

**OFFICE OF DEAN (ACADEMIC AFFAIRS)**

Ref.: 139 (B) /Dean (AA)/2024

Date: 24.01.2024

**ACADEMIC YEAR 2022-23**

**Analysis on Feedback from Employees: Action Taken Report**

The following are the avenues through which feedback from employees was obtained during the academic year 2022-23:

- Department meeting
- Board of Studies meeting
- School Level Advisory Committee meeting
- IQAC meeting
- Academic Council meeting
- Feedback from Institution website.

Based on the analysis of feedback, the following points were taken for further course of action in the subsequent year:

- ❖ S1: Introduction of new elective courses in emerging areas.
- ❖ S2: Revising few courses to suit the Industrial needs and employment opportunities.

**Description of actions implemented:**

- ❖ Agenda item 21.9.1, 21.13.6 and 21.15.1 of 21<sup>st</sup> Academic Council meeting considered to fulfilment of S1.
- ❖ S2 is considered in the 21<sup>st</sup> Academic Council meeting vide Agenda item 21.7.1, 21.11.1 and 21.16.2 are given as samples.

**Annexure: Highlighted pages of Minutes of 21<sup>st</sup> meeting of Academic Council.**



**Dean, Academic Affairs**

**DEAN (ACADEMIC AFFAIRS)**  
B.S. Abdur Rahman Crescent Institute of  
Science & Technology  
Vandalur, Chennai - 600 048. India.

## **Excerpts of Minutes of 21<sup>st</sup> Academic Council Meeting**



**Minutes of**

**21<sup>st</sup> Meeting of Academic Council**

**held on**

**20<sup>th</sup> December, 2023**

**B.S. Abdur Rahman Crescent Institute of Science and Technology**

### **Item 21.6.2**

**To consider and approve the change in the pattern of conducting examinations for MBA degree under OL / ODL Programmes with same standards as conventional mode.**

#### **Note on Agenda:**

Based on the representations received from the students, the CDOE has planned to conduct one Mid-Term Examinations instead of CAT 1 and CAT 2 examinations from the forthcoming semester.

As per UGC DEB Regulations. the evaluation shall include two types of assessments; (i) continuous or formative assessment; and (ii) summative assessment in the form of end semester examination or term end examination:

The CDOE ensures the curricular aspects, assessment criteria and credit framework for the award of Degree programmes at postgraduate level through Open and Distance Learning mode and through Online mode shall be evolved by adopting same standards as being followed in conventional mode by the Higher Educational Institution.

Hence, the proposal to change the pattern of examinations to Mid-Term Examinations, Assignments, Semester End Examinations for MBA degree under OL / ODL programmes.is placed for approval.

The Academic Council may consider and approve the same for implementation from the Even Semester of Academic Year 2023-24.

#### **Resolution:**

After deliberations, the agenda item was approved for implementation from the Even Semester of academic year 2023 – 24

## **SCHOOL OF INFRASTRUCTURE**

### **DEPARTMENT OF CIVIL ENGINEERING**

#### **Item 21.7**

**To consider and approve the recommendations of 19<sup>th</sup> meeting of Board of Studies of the Department of Civil Engineering held on 29.09.2023.**

#### **Item 21.7.1**

**To consider and approve the syllabi of VII and VIII semesters of B.Tech. Civil Engineering under Regulations 2021.**

#### **Note on Agenda:**

In the 19<sup>th</sup> meeting of the Board of Studies of the Department of Civil Engineering,

the syllabi of **VII and VIII** Semester course(s), including relevant professional elective courses, were presented. After deliberations, the board has recommended the same for approval in the Academic council.

The salient features of the B.Tech. Civil Engineering curriculum (VII and VIII Semesters) under Regulations 2021 with emphasis on “Introduction of New courses” and “Courses with Syllabus revisions” are as follows:

**I. Semester VII & VIII (AY 2024-2025)**

**a) New courses introduced.**

Course Code	Course Title	Credits
CED 4101	Smart Infrastructure	3
CEDX 01	Advanced Design of RC and Masonry Structures	3
CEDX 02	Advanced Design of Steel Structures	3
CEDX 05	Introduction to Finite Element Analysis of Structures	3
CEDX 06	Structural Dynamics	3
CEDX 36	Pavement Engineering	3
CEDX 34	Application of Software in Geotechnical Engineering	3
CEDX 38	Design Principles of Special Foundation	3
CEDX 63	Intelligent Transportation Systems	3

**b) Courses with Syllabus revisions:**

Course Code	Course Title	Credits	Revision (%)
CEDX 03	Design of Bridge Structures	3	20%
CEDX 07	Prestressed Concrete Structures	3	20%
CEDX 19	Lean Construction	3	60%
CEDX 22	Building Information Modelling	3	30%
CEDX 54	Design of Hydraulic Structures	3	20%
CEDX 55	Water Power Engineering	3	20%
CEDX 61	Traffic Engineering	3	20%

The syllabi of the course(s) (VII and VIII Semester) of B.Tech., Civil Engineering under R 2021 (including syllabi of relevant professional elective courses) are given in [Annexure 21.7.1.](#)

The Academic Council may consider and approve the same for implementation from the even semester of academic year 2023-24.

**Resolution:**

After deliberations, the above item was approved for implementation from the the even semester of academic year 2023-24.

**Item 21.7.2**

**To consider and approve the revision in guidelines in the courses on Internship viz., CED 4102 and CED 3106 (B.Tech. Civil Engineering under R 2021), CEE 7102 (M.Tech. Structural Engineering, R 2022) and CEE 7122 (M.Tech. Construction Engineering and Project Management, R 2022).**

**Note on Agenda:**

The guidelines for pursuing the course “Internship” in B.Tech. Civil Engineering under R 2021, M.Tech. Structural Engineering and M.Tech. Construction Engineering and Project Management under R 2022 were revised and are given in [Annexure 21.7.2](#).

The Academic Council may consider and approve the same for implementation from the even semester of Academic year 2023-24.

**Resolution:**

After discussions, the agenda item was approved for the implementation from the even semester of Academic year 2023-24.

**Item 21.7.3**

**To consider and approve the revision in the curriculum and syllabi of M.Tech. Construction Engineering and Project Management under Regulations 2022.**

**Note on Agenda:**

The Department of Civil Engineering is offering the courses “CEEY 181- Climate change in Water Resources” and “CEEY 182 - Hydrologic Analysis and Design” to facilitate the PhD scholars to pursue the same based on the recommendations of the Research Advisory Committee (RAC). These courses are included in the curriculum of M.Tech. CEPM under R 2022 as elective courses. The syllabi of the courses are given in [Annexure 21.7.3](#).

The Academic Council may consider and approve the same for implementation from the even semester of Academic year 2023-24.

**Resolution:**

After discussions, the agenda item was approved for the implementation from the even semester of the Academic year 2023-24.

**DEPARTMENT OF AEROSPACE ENGINEERING**

**Item 21.9**

To consider and approve the recommendations of 18<sup>th</sup> Board of Studies of the Department of Aerospace Engineering held on 24.11.2023.

**Item 21.9.1**

To consider and approve the syllabi (VII semester electives) of B.Tech. Aeronautical Engineering under Regulations 2021.

**Note on Agenda:**

In the 18<sup>th</sup> meeting of Board of Studies of Aerospace Engineering Department, the syllabi of VII semester Elective courses were deliberated. After deliberations, the board has recommended the same for approval in the Academic council.

The salient features of the B.Tech. Aeronautical Engineering curriculum under R 2021 with respect to 'Introduction of New Courses' and 'Courses with Syllabus Revision' with respect to VII semester elective courses are as follows:

**I. Semester VII Elective core courses (AY 2024-25)**

**a. New Courses introduced:**

Course Code	Course Title	Credits
AEDX 07	Introduction to multi - Phase flow	2
AEDX 32	Product Development and 3D Printing	1

**b. Courses with Syllabus revision:**

Course Code	Course Name	Credits	Revision (%)
AEDX38	Aircraft Navigation and Guidance	3	25
AEDX 23	Composite Materials and Structures	3	25
AEDX 31	High Temperature materials for aerospace applications	3	25
AEDX 24	Finite Element Method	3	30
AEDX 28	Measurement Systems	3	30

The Curriculum and syllabi of the courses (VII semester Electives) of B.Tech. Aeronautical Engineering under R 2021 are given in [Annexure 21.9.1](#)

The Academic Council may consider and approve the same for implementation from the academic year 2024-25.

**Resolution:**

After deliberations, the above item was approved for implementation from the academic year 2024-25.

### Item 21.9.2

**To consider and approve the open elective courses for B.Tech. programmes under Regulation 2021.**

#### Note on Agenda:

The syllabi of the following **open elective courses** offered by the Department of Aerospace Engineering to B.Tech. programmes under R 2021 were deliberated in the 18<sup>th</sup> of Board of Studies of Department of Aerospace Engineering. After deliberations, the Board has recommended the same for approval in the Academic council.

Course Code	Course Title	Credits
GEDX 201	Application of Fluid Mechanics	3
GEDX 111	Drone Technology	3

The syllabi of the open elective courses offered by the Department of Aerospace Engineering to B.Tech. programmes under R 2021 are given in [Annexure 21.9.2](#).

The Academic Council may consider and approve the same for implementation from the Even semester of Academic Year 2023-24.

#### Resolution:

After deliberations, the above item was approved for implementation from the Even semester of Academic Year 2023-24.

### Item 21.9.3

**To consider and approve the curriculum of B.Sc. Aviation under Regulation 2021.**

#### Note on Agenda:

The starting of the new programme on 'B.Sc. Aviation' by the Department of Aerospace Engineering from the Academic year 2024-25.

The curriculum of the B.Sc. Aviation under the regulation 2021 was framed in alignment with the UGC model curriculum with the structure of the programme consisting of Core courses, Professional Electives courses, Soft skill courses, Humanities & Sciences courses and open elective courses.

The curriculum was deliberated in the Board of Studies of Department of Aerospace Engineering. After deliberations, the Board has recommended the same for approval in the academic council.

The Curriculum of the of B.Sc. Aviation programme under R 2021 are given in [Annexure 21.9.3](#).

The Academic Council may consider and approve the same for implementation from

the academic year 2024-25.

**Discussion:**

Dr. Ranjani Parthasarathy inquired about the provision of any undergraduate programs that are offered for duration of four years, in accordance with the rules outlined in the National Education Policy (NEP) 2020.

Dean, Academic Affairs informed that initiatives have been taken to offer four year under graduate programme in alignment with the guidelines outlined in the NEP 2020 and currently the process is in pipeline.

**Resolution:**

After deliberations, the above item was approved for implementation from the academic year 2024-25.

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

**Item 21.10**

**To consider and approve the recommendations of 15<sup>th</sup> Board of Studies of the Department of Automobile Engineering held on 19.10.23.**

**Item 21.10.1**

**To consider and approve the revised syllabi of programme core (Semester IV & V) and new professional elective courses of B.Tech. Automobile Engineering under Regulations 2021.**

**Note on Agenda:**

In the 15<sup>th</sup> meeting of Board of Studies of Automobile Engineering Department the syllabi of programme core (Semester IV & V) and professional elective courses were deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The salient deliberations of B.Tech. Automobile Engineering curriculum under R-2021 with respect to “Introduction of New elective courses” and “Courses with Syllabus revisions” are as follows:

**a) New Elective courses introduced / proposed: (AY: 2024-25)**

<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
AUDX 42	Battery and its Management	3
AUDX 43	Vehicle Diagnostic Systems	3



**b) Courses with syllabus revisions / proposed: (AY 2024-25)**

Semester	Course Code	Course Title	Credits	Revision (%)
IV	AUD 2211	Two and Three Wheeler Technology	3	20
V	AUD 3104	Vehicle Body Engineering	3	20

The Curriculum and syllabi of the above courses of B.Tech. Automobile Engineering under R 2021 are given in [Annexure 21.10.1](#).

The Academic Council may consider and approve the same for implementation from the academic year 2024-25.

**Resolution:**

After deliberations, the above item was approved for implementation from the academic year 2024-25.

**DEPARTMENT OF POLYMER ENGINEERING**

**Item 21.11**

To consider and approve the recommendations of 16<sup>th</sup> Board of Studies of the Department of Polymer Engineering held on 17.08.2023.

**Item 21.11.1**

**To revise the syllabi of program core courses, professional elective courses, and include new courses of B.Tech. Polymer Engineering under Regulations 2021.**

**Note on Agenda:**

In the 16<sup>th</sup> Board of Studies meeting of Polymer Engineering Department, the syllabi of program core courses, professional elective courses, and new courses were deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

The salient deliberations of B.Tech. Polymer Engineering curriculum under R-2021 with respect to “Introduction of New courses” and “Courses with Syllabus revisions” are as follows:

**I. Elective Courses (AY 2024-25)**

**a) New Courses Introduced / Proposed:**

Course Code	Course Title	Credits
PEDX 08	Thermodynamics for Polymer Engineering	3

PEDX18	Additive manufacturing technology	3
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**b) Courses with syllabus revisions (Proposed): Semester II - VII and Elective Courses**

Course	Course Title	Credits	Revision (%)
PED 1211	Basics of Machining	3	10
PED 2202	Polymer Compounding Technology	3	5
PED 3103	Plastic and Rubber Testing	3	5
PED 3201	Plastic and Rubber Product Design	3	50
PED 4101	Mould and Die Design	3	5
PEDX 04	Nanoscience and Technology	3	5
PEDX 11	Fibre Technology	3	10
PEDX 12	Polymer Post Processing Operations	3	5
PEDX 17	Plastic Packaging Technology	3	10
PEDX 31	Advanced Mould Manufacturing Techniques	3	20
PEDX 42	Adhesives and Surface Coating Technology	3	5

The Curriculum and Syllabi of the program core courses, professional elective courses, and new courses of B.Tech. Polymer Engineering under R-2021 is given in [Annexure 21.11.1.](#)

The Academic Council may consider and approve the same for implementation from the academic year 2024-25.

**Resolution:**

After deliberations, the above item was approved for implementation from the academic year 2024-25.

**SCHOOL OF ELECTRICAL AND COMMUNICATION SCIENCES**

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**Item 21.12**

To consider and approve the recommendations of 19<sup>th</sup> Board of Studies of the Department of Electrical and Electronics Engineering held on 29.08.2023.

**Item 21.12.1**

To consider and approve the syllabi of the open elective courses (i) Optimization Techniques (ii) Electric Vehicle and (iii) Introduction to Artificial Intelligence and Evolutionary Computing under B.Tech regulations 2021.

**Note on Agenda:**

The syllabi of the following **open elective courses** offered from Electrical and Electronics Engineering department to B.Tech. Programmes under R 2021 were deliberated in the 19<sup>th</sup> meeting of Board of Studies of Electrical and Electronics Engineering Department. After deliberations, the Board has recommended the same for approval in the Academic council.

Course Code	Course Title	Credits
GEDX 220	Optimization Techniques	3
GEDX 112	Electric Vehicle	3
GEDX 122	Introduction to Artificial Intelligence and Evolutionary Computing	3

The syllabi of the open elective courses offered from Electrical and Electronics Engineering department to B.Tech. programmes under R 2021 is given in [Annexure 21.12.1.](#)

The Academic Council may consider and approve the same for implementation from the Academic Year 2024-25.

**Discussions:**

Dr. Ranjani Parthasarathy suggested that the open elective courses titled “Optimization Techniques” and “Introduction to Artificial Intelligence and Evolutionary Computing” can be handled by the Department of Mathematics and Department of Computer Science & Engineering respectively, considering these courses are core to their discipline. Also it was proposed that the EEE department could offer open elective courses in the Renewable Energy domain. After discussions, the HOD, EEE agreed to offer open elective courses on the Renewable Energy domain in the forthcoming academic year.

**Resolution:**

After deliberations, it was resolved that the open elective course “GEDX 112 – Electric Vehicles” would be implemented from the Academic Year 2024-25.

**Item 21.12.2**

**To consider and approve the inclusion of Electric Mobility Laboratory in VI semester for B.Tech. EEE programme under R2021.**

**Note on Agenda:**

In the 19<sup>th</sup> meeting of Board of Studies of Electrical and Electronics Engineering

Department, the inclusion of new laboratory course “EED 3206 - Electric Mobility Laboratory” instead of EED3205 - Comprehension in VI semester of B.Tech. EEE programme under R2021, was deliberated. After deliberations, the Board has recommended the same for approval in the Academic council.

### I. Semester VI (AY 2024-25)

#### a) New courses introduced / proposed:

Course Code	Course Title	Credits
EED3206	Electric Mobility Laboratory	1

The revised curriculum of B.Tech. EEE and syllabus of the EED 3206 Electric Mobility Laboratory are given in [Annexure 21.12.2](#).

The Academic Council may consider and approve the same for implementation from the even semester of Academic Year 2023-24.

#### Discussions:

Mr. Arul Raj Kumar, Vice President of Ford Motor India Ltd., suggested the inclusion of renewable energy in the curriculum, emphasizing the importance for students to acquire knowledge about renewable energy sources.

#### Resolution:

After deliberations, the above item was approved for implementation from the even semester of the academic year 2023-24.

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### Item 21.13

To consider and approve the recommendations of the 25<sup>th</sup> Board of Studies of the Department of Electronics and Communication Engineering held on 20.09.23.

#### Item 21.13.1

**To consider and approve the syllabi of professional elective courses of B.Tech. Electronics and Communication Engineering under Regulations 2021.**

#### Note on Agenda:

The inclusion of the following Professional elective courses offered to the B.Tech ECE under R2021 Curriculum, was deliberated in the 25<sup>th</sup> Board of Studies of ECE

Department. After deliberations, the Board has recommended the same for approval in the Academic council.

**a) New courses introduced / proposed: (AY 2023-24)**

Course Code	Course Title	Credits
ECDX 61	Graphical Programming Based System Design	3

The syllabi of the professional elective courses offered to the B.Tech. ECE under R 2021 is given in [Annexure 21.13.1](#).

The Academic Council may consider and approve the same for implementation from the Even semester of Academic Year 2023-24.

**Resolution:**

After deliberations, the above item was approved for implementation from the Even semester of Academic Year 2023-24.

**Item 21.13.2**

**To consider and approve the syllabus of new open elective course offered by ECE Department to other B.Tech. Programme under Regulations 2021.**

**Note on Agenda:**

The inclusion of new **open elective** course offered by ECE Department to other B.Tech. programme under R 2021 was deliberated in the 25<sup>th</sup> Board of Studies of ECE Department. After deliberations, the Board has recommended the same for approval in the Academic council.

**a) New courses introduced / proposed: (AY 2024-25)**

Course Code	Course Title	Credits
GEDX 231	Electronics for Mechanical Systems	3

The syllabus of the open elective courses offered by ECE Department to other B.Tech programme under R 2021 was is given in [Annexure 21.13.2](#).

The Academic Council may consider and approve the same for implementation from the even semester of Academic Year 2023-24.

**Resolution:**

After deliberations, the above item was approved for implementation from the even semester of Academic Year 2023-24.

**Item 21.13.3**

**To consider and ratify the syllabus of new professional elective course of M.Tech. VLSI & Embedded Systems under Regulations 2022.**

**Note on Agenda:**

The inclusion of the following new Professional elective course offered to the M.Tech VLSI & Embedded Systems under R 2022, The syllabus was deliberated in the 25<sup>th</sup> Board of Studies of ECE Department. After deliberations, the Board has recommended the same for approval in the Academic council.

**a) New courses introduced / proposed: (AY 2023-24)**

Course Code	Course Title	Credits
ECEY 063	VLSI Design Flow	3

The revised curriculum and syllabus of the professional elective courses offered to the M.Tech VLSI & Embedded Systems under R 2022 is given in [Annexure 21.13.3](#).

The Academic Council may consider and ratify the same for implementation from the Odd semester of Academic Year 2023-24.

**Resolution:**

After deliberations, the above item was ratified for implementation from the Odd semester of Academic Year 2023-24.

**Item 21.13.4**

**To consider and ratify the course equivalency of NPTEL/SWAYAM courses with the BSACIST for availing the credit transfer under Regulations 2021 of B.Tech. ECE programme.**

**Note on Agenda:**

The syllabus of the following five courses offered from NPTEL/ SWAYAM were deliberated in the 25<sup>th</sup> Board of Studies of ECE Department held on 20.09.2023.

B.Tech ECE R17 curriculum		Swayam courses- NPTEL		
Course code and Name	Credit	Course code and Name	No of weeks	Credit (Equivalency)
ECCX 27- Deep Learning	3	Noc23_cs56 Deep learning	12	3

**Resolution:**

After deliberations, the above item was approved for implementation from the even semester of academic year 2023-24.

**DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING**

**Item 21.14**

**To consider and approve the recommendations of 20th Board of Studies of the Department of Electronics and Instrumentation Engineering held on 07.09.2023**

**Item 21.14.1**

**To consider and approve the new syllabus for professional elective courses on “EIDX 12 Aircraft Instrumentation” of B.Tech. Electronics and Instrumentation Engineering under Regulations 2021.**

**Note on Agenda:**

In the 20th meeting of Board of Studies of Electronics and Instrumentation Engineering Department the syllabi of professional elective course “EIDX 12 Aircraft Instrumentation” was deliberated. After discussions, the Board has recommended the same for approval in the Academic council.

The salient deliberations of B.Tech. Electronics and Instrumentation Engineering curriculum under R-2021 with respect to “Introduction of New courses” are as follows:

**I. Semester VII (AY 2024-25)**

**a) New courses introduced / proposed:**

<b>Course Code</b>	<b>Course Title</b>	<b>Credits</b>
EIDX12	Aircraft Instrumentation	3

The revised curriculum and syllabi of the courses of B.Tech Electronics and Instrumentation Engineering under R 2021 are given in [Annexure 21.14.1](#).

The Academic Council may consider and approve the same for implementation from the academic year 2024-25.

**Resolution:**

After deliberations, the above item was approved for implementation from the academic year 2024-25

**SCHOOL OF COMPUTER, INFORMATION AND MATHEMATICAL SCIENCES**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**Item 21.15**

To consider and approve the recommendations of the 22<sup>nd</sup> Board of Studies of the Department of Computer Science and Engineering held on 17.08.2023.

**Item 21.15.1**

**To consider and ratify the curriculum and revision in syllabi of B.Tech. – CSE (CS) under R2017, B. Tech (CSE), B. Tech – CSE (CS), B. Tech-CSE(IoT), B.Tech (AI & DS) programmes under R2021, M.Tech. CSE and M.Tech. (AI &DS) under R2022.**

**Note on Agenda:**

The revised curriculum and revision in syllabi of B.Tech. (CSE) B. Tech – CSE (CS), B. Tech. CSE(IoT), B.Tech. (AI & DS) programmes under R2021, B. Tech – CSE (CS) under R2017 and M.Tech. (AI & DS) under R2022 were deliberated in the 22<sup>nd</sup> Board of Studies of Computer Science and Engineering Department. After deliberations, the Board has recommended the same for ratification in the Academic Council.

The salient deliberations B.Tech. CSE, CSE(CS), CSE(IoT) and B.Tech. AI & DS curriculum under R 2017 and R 2021 with respect to “Introduction of New courses” for ratifications are as follows:

**I. B.Tech. CSE(CS) under R 2017**

**a) New courses introduced - Semester VII (AY: 2023-24)**

Course Code	Course Title	Credits
CSC 4102	Compiler Design	3
CSC 4104	Compiler Laboratory	1

**II. B.Tech. CSE, B.Tech. CSE (CS) and B.Tech. CSE(IoT) under R2021**

**a) New courses introduced - Semester V (AY: 2023-24)**

The course Theory of Computation is introduced with course code CSD 3101 for the programme B.Tech. CSE, B.Tech. CSE (CS) and B.Tech. CSE (IoT)

Course Code	Course Title	Credits
CSD 3101	Theory of computation	3

**III. B.Tech. CSE(CS) under R 2021**

**New courses introduced - Semester VI (AY 2023-2024)**

The course CSD 3231 – Ethical Hacking and CSD 3233 – Ethical Hacking Laboratory has been moved to cyber security professional electives with course code CSDX 413 and a



new course CSD 3202 – Compiler Design has been introduced.

Course Code	Course Title	Credits
CSD 3202	Compiler Design	3
CSD 3203	Compiler Laboratory	1

#### IV. B.Tech. CSE (IoT) under R 2021(AY: 2023-24)

##### New Professional Elective Courses Introduced

Course Code	Course Title	Credits
CSDX 455	IoT Cloud Infrastructure	3
CSDX 354	3D Printing and Software Tools	3
CSDX 355	IoT Multimedia Technologies	3
CSDX 360	Energy Harvesting Technologies and Power Management for IoT Devices	3
CSDX 361	Internet of Medical Things	3
CSDX 362	5G and IoT Technologies	3
CSDX 363	Artificial Intelligence and IoT	3
CSDX 364	Machine Learning and Deep Learning for IoT	3

#### V B.Tech. AI & DS under R 2021

##### a) New courses introduced: (AY 2023-2024)

Course Code	Course Title	Credits
CSD 3153	Automata theory	3
CSD 3156	Data and Security lab	1
CSD 3253	Data Analytics and Visualization Laboratory	1
CSD 3255	Software Tools and Techniques Laboratory	1
CSD 4151	Applied Artificial Intelligence	3
<b>New Professional Elective courses Introduced</b>		
CSDX 606	R Programming for Artificial Intelligence and Data Science	3
CSDX 503	Artificial Intelligence based Web application	3
CSDX 504	Game theory	3
CSDX 507	Decision Making for Data Science	3
CSDX 508	Social Network Analysis	3

CSDX 510	Healthcare Data Analytics	3
CSDX 511	Recommender System	3
CSDX 624	High Performance Computing	3
CSDX 628	Web Analytics	3
CSDX 630	Text Analytics	3
CSDX 632	Spatial Databases	3
CSDX 521	Speech Processing	3
CSDX 522	Computer Vision	3
CSDX 524	Reinforcement Learning	3

**b) The revised elective course codes and course names are given below:**

S.No.	Existing code	Modified Code	Course Title
1.	CSDX 502	CSDX 603	Intelligent Information Retrieval
2.	CSDX 524	CSDX 501	Web and Social Media Mining
3.	CSD 3152	CSDX 502	Artificial Neural Networks
4.	CSD 3155	CSDX 509	Pattern Recognition
5.	CSDX 519	CSDX 621	Process Automation
6.	CSDX 515	CSDX 622	Applied Machine Learning
7.	CSDX 518	CSDX 623	Agent-Based Intelligent System
8.	CSDX 520	CSDX 625	Human and Intelligent Systems
9.	CSD 3254	CSDX 626	Natural Language Processing
10.	CSD 3253	CSDX 629	Exploratory Data Analysis
11.	CSDX 501	CSDX 631	Graph Theory and its Applications in Data Science
12.	CSDX 504	CSDX 532	Predictive Analytics

**VI. Courses with syllabus revisions (ratified):**

**B.Tech. CSE (AY 2023-24)**

Course Code	Course Title	Credits	Revision (%)
CSD 2203	Computer Architecture and Microprocessor	3	20%
CSDX 226	Web Analytics and Social Media Mining	3	20%
CSDX 108	Computer Vision	3	5%

**B.Tech. AI & DS (AY 2023-24)**

Course Code	Course Title	Credits	Revision (%)
CSD 2255	Essentials Of Data Science	3	25%
CSD 3152	Cloud Computing Services	4	20%
CSD 3154	Machine Learning Techniques	3	70%
CSDX 502	Pattern Recognition	3	45%

The course learning objectives and course outcomes of undergraduate programmes under R2021 and post-graduate programmes under R2022 were revised.

The updated curriculum and syllabi revision are given in **Annexure [21.15.1 \(a\)](#), [21.15.1 \(b\)](#), [21.15.1 \(c\)](#) and [21.15.1 \(d\)](#)**

The Academic Council may consider and ratify the same from the Academic Year 2023-24.

**Resolution:**

After deliberations, the above item was ratified for implementation from the academic year 2023-24

**Item 21.15.2**

**To consider and ratify the course equivalency of NPTEL / SWAYAM courses and BSACIST for the credit transfer of B.Tech. Computer Science and Engineering programme under Regulations 2021.**

**Note on Agenda:**

In the 22<sup>nd</sup> meeting of Board of Studies of CSE Department, the course equivalency of NPTEL / SWAYAM courses with BSACIST for the credit transfer of B.Tech. Computers Science Engineering programme under R2021, R2017 were deliberated. After deliberations, the Board has recommended the same for ratification in the Academic council. The details of NPTEL / SWAYAM courses with the BSACIST are as follows:

Programme & Regulation	Course code and Name	Credit	Swayam courses- NPTEL		
			Course code and Name	No of weeks	Credit (Equivalence)
B.Tech CSE R2021	CSDX 108- Computer Vision	3	noc23-cs77- Computer Vision	12	3
B.Tech AI & DS R2017	CSC 3252 - Introduction to Internet of Things	3	noc23-cs83 - Introduction to Internet of Things	12	3

The syllabi of the above NPTEL/SWAYAM & BSACIST courses are given in [Annexure 21.15.2](#).

The Academic Council may consider and ratify the same for implementation from the Odd Semester Academic Year 2023-24.

**Resolution:**

After deliberations, the above item was ratified for implementation from the Odd Semester Academic Year 2023-24.

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Item 21.16**

To consider and approve the recommendations of the 18<sup>th</sup> Board of Studies of the Department of Information Technology held on 25.09.2023.

**Item 21.16.1**

To consider and approve the modifications in the syllabus for two courses of B.Tech. Information Technology under Regulation 2021.

**Note on Agenda:**

As per the feedback obtained from the faculty members, the syllabi for the courses viz. ITD 3103 – Mean Stack Web Development and ITDX 54 – Data Science using Python were modified in B.Tech. Information Technology under Regulation 2021.

**I. Semester V, VI, VII & VIII (AY 2024-25)**

**a) Courses with syllabus revisions (proposed):**

Course Code	Course Title	Credits	Revision (%)
ITD 3103	Mean Stack Web Development	3	10%
ITDX 54	Data Science using Python	3	10%

The Board recommended the modified syllabi of the courses which are given in [Annexure 21.16.1](#) and the same is placed for approval in the Academic Council.

The Academic Council may consider and approve the same for implementation from the Academic Year 2024-25.

**Resolution:**

After deliberations, the above item was approved for implementation from the Academic Year 2024-25.