic Council	emic Council Meeting No. :

Course Code: MBA3037	**Course Title: Personal Wealth Management** **Type of Course: Open Electives**	**L**	**T**	**P**	**C**
		3	**0**	**0**	**3**
Version No.	2.0				
Course Pre-requisites	**Nil**				
Anti-requisites	**Nil**				
Course Description	This course equips students with the knowledge and skills required to effectively manage personal finances and build long-term wealth. It covers fundamental concepts of financial planning, saving, budgeting, investment strategies, risk management, insurance, taxation, and retirement planning. Students will explore various financial instruments such as equities, bonds, mutual funds, real estate, and alternative investments, while learning how to evaluate risk-return trade-offs and align financial				

	decisions with life goals.			
Course Objective	This course is designed to improve the learners' **SKILL DEVELOPMENT** by using **PARTICIPATIVE LEARNING** techniques.			
Course Out Comes	**On successful completion of the course the students shall be able to:** 1. **Explain** the principles of personal financial planning, including budgeting, saving, investment, insurance, and retirement. *(Understanding)* 2. **Analyze** various investment avenues (equities, bonds, mutual funds, real estate, etc.) to **assess** their risk-return characteristics. *(Analyzing)* 3. **Apply** financial tools and techniques to **design** a personalized wealth management plan aligned with life goals. *(Applying / Creating)* 4. **Evaluate** tax implications, risk management strategies, and portfolio performance to **recommend** effective wealth-building approaches. *(Evaluating)*			
Course Content:				
Module 1	Fundamentals of Personal Financial Planning	Assignment using E Library (Participative Learning)	Assessment 1 - Quiz	11 Sessions
Basics of personal finance, including goal setting, budgeting, saving, and understanding cash flow. Students learn how to evaluate their financial situation, prioritize objectives, and lay the foundation for wealth accumulation.				
Module 2	Investment Planning and Portfolio Management	Assignment (Participative Learning)	Assessment 2 – Assignment	12 Sessions
Various investment instruments such as equities, bonds, mutual funds, real estate, and alternative investments. Topics include risk-return analysis, asset allocation, diversification, and portfolio optimization strategies.				
Module 3	Risk Management and Insurance Planning	study (Participative Learning)	Assessment 3 – Case Analysis	11 Sessions
Risk assessment and management techniques, including life, health, and property insurance. Students learn to select appropriate insurance products and integrate risk mitigation into overall financial planning.				
Module 4	Tax Planning, Retirement, and Wealth Preservation	Assignment (Participative Learning)	Assessment 4 – Mini Project	11 Sessions
Emphasizes tax-efficient strategies, retirement planning, estate planning, and long-term wealth preservation. Students learn to design comprehensive financial plans, monitor portfolio performance, and make adjustments aligned with life stages and goals.				
Targeted Application & Tools that can be used: **Digital & AI Tools** • **Budgeting & Expense Tracking**: Mint, YNAB (You Need A Budget), Walnut • **Investment & Portfolio Management**: Zerodha Coin, Groww, Upstox, ET Money • **Financial Planning & Advisory Tools**: Personal Capital, SmartAsset, Wealthfront • **AI-Powered Tools for Insights**: ChatGPT for scenario analysis, robo-advisors (Kuvera, Scripbox) • **Analytics & Visualization**: Excel, Tableau, Power BI for portfolio analysis and risk assessment • **Tax & Retirement Planning**: ClearTax, H&R Block, retirement calculators				
Project work/Assignment:				
1. **Personal Financial Plan Development:** Students prepare a comprehensive financial plan for a hypothetical individual or family, including budgeting, savings, investment, insurance, and retirement strategies.				

2. **Investment Portfolio Analysis:** Construct a simulated investment portfolio using equities, bonds, mutual funds, and other instruments. Analyze risk-return, diversification, and portfolio performance over a selected period. 3. **Risk and Insurance Assessment:** Evaluate the insurance needs (life, health, property) for a case study client. Recommend an optimal insurance strategy aligned with financial goals and risk profile. 4. **Tax Planning Simulation:** Analyze a client's income, investments, and expenses to propose tax-efficient strategies, including deductions, exemptions, and long-term tax-saving investments.
Text Book T1: **Kapoor, J.R., Dlabay, L.R., Hughes, R.J.** – *Personal Finance* (McGraw-Hill, Latest Edition) *Covers financial planning, budgeting, investments, insurance, retirement, and tax planning with practical examples.* T2: **Gitman, L.J., Joehnk, M.D.** – *Personal Financial Planning* (Cengage Learning, Latest Edition) *Focuses on integrating personal finance concepts with wealth management strategies.*
References **R1: Bodie, Z., Kane, A., Marcus, A.J.** – *Investments* (McGraw-Hill, Latest Edition) *Provides in-depth coverage of investment instruments, portfolio theory, and risk-return analysis.* *R2:* **Reilly, F.K., Brown, K.C.** – *Investment Analysis & Portfolio Management* (Cengage, Latest Edition) *Detailed approach to investment decisions, portfolio management, and asset allocation.*

Catalogue prepared by	Dr. Sunil M Rashinkar
Recommended by the Board of Studies on	BOS NO: xxth. BOS held on dd/mm/yyyy
Date of Approval by the Academic Council	Academic Council Meeting No. 14, Dated dd/mm/yyyy

Course Code: MBA3039	**Course Title: Market Research** **Type of Course: Open Electives**	**L**	**T**	**P**	**C**
		3	**0**	**0**	**3**
Version No.	2.0				
Course Pre-requisites	**Nil**				
Anti-requisites	**Nil**				
Course Description	This course introduces the concepts and techniques of market research used in business decision-making. It covers problem definition, research design, data collection methods, analysis, and interpretation. Students will learn how to gather consumer and market insights, apply qualitative and quantitative tools, and present findings effectively. Emphasis is on practical applications through projects and case studies to develop skills for real-world marketing and management decisions.				
Course Objective	This course is designed to improve the learners' **SKILL DEVELOPMENT** by using **PARTICIPATIVE LEARNING** techniques.				
Course Out Comes	**On successful completion of the course the students shall be able to:** • **Identify** market research problems and **explain** appropriate research designs for different business contexts. *(Remembering / Understanding)* • **Apply** qualitative and quantitative research methods to **collect and organize** relevant data. *(Applying)* • **Analyze** consumer behavior and market trends using statistical tools to **interpret** findings.				

	(Analyzing) • **Evaluate** research results and **create** actionable insights to support marketing decisions. *(Evaluating / Creating)*			
Course Content:				
Module 1	Introduction to Market Research	Assignment using E Library (Participative Learning)	Assessment 1 - Quiz	11 Sessions
This unit introduces the nature, scope, and importance of market research in business decision-making. It covers the research process, problem definition, objectives formulation, and the role of research in identifying opportunities, reducing risk, and supporting strategic planning.				
Module 2	Research Design and Data Collection	Assignment (Participative Learning)	Assessment 2 – Assignment	12 Sessions
This unit focuses on research design types—exploratory, descriptive, and causal—and their applications. It explores data collection methods including surveys, interviews, focus groups, observation, and experiments. Sampling techniques, questionnaire design, and scaling methods are emphasized to ensure accuracy and reliability.				
Module 3	Data Analysis and Interpretation	study (Participative Learning)	Assessment 3 – Case Analysis	11 Sessions
This unit introduces the use of statistical tools and software for analyzing collected data. Topics include coding, tabulation, descriptive statistics, hypothesis testing, correlation, regression, and multivariate analysis. The focus is on interpreting data to derive meaningful insights into consumer behavior and market trends.				
Module 4	Reporting and Applications of Market Research	Assignment (Participative Learning)	Assessment 4 – Mini Project	11 Sessions
This unit emphasizes the preparation and presentation of research reports. It covers effective communication of findings, visualization of data, and use of insights for decision-making in marketing areas such as product development, branding, pricing, distribution, and advertising. Case studies and projects are used to link research outcomes with real-world business applications.				
Targeted Application & Tools that can be used: **Digital & AI Tools for Marketing** • **Data Collection Tools**: Google Forms, SurveyMonkey, Qualtrics • **Social Media & Listening Tools**: Hootsuite, Brandwatch, Sprinklr • **Web & Digital Analytics**: Google Analytics, SimilarWeb, SEMrush				
Project work/Assignment: **Consumer Behavior Study** Conduct a survey using tools like Google Forms or SurveyMonkey to understand consumer preferences for a chosen product/service. Analyze results with Excel/SPSS and prepare insights. **Social Media Listening Project** Use tools such as Hootsuite or Brandwatch to track customer sentiment about a brand over a week. Prepare a report highlighting trends, sentiment analysis, and recommendations.				
Text Book T1: **Malhotra, N.K. & Dash, S.** – *Marketing Research: An Applied Orientation* (Pearson, Latest Edition) *Widely used reference with detailed coverage of research methods, case studies, and Indian examples.* T2: **Burns, A.C., Bush, R.F. & Veeck, A.** – *Marketing Research* (Pearson, Latest Edition) *Focuses on both qualitative and quantitative approaches with practical applications.*				
References R1: Kumar, V. – 101 Design Methods: A Structured Approach for Driving Innovation in Your Organization (Wiley)				

Useful for understanding research-driven innovation and design thinking approaches. R2: Zikmund, W.G., Babin, B.J., Carr, J.C. & Griffin, M. – Business Research Methods (Cengage Learning, Latest Edition)	
Catalogue prepared by	Dr. Uma P Jaidev
Recommended by the Board of Studies on	BOS NO: xxth. BOS held on dd/mm/yyyy
Date of Approval by the Academic Council	Academic Council Meeting No. 14, Dated dd/mm/yyyy

se Code: **1034**	**se Title:** Data Analysis for Managers using IBM SPSS **of Course:** Value Added Course (VAC) – 15 Hours			
ion No.				
se Pre-requisites	3. Should know basic descriptive and interferential statistics 4. Should have Laptop with SPSS Installed in it.			
requisites				
se Description	This course is aimed at better understanding the application of statistical concepts in research during data analysis stage which can enable the the budding managers to take data driven marketing decisions. It gives an understanding about the nature of data, its source, types and how to use it by analyzing them using IBM SPSS to take effective managerial decision in different marketing scenarios. The students shall gain a practical exposure on solving real time managerial problem using data.			
se Outcomes	On successful completion of this course the students shall be able to: **CO1.** Describe the basics of data analysis for decision making. [Understanding] **CO2.** Employ suitable measurement techniques to elicit data. [Applying] **CO3.** Apply quantitative analysis to take appropriate marketing decision backed by data. [Applying]			
se Content:	The course is designed to learn how to take data driven managerial decision using statistical tools like IBM SPSS. Both descriptive and inferential statistics has been covered in details with special emphasis on testing hypothesis using various statistical techniques.			
ule 1	**duction to E-mail Campaigning**	nment	ds-on on E-Mail Campaign	**08 Hours**

cs:

Introduction to Data Analysis – Role of data analysis in Research – Introduction to SPSS for data analysis – Handling Data with SPSS-Importing & Data entry in SPSS – Handling missing data, outliers, inappropriate codes etc – Descriptive statistics – Data representation- Bar chart, Pie chart, Box plot etc

ule 2	**ting, Delivering, and Tracking E-mail Campaign**	gnment	ds-on on E-Mail Campaign	**08 Hours**

cs:

Inferential statistics – Introduction to hypothesis- Association techniques – correlation – Regression – Parametric vs Non Parametric test for testing hypothesis –Comparing means – Independent sample t test, Paired Sample t test, ANOVA etc

ule 3	**oduction to Affiliate Marketing**	ect	ate Marketing	**08 Hours**

cs:

Data Reduction technique – Factor Analysis- Segmentation Technique- Clustering technique- IP Mapping-Mediation & Moderation technique using SPSS.

eted Application & Tools that can be used:

SPSS

osoft Excel

ect work/Assignment:

Project Work: Mini Project on Data Analysis using SPSS

gnment: : IBM SPSS Certificate course by Udemy

Text Books:

T 1: Zikmund, W. G., Babin, B, J., Carr, J.C. & Griffin, M. Business Research Methods: A South Asian Perspective. Delhi: Cengage Learning.

T2: Malhotra, Naresh K & Das, S. (2015). Marketing Research. 7th Ed. Pearson Education.

T3: Chawla, D. (2018). Research Methodology Concepts and Cases. New Delhi: Vikas Publications.

rences:

R 1: Kothari, C. R. & Garg, G. Research Methodology, Methods and Techniques. New Age International Publishers.

R 2: Anderson, Sweeney, Williams, Camm and Cochran. Statistics for Business and Economics. Delhi: Cengage Learning.

ne Resources:

https://www.youtube.com/watch?v=HtCiN28OlVk&t=6s
https://www.youtube.com/watch?v=Ql7elffRhX0
https://www.youtube.com/watch?v=LBQqGKY2dJ0&t=26s
https://www.udemy.com/course/data-analysis-using-ibm-spss-for-beginners

EL Video Lecture Sessions: Hypothesis & Statistical Testing: https://nptel.ac.in/courses/110/107/110107080/

Catalogue prepared by	Dr. Ameer Hussain A
Recommended by the Board of Studies on	NO: BOS held on
Date of Approval by the Academic Council	emic Council Meeting No., Dated

se Code: **1031**	**se Title: How To Analyze Data - Using Microsoft Excel Add Inns** **of Course: VAC**	**P- C**	1			0
ion No.						
se Pre-requisites	Business Statistics					
requisites						
se Description	This course is intended to enhance the data analysis skills using Microsoft Excel. Emphasis will be on the analysis and interpretation of data. Data analysis will be carried out incorporating different add inns in excel for the calculations. Parametric and non-parametric inferential procedures will be discussed.					
se Objective	This course is designed to improve the learner's EMLOYABILITY SKILLS by using skill development					
se Outcomes	On successful completion of the course the students shall be able to: 03. Interpret data using parametric test procedures 04. Use excel add inns to analyze and interpret data					
se Content:						
ule 1	**metric Test for means**	nment	g excel Add-inn		**3 Sessions**	
cs: Meaning of Statistical hypotheses – Null and alternative hypotheses – Type I and Type II errors– level of significance- testing procedure. Test for single mean (known and unknown variance) – Test for equality of two means (known and unknown variances) – paired t test – one way ANOVA						
ule 2	**for Variances and**	nment	g excel Add-inn		**7 Sessions**	

	proportions			

cs:

for single variance – test for equality of two variances. Test for single proportion and test for equality of two proportions. Test for correlation and regression coefficients.

ect work/Assignment:

Solving testing of hypothesis problems

Text Book:

1. Levine David M (2017) Statistics for Managers, Using Microsoft Excel, Eighth Edition, Pearson, New Delhi.

Catalogue prepared by	Dr. Jayakrishna Udupa
Recommended by the Board of Studies on	
Date of Approval by the Academic Council	

se Code: MBA1030	**se Title: Personal and Professional Business Networking Skills** **of Course: VALUE ADDED COURSE**	**– P – C**	**1 – 0 – 0 – 0**
sion No.			
se Pre-requisites	k) Self-Discipline l) Personal quests to learn and improve themselves m) Basic communication skills n) Marketing Management o) Organizational Behaviour		
-requisites			
se Description	The key to personal and professional success in today's fast-paced, linked world is cultivating strong networks. Opportunities, insights, and support for reaching your goals may all materialize through a strong network. Nevertheless, it takes intentional efforts and careful preparation to construct such a network. In this post, we will go into proven methods for building and growing your network, supported by practical examples to show how they work This value-added course is being conducted as a **Personal Growth Lab Program.** The purpose of this enriching course is to provide students with the tools they need to succeed in their personal and professional lives; it is part of the Personal Growth Lab Program.		

	A person's holistic self-improvement is the focus of Personal Growth Lab. A person can achieve this goal to the best of their abilities when they have self-awareness, know their own strengths and areas for improvement, conquer their fears, adapt to new situations and environments, think creatively and push their limits, cultivate an optimistic outlook, and ultimately become the most esteemed and valued versions of themselves. ▪ In their respective families, ▪ In the Organizations that they intend to work for ▪ In the Society that they live and finally ▪ To Our Country at large. In a lab, students work in a structured environment with dedicated Professor as Faculty and other experimenters who provide constant feedback and assistance. Students should take stock of their personal, interpersonal, professional, and life objectives before jumping headfirst into networking skills, both on the personal and professional fronts whether they are seeking a Job, Career advancement, mentorship, or start their own business. Caselets, presentations, weekend assignments, and a mini-project with lots of learning interaction and personal engagement support the course's overall experiential learning approach.
se Outcomes	On successful completion of this course the students shall be able to: 7) Learn and develop the art of interacting with Professionals 8) Create a strong network of Professional connections in the sector of your choice 9) Develop relationships that last long 10) Showcase one's abilities, qualities, assess others qualities 11) Develop Strategic networking that will help the student to discover secret employment markets, industry events, and special business prospects. 12) Use networking to investigate other job routes, get mentoring, and get direction that could assist quicken your professional journey.
se Objective:	The sole objective of the course is on building, improving, developing, sustaining long lasting personal and professional contacts to ameliorate their career and life.
LIST OF ACTIVITIES / TOPICS : 15 Sessions	
CS/ ACTIVITIES/ LAB THEMES **8. Introduction to personal and professional business networking [1 Session]** Test your networking skills - paper and pencil test, ice breaker on how to interact **9. Your Network is your net worth – Opportunities to Explore [1 Session]**	

Activity – **Identify, Approach, Establish Networks** across your personal and peer circles - Individual and Group Network abilities – CA – 20 Marks (1 Week time).

10. How to develop your INDIVIDUAL NETWORKING SKILLS – [5 Sessions]

I. Personal Branding – What's your PBA, Learn to make your IKIGAI? Activity
J. Networking with confidence
K. Picking up the right people
L. Goal Setting
M. Networking with people who could let you down - Cutting ties with those that do not meet your standards.
N. Engaging in both proactive and reactive approaches to building your network connections.
O. Who should typically be in your personal and professional network?
P. What should be the optimal size of your personal and professional network

11. How to improve your networking skills [1 Session]

- The 3 Ps personal networking - prepare practice and pull yourself together.
- Approachability, Availability

12. HOW NETWORKING AND INTERPERSONAL RELATIONS [3 Sessions]

D. INTERPERSONAL RELATIONS LAB – BASIC LAB - THEME
How to interact with people
E. INTERPERSONAL RELATIONS LAB – THEME LAB
The sensitive art of praising/ appreciating to win over people
F. INTERPERSONAL RELATIONS LAB – THEME LAB
How to take an insult with a smile and learn to move ahead in life towards success

13. PROFESSIONAL NETWORKING - Business Networking [3 Sessions]

Definition, Industry – eco-system, its partnerships and its various stakeholders – key account holders, partners, suppliers, alliances, Draw a net map of your current network, Practice and receive Practise and receive feedback on initiating conversations with people you don't know

14. NETWORK CONTROL [1 Session]

Network challenges, Effective Control and the perfect networker profile **[1 Session]**

eted Application & Tools that can be used: NA

ect work/Assignment:

6. **This course has a field assignment based on which the student will be evaluated for 100 marks**
7. **No special social media tools or skills will be imparted in this program**

8. **Non-Serious Students** will be expelled from the course and no attendance will be given to them. They will be declared fail in the VAC and they need to explore if any other Value-Added Course would suit them in developing themselves.
9. **In addition to the above, a note will be sent to their Parents, and higher Authorities on Campus with a special note to the placement department that they are unfit for placements.**
10. **Non-serious students are those as under:**
    - Not coming to the class on time
    - Sleeping in Class
    - Class disturbers
    - Watching mobile while the session is on
    - Absentees without information
    - Not participating in the Activities/ Lab Sessions
    - Not producing the required field-based Project Work / Assignment

Activity: Assessment Test: Areas to Improve

Assignment 1: Identify, build and develop their first circle of contacts to network

Assignment 2: Presentation: What are the various factors that limit or inhibit them and skills to gain for personal and professional networking

Assignment 3: Oral/ Written Note: Sharing Experiences: Interpersonal Relations

Assignment 4: Develop a strategic plan to leverage networking for securing a desired corporate job, obtaining industry mentorship, and gaining guidance to enhance professional development.

Project Work: The student will identify and explore across his references and contacts and builds his/her personal networking contacts and submits the same as an assignment.

This project work will carry 50 marks
Assignments: 50 Marks

The above assignments will carry 10 marks each totaling 40 marks and another 10 marks for class discipline, learning enthusiasm, interaction and timely submission of assignments.

Text Book:

NO SELECT PRESCRIBED TEXT BOOK IS AVAILABLE N THE CHOSEN VALUE ADDED COURSE

References

19. Tools for Handling Tough Conversations by Patterson, K. Grenny, J. McMillan, R. and Switzler, A.
20. Patterson, K., Grenny, J., McMillan, R., and Switzler, A. (2002). Crucial conversations: tools for talking when stakes are high. New York: McGraw-Hill. ISBN: 0-07-140194-6
21. Scott, Susan. (2002). Fierce conversations – achieving success at work and in life, one
22. conversation at a time. New York: Berkley Publishing. ISBN: 0-425-19337-3
23. Douglas Stone (Author) , Bruce Patton (Author) , Sheila Heen (Author) & 1 more (1999). Difficult Conversations: How to Discuss What Matters
24. New York: Penguin. ISBN: 0 14 02.8852X Penguin Books

25. Brehm, S. S., Miller, R. S., Perlman, D., & Campbell, S. M. (2001). Intimate Relationships (3rd Edition). New York: McGraw-Hill. ISBN: 978-0-07-337018-7
26. Interaction Ritual (Paperback)Author: Erving Goffman
27. Publisher: Knopf Doubleday Publishing Group (1982)
28. Skill with people by Les Giblin ISBN: 0-9616418-0-6
29. Give and take by Adam Grant
30. Giftology by John Ruhlin
31. Super Connector by Scott Gerber and Ryan Paugh
32. Never Eat Alone by Keith Ferrazzi and Tahl Raz
33. The Corporate Culture survival guide by Edgar H Schien, Published by Jossey-Bass, Wiley Imprint
34. **How to Win Friends and Influence People** by Dale Carnegie
35. How to Speak How to Listen by Mortimer J. Adler (Author)
36. **Skill with People** by Les Giblin

Articles:
Select articles would be shared to students to enhance their learning to the practice

Case Studies:
Select live scenarios/ examples from the Course Instructors experiences/ SDPs/ MDPs conducted, would be shared with the students in the class session. Students would investigate and engage in class by hearing about the experiences of the instructors.

Catalogue prepared by	Dr Ravi Prakash Kodumagulla, Professor, School of Management, Presidency University
Recommended by the Board of Studies on	NO: held on 28-12-2024
Date of Approval by the Academic Council	emic Council Meeting No.

Course Code: MBA1033	**Course Title: Personal Branding: Aligning Values with Career Success** **Type of Course:** Value Added Course	**L – T – P - C** 1 – 0 – 0 - 0
Version No.	1.0	
Course Pre-requisites	• Communication and Interpersonal Skills • Career Planning and Development	
Anti-requisites	NIL	

Course Description	This course focuses on the critical role of personal branding in aligning one's values, aspirations, and strengths with career success. It explores the intersection of personal identity and professional branding, emphasizing self-awareness, strategic communication, and effective networking. Students will gain the skills needed to articulate their unique value propositions confidently and authentically to potential employers and professional networks. The course integrates theoretical concepts with practical tools to enable students to develop a coherent, impactful personal brand.			
Course Outcomes	On completion of this course, the student will be able to: **CO1:** Define the concept of personal branding and its relevance to career development. [Remember] **CO2:** Evaluate the role of core values and strengths in shaping a personal brand. [Evaluate] **CO3:** Design a personal brand narrative using strategic communication techniques. [Create] **CO4:** Implement effective networking strategies for career growth. [Apply]			
Course Objective	This course is designed to enhance learners' EMPLOYABILITY SKILLS by using PARTICIPATIVE LEARNING techniques.			
Module 1	**Introduction to Personal Branding**	Assignment (Participative Learning)	Self-Reflection Report	**03 Hours**
Topics: Understanding Personal Branding; The Role of Values, Strengths, and Aspirations; Components of a Personal Brand; Traditional vs. Modern Career Planning; The Importance of Authenticity in Professional Branding.				
Module 2	**Strategic Communication for Personal Branding**	Assignment (Participative Learning)	Personal Brand Narrative Development	**03 Hours**
Topics: Crafting Your Story; Leveraging Communication Tools; Tailoring Messages for Different Audiences; Aligning Professional Documents with Branding Goals (Resume, Cover Letters, and Portfolios).				
Module 3	**Networking Skills and Strategies**	Assignment (Experiential Learning)	Networking Strategy Plan	**05 Hours**
Building a Meaningful Network; Identifying Key Professional Contacts; Using Social Media Platforms Effectively; The Power of Informational Interviews; Creating Opportunities through Networking.				
Module 4	**Personal Branding in Action**	Assignment (Experiential Learning)	LinkedIn Profile Optimization and Mock Interviews	**04 Hours**
Topics:				

Demonstrating Your Brand in Interviews; Enhancing Online Presence; Aligning Personal and Professional Goals; Case Studies of Successful Personal Branding; Overcoming Challenges in the Job Market.

Targeted Application & Tools that can be used:

Students would be encouraged to take up live projects and through experiential learning activities in theclassroom.

Professionally Used Software: LinkedIn and Canva

Project work/Assignment:

- Self-Reflection Report (20 marks): Reflective essay on personal values, strengths, and career goals.
- Personal Brand Narrative Assignment (25 marks): Develop and present a personal brand story.
- Networking Strategy Plan (15 marks): Create and present a networking roadmap.
- Mock Interview (20 marks): Simulate an interview demonstrating personal branding alignment.
- Resume & LinkedIn Profile Optimization (10 marks): Update resume and LinkedIn profile based on personal branding principles.
- Class Participation & Engagement (10 marks): Active involvement in discussions and peer feedback.

Text Books:

T1: You Are The Brand: The 8-Step Blueprint to Showcase Your Unique Expertise and Build a Highly Profitable, Personally Fulfilling Business – Mike Kim, Morgan James Publishing, 2021.

T2: Digital You: Real Personal Branding in the Virtual Age - William Arruda, Association for Talent Development, 2019.

References:

R1: Dare to Lead: Bold Work. Tough Conversations. Whole Hearts. – Brené Brown, Random House, 2018.

R2: The Long Game: How to Be a Long-Term Thinker in a Short-Term World - Dorie Clark, Harvard Business Review Press, 2021.

Online Resources:

- "Introduction to Personal Branding" – Coursera (https://www.coursera.org/learn/personal-branding?utm_source=chatgpt.com)
- **Building a Professional Brand on LinkedIn – (**https://alison.com/course/building-a-professional-brand-on-linkedin)
- How to build a Personal Brand on LinkedIn | Creator Masterclass (https://www.youtube.com/watch?v=h6LF1Anx9kc)
- Building Your Personal Brand on LinkedIn: A Step-by-Step Course (https://taplio.com/blog/linkedin-personal-brand-crash-course)

Catalogue prepared by	Dr. Uttam Chakraborty
Recommended by the Board ofStudies on	

Date of Approval by the Academic Council	

se Code: **.1032**	se Title: **Python Programming** of Course: VAC	P- C		0	0	0
ion No.						
se Pre-requisites	NO prerequisites					
requisites						
se Description	This Python programming course is designed to provide learners with a comprehensive understanding of Python's capabilities, ranging from the basics to advanced applications. The course emphasizes practical learning through hands-on exercises, real-world projects, and industry-relevant use cases. Participants will explore Python's versatility in data analysis, web scraping, automation, and machine learning, making it ideal for aspiring programmers, data analysts.					
se Objective	This course aims to equip learners with a strong foundation in Python programming, covering essential concepts, practical applications, and advanced topics.					
se Outcomes	5. Demonstrate basic programming skills in Python for business analytics. 6. Solve messy data problems across data structures using Pandas and Numpy. **7.** Develop solutions using Python Object Oriented Programming**.** **8.** Solve a business problem using Python					
se Content:	Solve messy data problems across data structures using Pandasand Numpy					
ule 1	Develop solutions using Python Object Oriented Programming	ning to fundamentals	: Programming concepts	3 Hours		
Topics:.Overview of Python. Installation and Setup. Syntax, Variables, and Data Types Input and Output Operations.						
ule 2		ning to fundamentals	: Programming concepts	4 Hours		
Basic Operators (Arithmetic, Relational, Logical, Assignment, Bitwise).Decision-Making Statements (if, elif, else).Loops (for, while, nested loops) Break, Continue, and Pass. Functions (Built-in, User-defined, Lambda, Recursion)						

- **Libraries Introduced:**
  - Collections (Counter, defaultdict, OrderedDict, namedtuple, deque)
  - os, shutil, csv

ule 3	Data Structures, OOP, and File Handling	ramming	ramming Concepts	4 Hours

- Topics:.Lists, Tuples, Sets, Dictionaries, List and Dictionary Comprehensions, Strings and String Methods, Iterators and Generators, Mutable vs. Immutable Data Structures.
- **Libraries Introduced:**
  - Collections (Counter, defaultdict, OrderedDict, namedtuple, deque)
  - os, shutil, csv

Module 4	Data Structures, OOP, and File Handling	ramming	ramming Concepts	4 Hours

Object-Oriented Programming (Classes, Objects, Inheritance, Polymorphism, Encapsulation),Working with Files (Read, Write, Append, CSV Handling),Exception Handling (Try, Except, Finally, Custom Exceptions)

- **Libraries Introduced:**
  - Collections (Counter, defaultdict, OrderedDict, namedtuple, deque)
  - os, shutil, csv

ect work/Assignment:

Assignment 1:TBD

Book

T 1:Core Python Programming
Author: Nageswara Rao R
Focus: Detailed coverage of Python fundamentals, object-oriented programming, exceptions, data structures,

References
Books: Introduction to Python Programming
Authors: S. Gowrishankar and A. Veena
Focus: Beginner-friendly, covering fundamental concepts in Python programming.

Python Programming
Authors: Dr. Jisu Elsa Jacob and Bharath Viswam S

Focus: Comprehensive coverage of data types, control flow, functions, and object-oriented programming.

An Introduction to Python Programming: A Practical Approach
Authors: Dr. Krishna Kumar Mohbey and Dr. Brijesh Bakariya
Focus: Practical approach with examples, covering Python basics to advanced topics.

Python Programming
Author: Rupesh Nasre
Focus: Basics to web application development, suitable for beginners and intermediate learners.

dly note: Student should visit PU library and access the online resources for the same and incorporate the assignment as well as attach the photo of log in and log out in person in the end of the assignment file.)

Research Articles in Journals

https://presiuniv.knimbus.com/user#/home
Videos

Corey Schafer

- Comprehensive tutorials on Python, covering beginner to advanced topics.
- Watch here

freeCodeCamp.org

- Extensive Python tutorials, including long-form courses on data analysis, machine learning, and more.
- Watch here

Programming with Mosh

- Engaging Python tutorials focusing on real-world applications, perfect for beginners and professionals.
- Watch here

Tech with Tim

- Project-based tutorials that guide you in building practical Python applications, including games and automation scripts.

Catalogue prepared by	Dr P. A Manoj Kumar & Dr. Varalakshmi Dandu
Recommended by the Board of Studies on	NO:
Date of Approval by the Academic Council	emic Council Meeting No. :