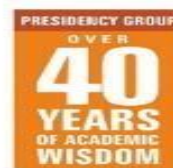




PRESIDENCY UNIVERSITY

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



SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION SCIENCE

COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING) [CAI]

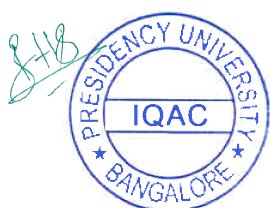
Ref. No: PU/SOCSE/CAI/ATR/BOS-12/2021-22

Date: 26-07-2022

Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Every teacher wants to interact with students , and give real life examples	Teachers are trained to conduct activity based learning and special attention is taken to give real time scenarios in the lab as well as in theory
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Provide internship program to the student as it might help them to face challenges in their work environment.	Students are advised to take internships from the industry
4	More programming languages needs to be added	Discussed in the BOS and included more programming languages to the curriculum



Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality.	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes.	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs.
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc.	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity-based education which is more student-centric.

Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Increase training sessions on aptitude and programming language	Included special training on Programming language and aptitude.
2	Conduct mock interviews and group discussions before placement drives	Special training are given to the students
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

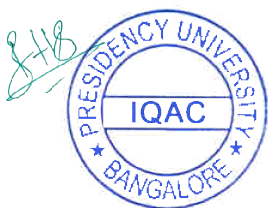
Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech CAI Program)

Sl.No	COURSE	Course Code	Credits
1	Data Structures and Algorithms	CSE 201 / CSE2001	3
2	Digital Design	CSE 202 / CSE2015	3
3	Database Management Systems	CSE 207/ CSE298/ CSE2012	3
4	Object Oriented Programming	CSE 204/CSE2008/ CSE2002	3
5	Analysis of Algorithms	CSE 212 / CSE2007	3
6	Software Engineering and Project Management	CSE 227 / CSE2014	3
7	Principle of Artificial Intelligence	CSE 308 / CSE 228 / CSE3001	3
8	Big Data Analytics	CSE 219 / CSE3002	3

9	Internet of Things	CSE 220 / CSE3003	3
10	Digital Image Processing	CSE395/CSE3081	3
11	Parallel Computing	CSE 305 / CSE3079	3
12	Theory of Computations	CSE 208/CSE2018	3
13	Mobile Applications Development	CSE 310/CSe3075	3
14	Microprocessors and Microcontrollers	CSE206/CSE3074	3
15	Operating Systems	CSE 210 / CSE2010	3
16	Distributed Systems	CSE368/CSE2052	3
17	Social Network Analysis	CSE404/CSE3039	3
18	Programming in Advanced Java	CSE 301 / CSE2035	3
19	Cloud Computing	CSE 306 / CSE233 / CSE201/CSE2013	3
20	Software Architecture	CSE 314 / CSE3089	3
21	Compiler Design	CSE 217 / CSE3077	3
22	Data Mining	CSE307/CSE2021	3
23	Computer Organization and Architecture	CSE205/CSE 223 / CSE2009	3
24	Discrete Mathematics	CSE 203 / CSE2016	3
25	Data Communications and Computer Networks	CSE211/CSE 2011	3
26	Introduction to Bio Informatics	CSE 325/CSE3069	3
27	Software Testing and Quality Assurance	CSE 396/CSE3084	3
28	Artificial Intelligence and Neural Networks	CSE3006	3
29	Object Oriented analysis and Design with UML	CSE 248 /CSE3082	3
30	Problem Solving using JAVA	CSE1001	3
31	Programming in C# and .NET framework	CSE302/CSE3091	3
32	Digital and Mobile Forensics	CSE397/CSE3099	3
33	Cryptography and Network Security	CSE 215 / CSE3078	3
34	Artificial Inteligence and Machine Learning	CSE3001	3
35	Computer Graphics	CSE2066	3
36	Web Technologies	CSE2067	3
37	Fundamentals of Data Analytics	CSE2027	3



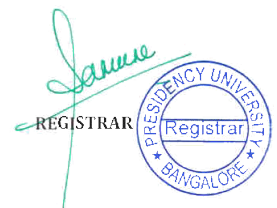
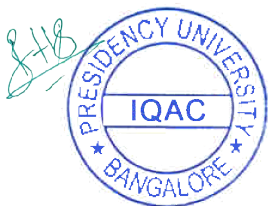
Annexure – 2

List of New Courses included for the Academic Year 2021-22 (B.Tech-CAI Program)

Sl.No	COURSE	Course Code	Credits
1	Machine learning Techniques	CSE3008	3
2	Introduction to Fuzzy Logic	CSE3007	3



Assoc. Dean – CSE



**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER SCIENCE AND ENGINEERING (B LOCK CHAIN) [CBC]

Ref. No: PU/SOCSE/CBC/ATR/BOS-12/2021-22

Date: 26-07-2022

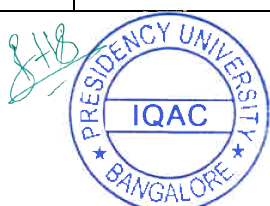
Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality.	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes.	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs.
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc.	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity-based education which is more student-centric.



Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

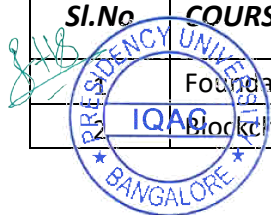
List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech CBC Program)

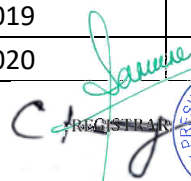
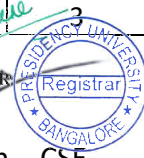
Sl. No	COURSE	Course Code	Credits
1	Data Structures and Algorithms	CSE 201 / CSE2001	3
2	Analysis of Algorithms	CSE 212 / CSE2007	3
3	Big Data Analytics	CSE 219 / CSE3002	3
4	Parallel Computing	CSE 305 / CSE3079	3
5	Mobile Applications Development	CSE 310/CSE3075	3
6	Microprocessors and Microcontrollers	CSE206/CSE3074	3
7	Operating Systems	CSE 210 / CSE2010	3
8	Cloud Computing	CSE 306 / CSE233 / CSE201/CSE2013	3
9	Introduction to Bio Informatics	CSE 325/CSE3069	3
10	Object Oriented analysis and Design with UML	CSE 248 /CSE3082	4
11	Problem Solving using JAVA	CSE1001	3
12	Cryptography and Network Security	CSE 215 / CSE3078	3
13	Fundamentals of Data Analytics	CSE2027	3
14	Innovation Project - Arduino using C	CSE1002	2

Annexure – 2

List of New Courses included for the Academic Year 2021-22 (B.Tech-CBC Program)

Sl.No	COURSE	Course Code	Credits
1	Foundations of Blockchain Technology	CSE2019	3
2	Blockchain Technology and Application	CSE2020	3





 Assoc. Dean – CSE

**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER SCIENCE AND TECHNOLOGY (Big Data) [CBD]

Ref. No: PU/SOCSE/CBD/ATR/BOS-12/2021-22

Date: 26-07-2022

Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Students and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity-based education which is more student-centric.

Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included

3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
---	--	---

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech-CBD Program)

Sl.No	COURSE	Course Code	Credits
1	Analysis of Algorithms	CSE 212 / CSE2007	3
2	Big Data Analytics	CSE 219 / CSE3002	3
3	Parallel Computing	CSE 305 / CSE3079	3
4	Mobile Applications Development	CSE 310/CSE3075	3
5	Microprocessors and Microcontrollers	CSE206/CSE3074	3
6	Operating Systems	CSE 210 / CSE2010	3
7	Cloud Computing	CSE 306 / CSE233 / CSE201/CSE2013	3
8	Introduction to Bio Informatics	CSE 325/CSE3069	3
9	Object Oriented analysis and Design with UML	CSE 248 /CSE3082	4
10	Problem Solving using JAVA	CSE1001	3
11	Cryptography and Network Security	CSE 215 / CSE3078	3
12	Fundamentals of Data Analytics	CSE2027	3
13	Innovation Project - Arduino using C	CSE1002	2
14	Data Communication and Computer Networks	CSE211/CSE2011	3

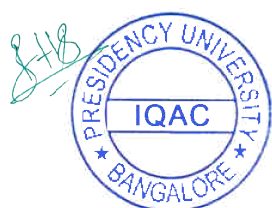
Annexure – 2

List of New Courses included for the Academic Year 2021-22 (B.Tech-CBD Program)

Sl.No	COURSE	Course Code	Credits
1	No SQL Databases	CSE2024	4
2	Web Intelligence and Analytics	CSE3031	3
3	Streaming Data Analytics	CSE3032	3
4	Big Data Security and Privacy	CSE3034	3



Assoc. Dean – CSE



**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY) [CCS]

Ref. No: PU/SOCSE/CCS/ATR/BOS-12/2021-22

Date: 26-07-2022

Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Need project-based learning	Instead of giving assignments, decided to involve students in mini projects
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	More materials are required	Ensured that library has enough text books and reference books for each subject. Each faculty requests the required titles and the number of copies required
4	Industry required courses need to be added based on the current trend and to bring flexibility for opting it	New elective courses have been included in the curriculum

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
4	Bring in more training which will help students to complete their certification in the cyber security field	VAC are added in the mentioned domain to give additional knowledge in the mentioned domain.

Feedback from Alumni and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
4	Bring in more training which will help students to complete their certification in the cyber security field	VAC are added in the mentioned domain to give additional knowledge in the mentioned domain.

Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
4	Bring in more training which will help students to complete their certification in the cyber security field	VAC are added in the mentioned domain to give additional knowledge in the mentioned domain.

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech CCS Program)

Sl.No	COURSE	Course Code	Credits
1	Data Structures and Algorithms	CSE 201 / CSE2001	3
2	Object Oriented Programming	CSE 204/CSE2008/ CSE2002	3
3	Design of Analysis and Algorithms	CSE 212 / CSE2007	3
4	Big Data Analytics	CSE 219 / CSE3002	3
5	Internet of Things	CSE 220 / CSE3003	3

6	Parallel Computing	CSE 305 / CSE3079	3
7	Mobile Applications Development	CSE 310/CSe3075	3
8	Microprocessors and Microcontrollers	CSE206/CSE3074	3
9	Operating Systems	CSE 210 / CSE2010	3
10	Cloud Computing	CSE 306 / CSE233 / CSE201/CSE2013	3
11	Introduction to Bio Informatics	CSE 325/CSE3069	3
12	Object Oriented analysis and Design with UML	CSE 248 /CSE3082	3
13	Problem Solving using JAVA	CSE1001	3
14	Cryptography and Network Security	CSE 215 / CSE3078	3
15	Innovation Project - Arduino using C	CSE1002	2
16	Fundamentals of Data Analytics	CSE2027	3

Annexure – 2

No New Courses included for the Academic Year 2021-22 (B.Tech – CCS Program)



Assoc. Dean – CSE



**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE) [CDS]

Ref. No: PU/SOCSE/CDS/ATR/BOS-12/2021-22

Date: 26-07-2022

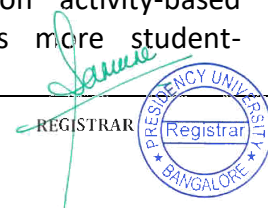
Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
2	Every teacher wants to interact with students, and give real life examples	Teachers are trained to conduct activity based learning and special attention is taken to give real time scenarios in the lab as well as in theory
3	Make new events and provide some more books in library for reference	Number of Seminars/workshops are increased and ensured that all the reference materials are procured and kept in the library

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching, such as seminar presentations, group discussions etc.	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity-based education which is more student-centric.



Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

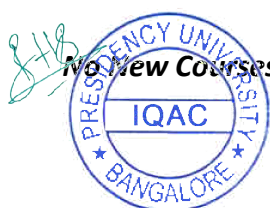
Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech CDS Program)

Sl.No	COURSE	Course Code	Credits
1	Data Structures and Algorithms	CSE 201 / CSE2001	3
2	Design and Analysis of Algorithms	CSE 212 / CSE2007	3
3	Cryptography and Network Security	CSE 215 / CSE3078	3
4	Big Data Analytics	CSE 219 / CSE3002	3
5	Parallel Computing	CSE 305 / CSE3079	3
6	Mobile Applications Development	CSE 310/CSE3075	3
7	Microprocessors and Microcontrollers	CSE206/CSE3074	3
8	Operating Systems	CSE 210 / CSE2010	3
9	Cloud Computing	CSE 306 / CSE233 / CSE201/CSE2013	3
10	Introduction to Bio Informatics	CSE 325/CSE3069	3
11	Object Oriented analysis and Design with UML	CSE 248 /CSE3082	4
12	Fundamentals of Data Analytics	CSE2027	3
13	Artificial Intelligence and Machine Learning	CSE3001	3

Annexure – 2

New Courses included for the Academic Year 2021-22 (B.Tech-CDS Program)



Assoc. Dean – CSE

**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER SCIENCE AND TECHNOLOGY(DevOps) [CDV]

Ref. No: PU/SOCSE/CDV/ATR/BOS-12/2021-22

Date: 26-07-2022

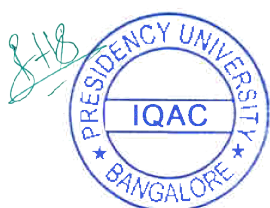
Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity-based education which is more student-centric.



Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

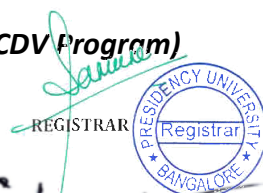
Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech CDV Program)

Sl.No	COURSE	Course Code	Credits
1	Computer Programming	CSE151	4
2	Data Structures and Algorithms	CSE 201 / CSE2001	3
3	Design and Analysis of Algorithms	CSE 212 / CSE2007	3
4	Cryptography and Network Security	CSE 215 / CSE3078	3
5	Big Data Analytics	CSE 219 / CSE3002	3
6	Parallel Computing	CSE 305 / CSE3079	3
7	Mobile Applications Development	CSE 310/CSE3075	3
8	Microprocessors and Microcontrollers	CSE206/CSE3074	3
9	Operating Systems	CSE 210 / CSE2010	3
10	Cloud Computing	CSE 306 / CSE233 / CSE201/CSE2013	3
11	Introduction to Bio Informatics	CSE 325/CSE3069	3
12	Data Communication and Computer Networks	CSE211/CSE 2011	4
13	Object Oriented analysis and Design with UML	CSE 248 /CSE3082	4
14	Innovation Project - Arduino using C	CSE1002	2
15	Fundamentals of Data Analytics	CSE2027	3

Annexure – 2

No New Course is included for the Academic Year 2021-22 (B.Tech-CDV Program)



Assoc. Dean – CSE

**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER ENGINEERING (COM)

Ref. No: PU/SOCSE/COM/ATR/BOS-12/2021-22

Date: 26-07-2022

Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Students and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Programming language-based training for placement could be given to the students which will help to crack the interview	Special training session is organized for the students who are preparing for the placement drive.
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
4	Courses should include real time application	Special attention is taken to introduce more real time scenarios while conducting lab sessions and during delivery of theory
5	Course content should be a little deeper.	Taken care during the design of curriculum

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc.	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity-based education which is more student centric.

Feedback from Alumni and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Programming language-based training for placement could be given to the students which will help to crack the interview	Special training session is organized for the students who are preparing for the placement drive.
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Increase training sessions on aptitude and programming language	Included special training on Programming language and aptitude.
2	Conduct mock interviews and group discussions before placement drives	Special training is given to the students
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech-COM Program)

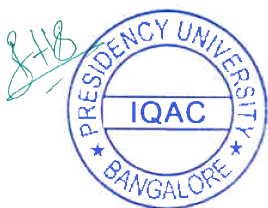
Sl No.	COURSE	Course Code	Credits
1	Data Structures and Algorithms	CSE 201 / CSE2001	3
2	Object Oriented Programming	CSE 204 / CSE2008/ CSE2002	3
3	Big Data Analytics	CSE 219 / CSE3002	3
4	Internet of Things	CSE 220 / CSE3003	3
5	Parallel Computing	CSE 305 / 3088	3
6	Mobile Applications Development	CSE 310	3
7	Operating Systems	CSE 210 / CSE2010	3
8	Web Services	CSE 311	3
9	Cloud Computing and Services	CSE 306 / CSE233 / CSE201	3
10	Introduction to Bio Informatics	CSE 325	3

11	Machine learning using python	CSE261/CSE2061	4
----	-------------------------------	----------------	---

Annexure – 2
No List of New Courses included for the Academic Year 2021-22 (B.Tech-COM Program)



Assoc. Dean – CSE



**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER SCIENCE & TECHNOLOGY [CIT]

Ref. No: PU/SOCSE/CIT/ATR/BOS-12/2021-22

Date: 26-07-2022

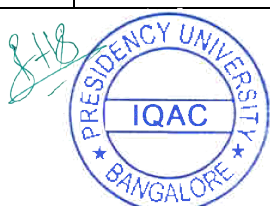
Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Need to teach the subjects in detail and enough revision and assignments has to be given	Ensured that the teachers deliver the content in detail and give enough time for revision after identifying slow and fast learners.
3	More clarity should be given what is the importance of each courses and how it helps them in the future.	Each faculty explains the course handout in detail in the introduction class itself which makes the student to understand the course in detail.

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity-based education which is more student-centric.



Feedback from Employer and action taken report

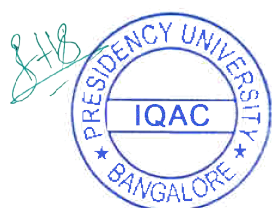
Sl. No	Feedback/Suggestions	Action Taken
1	Increase training sessions on aptitude and programming language	Included special training on Programming language and aptitude.
2	Conduct mock interviews and group discussions before placement drives	Special training are given to the students
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech -CIT Program)

Sl.No	COURSE	Course Code	Credits
1	Design and Analysis of Algorithms	CSE 212 / CSE2007	3
2	Cryptography and Network Security	CSE 215 / CSE3078	3
3	Big Data Analytics	CSE 219 / CSE3002	3
4	Parallel Computing	CSE 305 / CSE3079	3
5	Mobile Applications Development	CSE 310/CSE3075	3
6	Microprocessors and Microcontrollers	CSE206/CSE3074	3
7	Operating Systems	CSE 210 / CSE2010	3
8	Cloud Computing	CSE 306 / CSE233 / CSE201/CSE2013	3
9	Introduction to Bio Informatics	CSE 325/CSE3069	3
10	Object Oriented analysis and Design with UML	CSE 248 /CSE3082	4
11	Fundamentals of Data Analytics	CSE2027	3



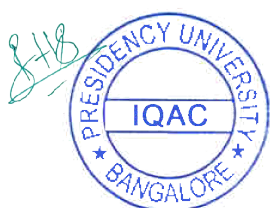
Annexure – 2

List of New Courses included for the Academic Year 2021-22 (B.Tech-CIT Program)

Sl.No	COURSE	Course Code	Credits
1	Theory of Computations	CSE 208/CSE2018	3
2	Artificial Intelligence and Neural Networks	CSE3006	3
3	Problem Solving using JAVA	CSE1001	3
4	Innovation Project - Arduino using C	CSE1002	2
5	Innovation Project - Raspberry Pi using Python	CSE1003	2
6	Computer Graphics	CSE2066	3
7	Web Technologies	CSE2067	3
8	Information Security and Management	CSE2060	3
9	Data Handling and Visualization	CSE2026	3



Assoc. Dean – CSE



**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER SCIENCE AND ENGINEERING (CSE)

Ref. No: PU/SOCSE/CSE/ATR/BOS-12/2021-22

Date: 26-07-2022

Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Industry required courses need to be added based on the current trend and to bring flexibility for opting it	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Proper balance between theory and practical is required	More practical components are added in the curriculum
4	Requested for change of class timing and lunch break	Class timing is changed to 9am to 4pm and lunch break is extended.
5	Teacher must make interesting and interactive class so that students can concentrate and enjoy the subject	All the faculties are given training for activity-based learning and instructed to execute in the class room

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity based education which is more student centric.

Feedback from Alumni and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Feedback from Employer and action taken report

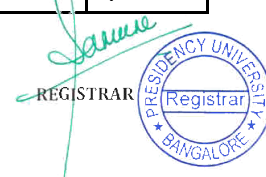
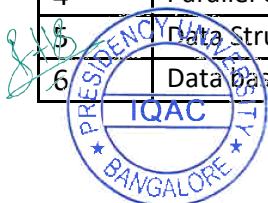
Sl. No	Feedback/Suggestions	Action Taken
1	Increase training sessions on aptitude and programming language	Included special training on Programming language and aptitude.
2	Conduct mock interviews and group discussions before placement drives	Special training are given to the students
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech-CSE Program)

S. No.	COURSE	Course Code	Credits
1	Internet of Things	CSE 220	3
2	Cloud Computing	CSE 306	3
3	Image Processing	CSE 395	3
4	Parallel Computing	CSE 305	3
5	Data Structures and Algorithms	CSE201/CSE2001	4
6	Database Management system	CSE207/CSE2012	4



Annexure – 2

List of New Courses included for the Academic Year 2021-22 (B.Tech-CSE Program)

S. No.	COURSE	Course Code	Credits
1.	Theory of Computation	CSE 2018	3
2.	Programming in Python and its applications	CSE 3092	3
3.	Design and Analysis of Algorithms	CSE 2007	3
4.	Problem Solving using Java	CSE 1001	3
5.	Fundamental of Data Analysis	CSE 2027	3
6.	Data Structures using C	CSE 296	3
7.	Data Communication and Networking	CSE 2011	4
8.	Principles of Artificial Intelligence	CSE 3001	2
9.	Neural Networks	CSE 3068	3
10.	Advanced Computer Networks	CSE 3070	3
11.	Computer Vision	CSE 3071	3
12.	Evolutionary Computing	CSE 3072	3
13.	Machine Vision	CSE 3074	4
14.	Mobile Application Development	CSE 3075	3
15.	Cryptography & Network Security	CSE 3078	3
16.	Multi Core Architecture	CSE 3079	3
17.	Quantum Computing	CSE 3080	3
18.	Advanced Object-Oriented Programming	CSE 3081	3
19.	Software Quality Assurance	CSE 3084	3
20.	Real Time operating system	CSE 3085	3
21.	Advanced Computer Graphics	CSE 3086	3
22.	Distributed Computing	CSE 3087	3
23.	Parallel Computing	CSE 3088	3
24.	Programming in C# and .NET framework	CSE 3091	3
25.	Distributed System	CSE2052	3
26.	Natural Language Processing	CSE3014	3
27.	Deep Learning Techniques	CSE3010	3



Assoc. Dean – CSE



**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

COMPUTER SCIENCE AND ENGINEERING (IoT)

Ref. No: PU/SOCSE/IOT/ATR/BOS-12/2021-22

Date: 26-07-2022

Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Every teacher wants to interact with students, and give real life examples	Teachers are trained to conduct activity based learning and special attention is taken to give real time scenarios in the lab as well as in theory
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity based education which is more student-centric.



Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised.

Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech-IOT Program)

Sl.No	COURSE	Course Code	Credits
1	Data Structures and Algorithms	CSE 201 / CSE2001	3
2	Digital Design	CSE 202 / CSE2015	3
3	Database Management Systems	CSE 207/ CSE298/ CSE2012	3
4	Object Oriented Programming	CSE 204/CSE2008/ CSE2002	3
5	Analysis of Algorithms	CSE 212 / CSE2007	3
6	Software Engineering and Project Management	CSE 227 / CSE2014	3
7	Principle of Artificial Intelligence	CSE 308 / CSE 228 / CSE3001	3
8	Big Data Analytics	CSE 219 / CSE3002	3
9	Internet of Things	CSE 220 / CSE3003	3
10	Digital Image Processing	CSE395/CSE3081	3
11	Parallel Computing	CSE 305 / CSE3079	3
12	Theory of Computations	CSE 208/CSE2018	3
13	Mobile Applications Development	CSE 310/CSe3075	3
14	Microprocessors and Microcontrollers	CSE206/CSE3074	3
15	Operating Systems	CSE 210 / CSE2010	3
16	Distributed Systems	CSE368/CSE2052	3
17	Social Network Analysis	CSE404/CSE3039	3
18	Programming in Advanced Java	CSE 301 / CSE2035	3
19	Cloud Computing	CSE 306 / CSE233 / CSE201/CSE2013	3
20	Software Architecture	CSE 314 / CSE3089	3
21	Compiler Design	CSE 217 / CSE3077	3
22	Data Mining	CSE307/CSE2021	3
23	Computer Organization and Architecture	CSE205/CSE 223 / CSE2009	3
24	Discrete Mathematics	CSE 203 / CSE2016	3
25	Data Communications and Computer Networks	CSE211/CSE 2011	3
26	Introduction to Bio Informatics	CSE 325/CSE3069	3
27	Software Testing and Quality Assurance	CSE 396/CSE3084	3
28	Artificial Intelligence and Neural Networks	CSE3006	3
29	Object Oriented analysis and Design with UML	CSE 248 /CSE3082	4

30	Problem Solving using JAVA	CSE1001	3
31	Programming in C# and .NET framework	CSE302/CSE3091	3
32	Digital and Mobile Forensics	CSE397/CSE3099	3
33	Cryptography and Network Security	CSE 215 / CSE3078	3
34	Artificial Intelligence and Machine Learning	CSE3001	3
35	Innovation Project - Arduino using C	CSE1002	2
36	Computer Graphics	CSE2066	3
37	Web Technologies	CSE2067	3
38	Fundamentals of Data Analytics	CSE2027	3
39	Artificial Intelligence and Machine Learning	CSE3001	3

Annexure – 2

List of New Courses included for the Academic Year 2021-22 (B.Tech-IOT Program)

Sl.No	COURSE	Course Code	Credits
1	Artificial Intelligence and Neural Networks	CSE3006	3
2	Problem Solving using JAVA	CSE1001	3
3	Innovation Project - Arduino using C	CSE1002	2
4	Web Technologies	CSE2067	3



Assoc. Dean – CSE



**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING AND INFORMATION
SCIENCE**

INFORMATION SCIENCE AND ENGINEERING (ISE)

Ref. No: PU/SOCSE/ISE/ATR/BOS-12/2021-22

Date: 26-07-2022

Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	For new current revised syllabus there should be more industry exposure	New elective courses have been included in the curriculum
2	Making the curriculum more outcome oriented	Introduced Outcome Based Education
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
4	There should be option for credit transfer facility for the students by attending courses from reputed online platforms	Students can take up courses from platforms like NPTEL
5	More lab-oriented courses are required and bring participation challenges like hackathon	Introduced more practical oriented courses in the curriculum and special attention has taken to ensure the participation in open challenges. Students are encouraged to participate in the hacker rank challenges and to get the certification done

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc.	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity-based education which is more student-

		centric.
--	--	----------

Feedback from Alumni and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	For new current revised syllabus there should be more industry exposure	New elective courses have been included in the curriculum
2	Making the curriculum more outcome oriented	Introduced Outcome Based Education
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
4	There should be option for credit transfer facility for the students by attending courses from reputed online platforms	Students can take up courses from platforms like NPTEL

Feedback from Employer and action taken report

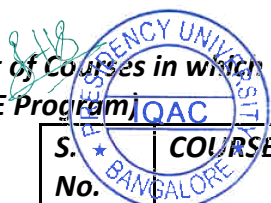
Sl. No	Feedback/Suggestions	Action Taken
1	Increase training sessions on aptitude and programming language	Included special training on Programming language and aptitude.
2	Conduct mock interviews and group discussions before placement drives	Special training are given to the students
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders

Annexure – 1

List of Courses in which Content Revision is undertaken for the Academic Year 2021-22 (B.Tech -ISE Program)

S. No.	COURSE	Course Code	Credits
1	Computer Organization and Architecture	CSE205/CSE2009	3
2	Operating Systems	CSE210/CSE2010	3



Annexure – 2

List of New Courses included for the Academic Year 2021-22 (B.Tech-ISE Program)

S. No.	COURSE	Course Code	Credits
1	Discrete Mathematical Structures	CSE 2016	3
2	Theory of Computation	CSE 2018	3
3	Computer Hardware Workshop	CSE 1003	1
4	Programming in Python and its applications	CSE 3092	3
5	Design and Analysis of Algorithms	CSE 2007	3
6	Programming in Java	CSE 2008	3
7	Fundamental of Data Analysis	CSE 2027	3
8	Data Structures using C	CSE 296	3
9	Programming in Java	CSE 408	3
10	Data Communication and Networking	CSE 2011	4
11	Principles of Artificial Intelligence	CSE 3001	2
12	Probabilistic Graphical Models	CSE 2033	4
13	Graphics Programming	CSE 2034	3
14	Neural Networks	CSE 3068	3
15	Advanced Biometrics	CSE 3069	3
16	Advanced Computer Networks	CSE 3070	3
17	Computer Vision	CSE 3071	3
18	Evolutionary Computing	CSE 3072	3
19	Machine Vision	CSE 3074	4
20	Mobile Application Development	CSE 3075	3
21	Cryptography & Network Security	CSE 3078	3
22	Multi Core Architecture	CSE 3079	3
23	Quantum Computing	CSE 3080	3
24	Advanced Object Oriented Programming	CSE 3081	3
25	Software Quality Assurance	CSE 3084	3
26	Real Time operating system	CSE 3085	3
27	Advanced Computer Graphics	CSE 3086	3
28	Distributed Computing	CSE 3087	3
29	Parallel Computing	CSE 3088	3
30	Mathematical Tools for Theoretical Computer Science	CSE 3090	3
31	Programming in C# and .NET framework	CSE 3091	3



SCIENCE

INFORMATION SCIENCE AND TECHNOLOGY (IST)

Ref. No: PU/SOCSE/IST/ATR/BOS-12/2021-22

Date: 26-07-2022

Action taken Report on Curriculum Feedback- 12th BOS

Feedback from Student and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Every teacher wants to interact with students, and give real life examples	Teachers are trained to conduct activity based learning and special attention is taken to give real time scenarios in the lab as well as in theory
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
4	Make new events and provide some more books in library for reference	Number of Seminars/workshops are increased and ensured that all the reference materials are procured and kept in the library
5	Requested for change of class timing and lunch break	Class timing is changed to 9am to 4pm and lunch break is extended.

Feedback from Faculty and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Syllabus content needs enhancement in terms of quality	All the teachers were notified about the issue and they were encouraged and enriched the curriculum with more appropriate teaching-learning methods and techniques.
2	Depth of the course content needs to be increased for achieving the expected Course Outcomes	Special sessions are arranged in the campus for all the faculty members detailing how to check the attainment of COs and POs
3	Teachers should have the freedom to adopt innovative techniques/strategies of teaching such as seminar presentations, group discussions etc	Introduced innovative projects using Arduino and using Raspberry Pi as part of the curriculum. Given special training for the faculties on activity based education which is more student-centric.

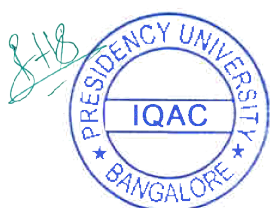
Feedback from Alumni and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Elective courses need to be selected based on the needs of the industry	New elective courses have been included in the curriculum
2	Curriculum needs to be revised based on the recent trends in computer science and engineering	Based on the needs of the industry, new courses have been included
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum
4	Seminars/Workshops/Industrial training has to be increased	Number of Seminars/workshops are increased

Feedback from Employer and action taken report

Sl. No	Feedback/Suggestions	Action Taken
1	Increase training sessions on aptitude and programming language	Included special training on Programming language and aptitude.
2	Conduct mock interviews and group discussions before placement drives	Special training are given to the students
3	Topics related to advanced programming languages need to be included	Advanced programming languages courses are included in the curriculum

Based on the feedback received from stakeholders, related courses (Annexure 1) were revised. Few new courses (Annexure 2) were also included based on the feedback received from stakeholders.



Annexure – 1

**List of Courses in which Content Revision is undertaken for the Academic Year 2021-22
(B.Tech-IST Program)**

Sl No.	COURSE	Course Code	Credits
1.	Principles of Data Communication and Computer Networks	CSE 236	3
2.	Operating Systems	CSE 210 / CSE 2010	3
3.	Advanced Computer Networks	CSE 237 / CSE 2011	3
4.	Network Simulation Lab	CSE 257	3
5.	Big Data Analytics	CSE 219	3
6.	Cloud Computing and Services	CSE 233 / CSE 2013	3
7.	Web 2.0	CSE 244	3
8.	Internet of Things	CSE 220	3
9.	Data Structures Lab	CSE 251	3
10.	Analysis of Algorithms	CSE 212 / CSE 2007	3
11.	Network Programming Lab	CSE 262 / CSE 257	3
12.	Programming in Java	CSE 2008	3
13.	Programming in Python	CSE 317	3
14.	Network Management Systems	CSE132	
15.	Cloud Computing and Visualization	CSE2057	
16.	Infrastructure Management	CSE3143	

Annexure – 2

No new courses are added in the Academic Year 2021-22.



Assoc. Dean – CSE

