

# **OFFICE OF DEAN (ACADEMIC AFFAIRS)**

Ref.: 160(A) /Dean (AA)/2024

Date: 25.09.2024

# ACTION TAKEN REPORT ON THE STAKEHOLDERS FEEDBACK ANALYSIS OF AY 2023-24

# I. Action Taken Report on Student Feedback Analysis

The feedbacks were collected and collated in the Department level / Institution level and important suggestions / comments / remarks given by the students to enhance the curriculum, syllabi and other course related activities are considered for further course of action. The salient suggestions of students (SS1, SS2 & SS3) are as follows:

- SS1:Curriculum of advanced courses and latest topics can be included to meet industry demand.
- SS2: To increase the number of program electives by collaborating with industries.
- SS3: To introduce advanced technological topics and to remove few courses which is not suitable to the current technological advancements.

# **Details of Action Taken**

- S1 was given emphasis in the BOS of EEE and CSE Departments. The courses emphasizing on the dynamic needs and Industrial demand were deliberated in the 22<sup>nd</sup> meeting of Academic Council held on 04<sup>th</sup> September 2024 and the evidence is presented in the agenda item 22.9.1 and 22.12.1
  - S2 was considered in the BOS of CA Department by increasing professional elective courses in BCA, BSc. and MCA programmes. Agenda item no. 22.14.3 & 22.14.4, in 22<sup>nd</sup> Academic Council meeting are the samples of new professional elective courses introduced to suit the needs of current industrial expectations.



# II. Action Taken Report on Feedback from Employees

Based on the analysis of employees' feedback, the significant suggestions given by faculty members (FS1, FS2 & FS3) were considered for further course of action:

- FS1: Revising few courses to suit the Industrial needs and employment opportunities.
- FS2: Introduction of new elective courses in emerging areas.

# **Description of Action Implemented:**

- FS1 was given emphasis in the BOS of E&IE and CSE. The courses emphasizing the revision in the syllabus of the programme core and professional elective courses were deliberated in the 22<sup>nd</sup> meeting of Academic Council held on 04<sup>th</sup> September 2024 and the evidence is presented in the agenda item 22.11.2.
- FS2 was given emphasis in the BOS of E&IE. The courses emphasizing the introduction of new courses were deliberated in the 22<sup>nd</sup> meeting of Academic Council held on 04<sup>th</sup> September 2024 and the evidence is presented in the agenda item 22.12.1



# III. Action Taken Report on Feedback from Employers

Based on the analysis of employers feedback, the following points were taken for further course of action.

- ES1: Updating course syllabi to match current knowledge levels
- ES2: Introducing courses in emerging technologies
- ES3: Starting new programs based on market demand
- ES4: Emphasizing application-oriented courses

# **Details of Action Taken**

- ES1 and ES2 was considered in the BOS of CA Department by revising and introduction of new professional elective courses in BCA, BSc. and MCA programmes. Agenda item no. 22.14.3 & 22.14.4, in 22<sup>nd</sup> Academic Council meeting are the serves as evidence for the suggestions.
- ES3 a new programme in B.Sc. Aviation was started from 2024-25.
- ES4 was considered in the BOS of CA Department by emphasizing application oriented courses in open elective of B.Tech. programmes.
  Agenda item no. 22.14.5 in 22<sup>nd</sup> Academic Council meeting are the serves as evidence for the suggestions.



# IV. Action Taken Report on Feedback from Alumni

The feedback received from alumni were elevated in SLAC and BoS of the Departments / Schools. The valuable suggestions related to courses were considered for further course of action:

AS1. Curriculum can be updated based on current trends in technologies and industrial needs.

AS2. Some of the courses content can be updated relevant to employability and more practical exposure in programming skills may be given to students for better placement opportunities.

# **Details of Action Taken**

AS1 and AS2 was given emphasis in the BOS of CSE and CA Departments. The courses emphasizing the syllabus updation based on current trends in technologies and industrial needs. were deliberated in the 22<sup>nd</sup> meeting of Academic Council held on 04<sup>th</sup> September 2024 and the evidence is presented in the agenda item 22.12.2 & 22.14.1

# **IV. Action Taken Report on from Parents Feedback**

The feedback received from parents were gathered in Parent Teachers meeting conducted in the Departments / Schools. The valuable suggestions related to courses were considered for further course of action:

- PS1. More value added courses can be conducted.
- PS2: Soft skills training can be given to the students.



# **Details of Action Taken**

PS1 were considered by motivating to enrolled in value added courses conducted by IIT Bombay Spoken Tutorial courses and NPTEL / SWAYAM courses. PS2: The students were encouraged to enroll in soft skill training conducted by English Department and Career development cell to improve in their employability skills.

. Annexure: Highlighted pages of Minutes of 22<sup>nd</sup> meeting of Academic Council.

**Dean, Academic Affairs** 

Annexure: Excerpts of 22nd meeting of Academic Council.



**Minutes of** 

# 22<sup>nd</sup> MEETING OF ACADEMIC COUNCIL

held

on 04<sup>th</sup> September, 2024

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



# Minutes of the 22<sup>nd</sup> meeting of Academic Council

#### Date: 04.09.2024

#### Time: 10.00 a.m.

# Venue: Seminar Hall III, Convention Centre

The following members were attended the meeting:

- 1. Prof. Dr. T. Murugesan, Vice Chancellor
- 2. Prof. Dr. N. Thajuddin, Pro Vice Chancellor
- 3. Dr. N. Raja Hussain, Registrar
- 4. Dr. P.S. Syed Masood Jamali, Advisor
- 5. Dr. Bashir Alam, Professor, Department of Computer Engineering, Jamia Millia Islamia, Central University, New Delhi.
- 6. Dr. Ranjani Parthasarathy, Former Professor, Department of IST, Anna University, Chennai.
- 7. Dr. Usha Natesan, Director, National Institute of Technical Teachers Training and Research (NITTR), Chennai
- 8. Mr. Arul Raj Kumar, Vice President, Ford Motor India Ltd., Chengalpattu.
- 9. Mr. Anbu NedunchezhianGeneral Manager Operations, Caterpillar, Thiruvallur Plant
- 10. Mr. K. Rakeeb Mohamed Mubeen Product Head Zoho Desk, Zoho Corporation Pvt. Ltd., Tenkasi.
- 11. Dr. S. Kaja Mohideen, Controller of Examinations
- 12. Dr. M. Mohamed Ismail, Dean (Academic Affairs)
- 13. Dr. J. Revathy, Dean (Research)
- 14. Dr. Karthikeyan Ramalingam, Dean (Student Affairs)
- 15. Dr. A. Abudhahir, Director (IQAC) & Professor, Department of Electronics & Instrumentation Engineering
- 16. Dr. Syed Mohamed Abdul Majeed, Director (Admissions) & Professor, Dept. of Polymer Engineering
- 17. Dr. M.S. Haji Sheik Mohammed, Dean (School of Infrastructure)
- 18. Dr. H. Siddhi Jailani, Dean (School of Mechanical Sciences)
- 19. Dr. C. Tharini, Dean (School of Electrical & Communication Sciences)
- 20. Dr. S. Hemalatha, Dean (School of Life Sciences)
- 21. Ar. G. Jayalakshmi, Dean (Crescent School of Architecture)
- 22. Dr. I. Raja Mohamed, Dean (School of Physical and Chemical Sciences)
- 23. Dr. Ayub Khan Dawood Dean, School of Social Sciences and Humanities



- 24. Dr. C. Chockalingam, Dean (Crescent School of Law)
- 25. Dr. M. Vijaya Vara Prasad, Dean (Crescent School of Pharmacy)
- 26. Dr. A. Abdul Hai Hasani Nadwi, Dean (School of Arabic & Islamic Studies)
- 27. Dr.S.K.G. Ganesh, Head in Charge (Crescent School of Business)
- 28. Mr. M. Parvez Alam, Executive Director, Crescent Innovation and Incubation Centre
- 29. Dr. Ganesh. K Director, Career Development Centre (CDC) & Industry Relations
- 30. Dr. A.S. Selva Kumar, Head, Mechanical Engineering
- 31. Dr. P.N. Kadiresh, Head, Dept. of Aerospace
- 32. Dr. P.D. Jeyakumar, Head, Dept. of Automobile Engineering
- 33. Dr. S. Shamshath Begum, Head (Incharge), Department of Polymer Engineering
- 34. Dr. R. Jayashree, Head, Department of Electrical and Electronics Engineering
- 35. Dr.G.Kannan Head, Department of Electronics & Communication Engineering
- 36. Dr. D. Najumnissa Jamal, Head, Department of Electronics & Instrumentation Engineering
- 37. Dr. W. Aisha Banu, Head, Department of Computer Science Engineering
- 38. Dr. N. Prakash, Head, Department of Information Technology
- 39. Dr.M.Syed Masood, Head, Dept. of Computer Application
- 40. Dr. Sindhu J. Kumar, Head, Department of Mathematics & AS
- 41. Dr. G.V. Vijayaraghavan, Head, Department of Physics
- 42. Dr. N. Hajara Beevi, Head, Department of Chemistry
- 43. Dr. P Rathna, Head, Department of English
- 44. Dr. K. Soundarapandiyan, Head, Department of Commerce
- 45. Dr. R. Radhai, Head, Department of Public Policy
- 46. Dr. S. Rasool Mohideen, Professor, Dept. of Mechanical Engineering
- 47. Dr. A.Jaya, Professor, Dept. of Computer Applications
- 48. Dr. P.K. Jawahar, Professor, Department of Electronics & Communication Engineering
- 49. Dr. S. Sathik Basha, Professor, Dept. of Physics
- 50. Dr. K. Yogeswari, Professor, Dept. of Civil Engineering
- 51. Dr. G. Kavitha, Professor, Dept. of Information Technology
- 52. Dr.N. Sabiyath Fatima, Professor, Department of Computer Science and Engineering
- 53. Dr.S.Bhagavathy , Department of Chemistry
- 54. Dr. A. Shajahan, Associate Professor, Department of Chemistry
- 55. Dr.S.P.Valli , Associate Professor, Department of Computer Science and Engineering
- 56. Dr. Naveena Ameena, Assistant Professor (Seln.Gr) Dept. of Information Technology
- 57. Mr.H.Hasan Babu , Assistant Professor (Sr. Gr.), Department of Electronics & Communication Engineering
- 58. Mr. Fadhil Ahmed Abdul Kadar, IV year CSE



59. Mr. Mohamed Anas III yr, B.Com.(Hons.)

#### Welcome Address by the Vice Chancellor

The Vice Chancellor extended a warm welcome to the esteemed members of Academic Council and introduced the recently appointed distinguished external experts viz. Mr. Anbu Nedunchezhian General Manager – Operations, Caterpillar, Thiruvallur Plant and Mr. K. Rakeeb Mohamed Mubeen Product Head – Zoho Desk, Zoho Corporation Pvt. Ltd., along with the new Internal Members.

Additionally, heartfelt gratitude was conveyed to the departing members (External Experts and Internal Members those completed the terms) for their unwavering commitment and dedicated service to the Academic Council. The Vice Chancellor acknowledged their significant contributions recognizing the pivotal roles they played during their tenure. Then the members present had the opportunity to introduce themselves, and to provide a visual insight into the Institute, a brief video presentation was shared with the members.

Following this, the Vice chancellor presented the report on the academic activities of the Institution from previous Academic Council Meeting held on 20<sup>th</sup> December 2023 till date.

# I. ACADEMIC ACTIVITIES

- > Commencement of the even semester of the academic year 2023-24
  - 1. January 2, 2024, for all final-year students in B.Tech. and M.Tech. programs.
  - 2. January 18, 2024. for all first-year and intermediate-year students across all programs
- The total no. of courses configured in the E-learning portal of Crescent Mastersoft ERP for the even semester of AY 2023-24 is given below.

S. No.	Description	Number
1	No. of courses enrolled	812
2	No. of courses configured	1169

The students were encouraged to enroll in value added courses. The details of the number of courses and students enrolled in IIT Bombay – Spoken Tutorial Courses and SWAYAM/NPTEL courses in the even semester 2023-24 are given below.

	IIT Bombay –	SWAYAM /
Details	Spoken Tutorial	NPTEL courses
Dotailo	Even semester	Even semester
	2023-24	2023-24



Total number of courses enrolled	75	300
Total number of faculty involved / registered	75	215
Total number of students enrolled	3969	2632

- 557 students from various departments have availed for credit transfer in 50 courses with a total credit transfer of 1746 credits.
- The details of Entrepreneurship and "Advanced Entrepreneurship" courses were offered to the students of B.Tech. programmes across all disciplines in collaboration with Wadhwani foundation -NEN, Bangalore is given below

Month & Year	Entrepreneurship Course	Advanced Entrepreneurship Course	Total No. of Students Enrolled
EVEN Semester 2023-24 (Jan – June 2024)	786	-	786
ODD Semester 2024-25 (July- Dec 2024)	198	14	212
Total	984	14	998

> A total of **2,403** degrees were conferred during 13<sup>th</sup> convocation.

Undergraduate degrees were conferred to 1,679 students.

Postgraduate degrees were conferred to 578 students.

Ph.D. degrees were awarded to 93 scholars.

# Semester End Examinations May 2024

Out of 2,527 final-year students appeared in the semester end examinations, the estimated pass percentage is to be 89% (tentatively).

A total of 9,556 students appeared in the May 2024 session.

# > The 14<sup>th</sup> Convocation 2024 is tentatively scheduled to be held in October 2024.

# **II. MEETINGS OF STATUTORY BODIES**

Meetings of various boards, committees and statutory bodies were held as follows:

- > The meeting of the 21<sup>st</sup> meeting of Academic Council was held on 20<sup>th</sup> December 2023.
- > The 53<sup>rd</sup> Research Board meeting was conducted on 20.06.2024.
- Meetings of Board of Studies of Departments and Schools were conducted during June 2024 - July 2024.
- > The 24<sup>th</sup> Board of Management meeting was conducted on 28.08.2024.



of course and programme outcomes.

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

The revised Course Objectives (COBs) and the Course Outcomes (COs) for the course "PED 4211 Project Work" are given in <u>Annexure 22.8.2</u>

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 22.8.3

To consider and ratify the revision of Course Objectives (COBs) and Course Outcomes (COs) for the courses "PED 3106 Internship I" and "PED 4103 Internship II" of B.Tech. Polymer Engineering under Regulations 2021.

#### Note on Agenda:

In the 17<sup>th</sup> meeting of Board of Studies of Polymer Engineering Department, the revision of Course Objectives (COBs) and the Course Outcomes (COs) for the courses "PED 3106 Internship I" and "PED 4103 Internship II" were deliberated, considering the impact of this course in the assessment of course and programme outcomes.

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

The revised Course Objectives (COBs) and Course Outcomes (COs) for the courses "PED 3106 Internship I" and "PED 4103 Internship II" are given in <u>Annexure 22.8.3</u>.

The Academic Council may consider and ratify the same for implementation from the academic year 2023-24.

#### Resolution:

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

# SCHOOL OF ELECTRICAL AND COMMUNICATION SCIENCES DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### Item 22.9

To consider and approve the recommendations of 20<sup>th</sup> Board of Studies of the Department of Electrical and Electronics Engineering held on 17.05.2024.



#### Item 22.9.1

To consider and approve the revised curriculum and introduction of new open elective course "GEDX 231 Renewable Energy Engineering" and removal of open elective courses "GEDX220 Optimization Techniques" and "GEDX122 Introduction to Artificial Intelligence and Evolutionary Computing" offered by the Department of Electrical and Electronics Engineering under Regulations 2021.

#### Note on Agenda:

In the 20<sup>th</sup> meeting of Board of Studies of Electrical & Electronics Engineering Department, based on the dynamic needs in the Industry and emerging trends in renewable energy a new open elective course "GEDX 231 Renewable Energy Engineering," was introduced and deliberated for other B.Tech. programmes.

It is also deliberated to remove the open elective courses "GEDX 220 Optimization Techniques" and "GEDX122 Introduction to Artificial Intelligence and Evolutionary Computing", based on the suggestions given by the Expert members during the 21st meeting of Academic Council held on 20.12.2023.

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

#### a) New courses introduced / proposed: Semester VII (AY 2024-25)

Course Code	Course Title	Credits
GEDX 231	Renewable Energy Engineering	3

The revised curriculum and syllabus of the open elective course "GEDX 231 Renewable Energy Engineering is given in <u>Annexure 22.9.1.</u>

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 ELECTRONICS AND COMMUNICATION ENGINEERING

#### Item 22.10

To consider and approve the recommendations of the 26<sup>th</sup> Board of Studies of the Department of Electronics and Communication Engineering held on 13.05.2024.



#### Item 22.10.1

To consider and approve the syllabi of programme core and professional elective courses (Semester V – VIII) of B.Tech. Electronics and Computer Engineering under Regulations 2021.

#### Note on Agenda:

During the 26<sup>th</sup> meeting of Board of Studies of Electronics & Communication Engineering Department, the detailed syllabi of (V - VIII semester) courses offered to B.Tech. (Electronics and Computer Engineering) were thoroughly discussed.

Following the deliberations, the Board has recommended the same for approval in the Academic Council.

Course Code	Course Title	Credits	Core/	Semester
Course Coue	Course The	Credits	Elective	
ESD 3101	Analog and Digital Communication 4		Core	V
ESD 3102	VLSI Design	3	Core	V
ESD 3103	Compiler Design	3	Core	V
ESD 3104	Computer Network	3	Core	V
ESD 3105	VLSI Laboratory	1	Core	V
GED 3101	Communication Skills for Career Success	1	Core	V
ESD 3108	Internship I	1	Core	V
ESD 3201	Embedded Systems Design	3	Core	VI
ESD 3202	Embedded Systems Laboratory	1	Core	VI
ESD 4101	IoT and cloud computing	3	Core	VII
ESD 4102	Internship II	1	Core	VII
ECD 4201	Project Work	9	Core	VIII
ESDX 011	Digital Image and Video Processing	3	PE	V
ESDX 012	Control Systems	3	PE	V
ESDX 013	Introduction to PCB design	3	PE	V
ESDX 014	Principles of Robotics	3	PE	V
ESDX 015	ARM architecture and Programming	3	PE	VI
ESDX 016	Mechatronics	3	PE	VI
ESDX 017	Automotive Networking and protocols	3	PE	VI
ESDX 018	Wireless and Mobile Communication	3	PE	VI
ESDX 019	Introduction to Embedded Linux	3	PE	VI

#### a) New courses Introduced / Proposed: Semester V to VIII (AY 2024-25 and 2025-26)



ESDX 020	Introduction to RTOS	3	PE	VII
ESDX 021	Nanoelectronics	3	PE	VII
ESDX 022	Multicore Architecture and Parallel Programming	3	PE	VII
ESDX 023	Autonomous Vehicle	3	PE	VII
ESDX 041	Machine Learning	3	PE	V
ESDX 042	Theory of Computation	3	PE	V
ESDX 043	Data Science	3	PE	V
ESDX 044	Web Technology	3	PE	V
ESDX 045	Introduction to Industry 4.0	3	PE	V
ESDX 046	Cryptography and Network Security	3	PE	VI
ESDX 047	Artificial Intelligence	3	PE	VI
ESDX 048	Edge Computing	3	PE	VI
ESDX 049	Computer Vision	3	PE	VI
ESDX 050	Deep Learning	3	PE	VI
ESDX 051	GPU architecture and Programming	3	PE	VII
ESDX 052	Software Engineering	3	PE	VII
ESDX 053	Pattern Recognition	3	PE	VII
ESDX 054	Natural Language Processing	3	PE	VII
ESDX 055	Prompt Engineering	3	PE	VII
ESDX 056	Block chain Technology	3	PE	VII
ESDX 057	Mobile Multimedia Systems	3	PE	VII
ESDX 058	Data Mining and Data Warehousing	3	PE	VII
ESDX 059	XML and Web services	3	PE	VII
ESDX 060	Multimedia Communication and Networking	3	PE	VII
ESDX 061	Augmented Reality and Virtual Reality	3	PE	VII
ESDX 062	Quantum Computing	3	PE	VII

The detailed syllabi of (V - VIII semester) courses offered to B.Tech. (Electronics and Computer Engineering) is given in <u>Annexure 22.10.1.</u>

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

#### **Discussions:**

Dr. Ranjani Parthasarathy inquired whether the syllabus was the same as that of the Electronics and Communication Engineering program. The Head of the Electronics and



Communication Engineering Department responded, noting that there is a roughly 20% difference between the two syllabi.

#### **Resolution:**

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

#### Item 22.10.2

To consider and approve the revised curriculum and syllabus of Professional elective course "ECDX 065 Quantum Computing" for the B.Tech. ECE under Regulation 2021.

# Note on Agenda

The professional elective course "ECDX 065 Quantum Computing" applicable to all streams (RF Communication and Signal Processing, VLSI & Embedded Systems, Artificial Intelligence and Machine Learning, Automotive Electronics & Robotics) in VII Semester B.Tech. ECE programme was discussed during the Board of Studies meeting of ECE Department.

Following these discussions, the Board has recommended the same for approval in the Academic Council.

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

SI. No.	Course Group	Course Code	Course Title	Credits
1.	PEC	ECDX 065	Quantum Computing	3

The revised curriculum and syllabus of the professional elective course "ECDX065-Quantum Computing" is given in <u>Annexure 22.10.2.</u>

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 22.10.3

To consider and approve the revised curriculum and syllabus of Professional Elective course "ECEY 065 – Advanced Radiation Systems" for M.Tech. VLSI &



# Embedded Systems programme under Regulations 2022.

#### Note on Agenda

The professional elective course "ECEY 065 Advanced Radiation Systems" of III semester M.Tech. VLSI & Embedded Systems was discussed in the Board of Studies meeting of ECE Department.

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

	SI. No.	Course Group	Course Code	Course Title	Credits
Ē	1.	PEC	ECEY 065	Advanced Radiation Systems	3

#### a) New courses introduced / proposed: Semester III (AY 2024-25)

The revised curriculum and syllabus of the Professional elective course "ECEY065 Advanced Radiation Systems" is given in <u>Annexure 22.10.3.</u>

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 22.10.4

To consider and approve the revised curriculum and syllabus of new Open Elective course "GEDX 130 Graphical Programming Based System Design" offered by the department of ECE to other B.Tech. Programmes in VII Semester under Regulation 2021.

#### Note on Agenda:

By considering the current technological development and industry need, the following open elective course is offered by the "ECE department" to other branches of B.Tech. programmes under R2021 was deliberated in the Board of studies meeting.

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

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



SI. No.	Course Group	Course Code	Course Title	Credits
1.	OEC	GEDX 130	Graphical Programming Based System Design	3

The revised curriculum and syllabus of "GEDX 130 - Graphical Programming Based System Design" is given in <u>Annexure 22.10.4.</u>

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 ELECTRONICS AND INSTRUMENTATION ENGINEERING

#### Item 22.11

To consider and approve the recommendations of 21<sup>st</sup> Board of Studies of the Department of Electronics and Instrumentation Engineering held on 15.05.2024.

#### Item 22.11.1

To consider and approve the revision in the course outcomes of the programme core and professional elective courses (IV semester) of B.Tech. Electronics and Instrumentation Engineering under Regulations 2021.

#### Note on Agenda:

Based on the suggestions given by the faculty members, the outcomes of the following courses were modified and discussed in the 21<sup>st</sup> meeting of Board of Studies of Electronics and Instrumentation Engineering Department. After deliberations, the Board has recommended the same for approval in the Academic Council.

Course Code	Code Course Title	
EID2201	Industrial Instrumentation I	IV
EID2204	Python for Instrumentation Engineers	IV
EID2205	Industrial Instrumentation I Laboratory	IV
EID 2202	Control system	IV

#### a) List of Courses : Semester IV &V (AY 2024-25)



EIDX 21	Control System Components	IV
EID 3105	Industrial Instrumentation II Laboratory	IV
<b>—</b> 1 1		

The revised course outcomes of the above courses of B.Tech., Electronics and Instrumentation Engineering are given in <u>Annexure 22.11.1.</u>

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 22.11.2

To consider and approve the revision in syllabus in the programme core and professional elective courses of B.Tech. Electronics and Instrumentation Engineering under Regulations 2021.

#### Note on Agenda:

Based on the suggestions given by the faculty members, the revision in the syllabus of the programme core and professional elective courses were deliberated in the 21st meeting of Board of Studies of Electronics and Instrumentation Engineering Department. After deliberations, the Board has recommended the same for approval in the Academic council.

Course Code	Course Title	Semester	Credits	Revision (%)
EID1203	Electron Devices and Network Synthesis	II	1	30
	Laboratory			
EID2201	Industrial Instrumentation I	IV	3	5
EID3102	Industrial Instrumentation II	V	3	5
EID3104	Process Control Laboratory	V	1	30
EID3105	Industrial Instrumentation II Laboratory	V	1	15
EIDX10	Safety Instrumentation	VII	3	5

a) Courses with syllabus revisions:

The revised syllabus of the above courses of are given in Annexure 22.11.2.

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 22.12

To consider and approve the recommendations of 23<sup>rd</sup> Board of Studies of the Department of Computer Science and Engineering held on 09.05.2024 and 02.09.2024.

#### Item 22.12.1

To consider and approve the revised curriculum and syllabi of professional elective courses (Semester IV – VII) and one programme core course (Semester VII) of B.Tech. Artificial Intelligence and Data Science under Regulations 2021.

#### Note on Agenda:

Based on the suggestions given by the Academic Experts and Faculty members, the following programme core and professional elective courses (Semester IV – VII) were newly introduced.

Based on the dynamic needs in the industry, the courses "CSDX 529 Emotional Intelligence" and "CSDX 522 - Computer Vision (Renamed as Visual Data Analysis and Machine perception)" were revised in B.Tech. AI&DS.

The syllabi of above courses were discussed during the 23<sup>rd</sup> meeting of Board of Studies of Computer Science and Engineering Department.

Following the discussions, the Board has recommended the same for approval in the Academic council.

S.No.	Sem	Course	Course Code	Course Title	Credits
		Group			
1.	IV	PEC	CSDX 602	Knowledge Management	3
				Open Source Tools for AI &	
2.	IV	PEC	CSDX 605	Data Science	3
				R Programming for Artificial	
3.	IV	PEC	CSDX 606	Intelligence and Data Science	3
				Artificial Intelligence in Data	
4.	IV	PEC	CSDX 607	Analytics	3

#### a) New courses introduced / proposed: Semester IV - VII (AY 2024-25)



				Detective Database and	
_	N	DEO			0
5.	V	PEC	CSDX 505	Logic Programming	3
6.	V	PEC	CSDX 512	Agriculture Data Analytics	3
				Intrusion Detection & Data	
7.	V	PEC	CSDX 513	Analytics	3
8.	VI	PEC	CSDX 629	Exploratory Data Analysis	3
9.	VII	PCC	CSD 4151	Applied Artificial Intelligence	3
				Malware Analysis in Data	
10.	VII	PEC	CSDX 535	Science	3
11.	VII	PEC	CSDX 536	Image & Video Analytics	3
12.	VII	PEC	CSDX 537	Bayesian Data Analysis	3
13.	VII	PEC	CSDX 538	Feature Engineering	3
				Distributed Computing for	
				Artificial Intelligence and Data	
14.	VII	PEC	CSDX 539	Science	3
15.	VII	PEC	CSDX 540	Secure Data Science	3

#### b) Courses with syllabus revisions (proposed):

Course Code	Sem	Course Title	Credits	Revision (%)
CSDX 529	V	Emotional Intelligence	3	25
CSDX 522	VII	Visual Data Analysis and Machine Perception	3	10

The revised curriculum and syllabi of the above courses are given in <u>Annexure</u> <u>22.12.1.</u>

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

#### **Resolution:**

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

#### Item 22.12.2

To consider and ratify the revised curriculum and syllabi of programme core and professional elective courses (Semester IV & VI) of B.Tech. Artificial Intelligence and Data Science under Regulations 2021.



# Note on Agenda:

In the 23<sup>rd</sup> meeting of Board of Studies of Computer Science and Engineering Department, the syllabi of following programme core and professional elective courses of B.Tech. Artificial Intelligence and Data Science (semester IV & VI) were discussed. In order to cope up with current industrial demands, the following new courses were introduced.

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

S.NO.	SEM	Course Group	Course Code	Course Title	Credits
1.	IV	PEC	CSDX 604	Ethics In Artificial Intelligence & Data Science	3
2.	IV	PEC	CSDX 608	Data Science For Intelligent Gaming System	3
3.	VI	PCC	CSD 3252	IoT And Embedded Systems	3
4.	VI	PCC	CSD 3255	Software Tools And Techniques Laboratory	1
5.	VI	PEC	CSDX 627	Generative Artificial Intelligence	3

#### a) New courses (ratified): Semester IV & VI (AY 2023-24)

The revised curriculum and syllabi of the courses (IV & VI semester) of B.Tech. Artificial Intelligence and Data Science are given in <u>Annexure 22.12.2.</u>

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

#### **Resolution:**

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

#### Item 22.12.3

To consider and approve the revised curriculum and syllabi (I and II semester) of M.Tech.(CSE) programme under Regulations 2022.

#### Note on Agenda:

In the 23<sup>rd</sup> meeting of Board of Studies of Computer Science and Engineering Department, the revised curriculum and syllabi (I and II semester) of M.Tech.(CSE) were thoroughly discussed, to offer M.Tech. CSE programme in collaboration with Industry.

In M.Tech. CSE, the elective course "CSEY 023 - Advanced Blockchain Technology" was also revised.



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

S.No.	Sem	Course Group	Course Code	Course Title	Credits
1.	I	PCC	CSE 6151	Edge Engineering	4
2.	I	PCC	CSE 6152	Programming for Data Analysis	3
3.	I	PCC	CSE 6153	Edge Engineering Lab	1
4.	I	PCC	CSE 6154	Programming Lab	2
5.	I	PEC	CSEY 101	Java Programming for IoT Applications	3
6.	I	PEC	CSEY 102	.Net programming for IoT Applications	3
7.	I	HSC		Professional Skills I	1
8.	II	PCC	CSE 6161	IoT Middleware and Data Engineering	3
9.	I	PEC	CSEY 111	Application Architecture and Deployment	3
10.	Ш	PEC	CSEY 112	Embedded Programming	3
11.	II	HSC		Professional Skills - II	1
12.	II	PCC	CSE 6162	IoT Middleware and Data Engineering Lab	2
13.	Π	PEC	CSEY 113	Embedded Programming Lab	1

# a) New courses introduced / proposed: Semester I - II (AY 2024-25)

# b) Courses with syllabus revisions (proposed):

Course Code	Course Title	Credits	Revision (%)
CSEY 023	Advanced Blockchain Technology	3	20

The revised curriculum and syllabi of the courses (I & II semesters) M.Tech.(CSE) programme to be offered in collaboration with Industry under R 2022 are given in <u>Annexure</u> 22.12.3.

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



#### **Discussions:**

Mr. Arul Rajkumar inquired about the reasons for the significant changes in the curriculum and syllabus of the M.Tech. (CSE) programme. The Head of the CSE Department responded, explaining that the programme will now be offered in collaboration with M/s. LTI Mindtree as an industry-integrated M.Tech. program, aimed at enhancing employment opportunities with higher pay. Additionally, it was noted that students will complete their first year at Crescent and their second year at LTI Mindtree, as per the MoU signed with M/s. LTI Mindtree, Chennai.

Mr. Rakeeb raised the point that "production management skills" are currently trending in industries and asked whether a course on production management is included. He also inquired if a course on "mobile app development" is offered. The Head of CSE explained that interested students receive special attention after regular hours and are encouraged to pursue a value-added course on mobile app development.

# **Resolution:**

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

# DEPARTMENT OF INFORMATION TECHNOLOGY

#### Item 22.13

To consider and approve the recommendations of the 19<sup>th</sup> Board of Studies of the Department of Information Technology held on 22.05.2024.

#### Item 22.13.1

To consider and approve the revised curriculum and introduction of new professional elective courses of B.Tech. Information Technology under Regulations 2021.

# Note on Agenda:

As per the suggestions of expert members of the School Level Advisory committee (SLAC meeting conducted on 27<sup>th</sup> March 2024) and feedback from Staff members of IT department, it was proposed to include the following professional elective courses in the curriculum of B.Tech. Information Technology. The courses were deliberated in the Board of Studies meeting of IT Department.

After deliberations, the Board has recommended the same for approval in the



Academic council.

# a) New Elective courses introduced:

(Under the specialization of Data Science and AI)

Semester	Course Code	Course Title	Credits
V	ITDX 55	Machine Learning Using R	3
VI	ITDX 56	Deep Learning Using R	3
VI	ITDX 57	Generative AI using PyTorch	3

# b) New Elective courses introduced:

(Under the specialization of Information Technology Applications)

Semester	Course Code	Course Title	Credits
VII	ITDX 20	Full Stack Development	3
VII	ITDX 21	UI and UX Design	3

The revised curriculum and syllabi of the above elective courses are given in Annexure 22.13.1.

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

#### **Discussions:**

Dr. Ranjani Parthasarathy posed a question to both the IT and CSE departments, inquiring whether a "Prompt Engineering" course is offered. The Head of the IT Department responded that this suggestion would be taken into consideration during the upcoming Board of Studies (BoS) meeting.

#### **Resolution:**

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

#### **DEPARTMENT OF COMPUTER APPLICATIONS**

#### Item 22.14

To consider and approve the recommendations of 20<sup>th</sup> Board of Studies of the Department of Computer Applications held on 17.05.2024



#### Item 22.14.1

To consider and approve the syllabi of programme core and professional courses (Semester V & VI) of BCA programme with specialization in Artificial Intelligence under Regulations 2021.

#### Note on Agenda:

Based on the dynamic needs in the Industry and suggestions given by the external expert members, the syllabi of the following programme core and professional courses (Semester V – VI) were thoroughly discussed during the  $20^{th}$  meeting of Board of Studies of Computer Applications Department.

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

SI. No.	Course Code	Course Title	Credits
1.		Technology Core	
	CADX 124	Computer Vision	3
2.	CADX 125	Natural Language Processing	3
3.	CADX 123	Introduction to Deep Learning	3
		Techniques	
4.		Technology Core Lab -II	
	CADX126	Computer Vision Laboratory	2
5.		Technology Core Lab -III	
	CADX127	Natural Language Processing	2
		Laboratory	
6.	CADX 223	Intelligent Systems	3

a) New courses introduced: Semester V & VI (AY 2024-25)

The curriculum and syllabi of the courses (V & VI semesters) of BCA Artificial Intelligence programme are given in <u>Annexure 22.14.1.</u>

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.



3

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#### Item 22.14.2

To consider and approve the syllabi of programme core and professional courses (Semester V & VI) of BCA programme with specialization in Cyber Security under Regulations 2021.

#### Note on Agenda:

1.

2.

3.

4.

CADX 130

CADX 129

CADX131

CADX 228

Based on the emerging trends and the suggestions given by expert members, the syllabi of the following programme core and professional courses (Semester V – VI) were thoroughly discussed during the  $20^{th}$  meeting of Board of Studies of Computer Applications Department.

Following the discussions, the Board has recommended the same for approval in the Academic council.

**Technology Core** 

Information Security

**Fundamentals** 

Cyber Law

Blockchain Technology

**Technology Core Lab** 

Information Security Laboratory

SI.	Cou	irse		Oradita
No	. Co		Course Title	Credits

a) New courses introduced / proposed: Semester V &VI (AY 2024-25)

The curriculum and syllabi of the courses (V & VI semesters) of BCA Cyber Security programme are given in <u>Annexure 22.14.2.</u>

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 22.14.3

# To consider and approve the revised curriculum and new programme elective courses for BCA & B.Sc. Programmes under Regulations 2021.

Note on Agenda:

Based on the dynamic needs in the industry and the suggestions by the external experts, the syllabi of the following Programme Elective courses were discussed in the 20<sup>th</sup> meeting of Board of Studies of Computer Applications Department

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

#### a) New courses introduced / proposed: Semester V &VI (AY 2024-25)

# (Professional Elective I Stream)

SI.	Course	Course Title	Credits
No.	Code	Course Thie	Credits
1.	CADX255	Fundamentals of Block Chain	3
		Technology	
2.	CADX256	Introduction To Data Analytics	3

The revised curriculum and syllabi of the above programme elective courses are given in **Annexure 22.14.3**.

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 22.14.4

To consider and approve the revised curriculum and syllabi of Programme Elective courses of MCA programme under Regulations 2022.

#### Note on Agenda:

Based on the dynamic needs in the industry and the suggestions given by external experts, the syllabi of the following Programme Elective course of MCA programme was discussed in the 20<sup>th</sup> meeting of Board of Studies of Computer Applications Department.

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



a) New courses introduced / proposed: Semester III (AY 2024-25) (Professional Elective III)

SI. No.	Course Code	Course Title	Credits
1.	CAEY 360	Development and Operations	3

The revised curriculum and syllabi of the above course are given in Annexure 22.14.4.

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 22.14.5

To consider and approve the syllabi of Open Elective courses for B.Tech. Programmes under Regulations 2021.

#### Note on Agenda:

In order to enhance the employment opportunities and the suggestions given by external experts the syllabi of the following Open Elective courses under R 2021 were deliberated during the 20<sup>th</sup> meeting of Board of Studies of Computer Applications Department.

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

a) New courses introduced / proposed:	Semester VI &VII (AY 2024-25)
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SI. No.	Course Code	Course Title	Credits
1.	GEDX 203	Big Data Analytics	3
2.	GEDX 106	Cloud Services and Management	3
3.	GEDX 311	Customer Relationship Management Analytics	3
4.	GEDX 215	Introduction to Health Care Analytics	3
5.	GEDX 230	Web Application Development	3

The syllabi of the above open elective courses for B.Tech. programme are given in



#### Any other suggestions/ discussions:

Before concluding, the members made the following suggestions:

- **Mr. Arul Rajkumar** appreciated the evolving syllabus that aligns with industry demands. He recommended offering a course on "Site Reliability Engineering," a concept pioneered by Google.
- Dr. Ranjani Parthasarathy proposed the introduction of courses on "Universal Human Values" (UHV), as recommended by AICTE/UGC. She suggested including UHV-I in the student induction program and UHV-II in the higher semester as a common course across all disciplines.
- Dr. Abudhahir, the IQAC Director, informed the members that the NBA has adopted the Graduate Attributes of the Washington Accord. He emphasized the need to update the attribute "Engineering Knowledge" to "Lifelong Knowledge" and proposed revising the graduate attributes for each program. He also urged the Heads of Departments (HODs) to align their program curricula with the National Credit Framework (NCRF) parameters and to meet the requirements for adopting the NEP 2020 initiatives of the UGC, recommending a thorough revision in the upcoming academic year.
- **Mr. Rakeeb** expressed his appreciation and emphasized the importance of discipline and personal habits among students. He also inquired about the provision of soft skills training for students. The Dean, Academic Affairs responded that the current curriculum includes five one-credit courses, in addition to the training provided by the Placement Training Cell.
- **Mr. Rakeeb** further inquired whether special attention is given to enhancing language and communication skills. He suggested offering remedial classes in regional languages and assigning mentors to monitor the progress of slow learners. The Dean of Academic Affairs informed the members about the support mechanisms in place at the institute for slow learners.

#### Vote of thanks by the Registrar

The Registrar expressed gratitude to all members of the Academic Council who attended both online and in person, acknowledging their valuable suggestions and recommendations. He also commended the team from the office of Dean of Academic Affairs for the thorough presentation of agenda items and management of other logistics. Additionally,



he extended his appreciation to the Deans, Directors, Heads of Departments, and all other members for their active participation and cooperation in the conduct of Academic council meeting. The meeting concluded with a note of thanks from all members.

REGISTRAR

Dr. N. RAJA HUSSAIN Registrar B.S. Abdur Rahman Crescent Institute of Science & Technology Vandalur, Chennai - 600 048.

