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Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
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Date:25/07/2026

DEPARTMENT OF INTERNET OF THINGS

KLEF/ IOT/ IQAC - ACAD/ AQ.5/ DCMs /5.3

MINUTES OF XI BOARD OF STUDIES MEETING

The Department Board of Studies conducted an online meeting on July 25th, 2026, from 1:30 PM to 5:00 PM, presided over by Dr. P. Satyanarayana, Head of the IoT Department.

The following members are present.

1. Dr. Satyanarayana Penke,Chairperson,KLEF
2. Dr. Ravi Kumar Jatoth,Professor/Subject Experts, Department of ECE, National Institute of Technology, Warangal - 506004, Telangana, INDIA
3. Dr. Midhun Chakkaravarthy,PhD, Professor/Subject Experts, Faculty of Computer Science and Multimedia, Lincoln University College, Malaysia.
4. Mr.Murali Krishna Vemuri, Industry Black Berry-QNX, Hyderabad, Telangana
5. Dr. Ramesh Kumar Mojjada, Industry , Renault Nissan Technology & Business Centre, India.
6. Dr. T.P.S Kumar Kusumanchi,Faculty ,KLEF
7. Dr. Satya Gouri Arunasri Pabbisetti,Faculty ,KLEF
8. Dr.KVD Sagar,Faculty ,KLEF
9. Dr. Jyothi Ravi Kiran Kumar Dabbakuti,Faculty ,KLEF
10. Dr. Bhupati CH, Faculty, , KLEF
11. Dr. S.Sureka,Asst. Professor ,Member,KLEF
12. Dr.KVD Kiran, Professor in CSE/Faculty from Other Department, KLEF
13. Mr. Siddharth Sudineni, Alumni ,L&T, Bangalore
14. Mr. Mohan Chandaluru, Associate Professional Implementation Engineer/Alumni , Sutherland Global Services India Pvt. Ltd., Hyderabad.
15. Mr. K N SHIVA, POWER BI DEVELOPER/Alumni , ORANGE BUSINESS SERVICE PVT LTD,Bangalore
16. TANAKANTI RENUKA (2300100002),Student ,Member,KLEF
17. KOLAGANI HEMANTH (2300100020),Student ,Member,KLEF
18. KOSURI SAI PRIYANKA (2300100026),Student ,Member,KLEF

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19. SABBINENI HARSHA VARDHAN (2400100014),Student ,Member,KLEF
20. KURUVA ACHITHA(2400100018),Student ,Member,KLEF
21. TENALI SINDHU (2400100070),Student ,Member,KLEF
22. PONNURU BALA KOTI RAJESWAR(2400100071),Student ,Member KLEF

The following members are Absent:

Nil

Dr. P. Satyanarayana, Chairperson of the Board of Studies, opened a meeting with a welcome address and introduced external members to the internal members. He expresses gratitude for their willingness to serve on the Board of Studies. The Chairperson then presented the agenda items for discussion.

AGENDA ITEMS

Item No. 1: To consider and approve the Minutes of the Department Academic Committee (DAC) Meeting held on 22 July 2026.

Item No. 2: To consider and approve the Curriculum Structure, Program Development Document (PDD), and Regulations for the B.Tech Computer Science and Engineering (Internet of Things) Program applicable to the Y26 (2026–27 Admitted Batch).

Item No. 3: To consider and approve the proposed curriculum modifications, Program Development Document (PDD), and Regulations for the B.Tech (IoT) Y25 Batch.

Item No. 4: To consider and approve the proposed revisions to the Y23 Batch syllabus in accordance with the Degree Requirements of the B.Tech (IoT) Program.

Item No. 5: To consider and approve any other academic matters with the permission of the Chair.

AGENDA AND RESOLUTIONS

AGENDA ITEM-1

Description	Resolution Passed
To consider and approve the Minutes of the Department Academic Committee (DAC) Meeting held on 22 July 2026.	Approved Forwarded to the academic council for further approval.

The Chairperson of the BoS briefed the members of the Department Academic Committee (DAC) meeting held on 22 July 2026 (Agenda Item No. 1), and highlighted the key resolutions discussed. All members unanimously approved of these resolutions and forwarded them to the

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academic council for further approval. The details of the DAC minutes are shown in(**Annexure 01**).

AGENDA ITEM-2

Description	**Resolution Passed**
To consider and approve the Curriculum Structure, Program Development Document (PDD), and Regulations for the B.Tech Computer Science and Engineering (Internet of Things) Program applicable to the Y26 (2026–27 Admitted Batch).	Approved Forwarded to the academic council for further approval

Resolutions:

The BoS Chairman presented the proposed curriculum for the B.Tech CSE (IoT) program for the 2026–2027 admitted batch. He explained the curriculum structures of PBL(Project based learning) and regular in detail, including the list of courses, specializations, course objectives, syllabus, and proposed modifications for the new regulation and program development document(PDD).

The members are unanimously approved of the proposed curriculum modifications .The approved revisions have been forwarded to the Academic Council for further approval. The details of these course structures and curriculum and PDD are shown in (**Annexure-2**)

AGENDA ITEM-3

Description	**Resolution Passed**
To consider and approve the proposed curriculum modifications, Program Development Document (PDD), and Regulations for the B.Tech (IoT) Y25 Batch.	Approved Forwarded to the academic council for further approval

Resolutions:

The BoS Chairman presented the proposed curriculum modifications for the B.Tech (IoT) program for the 2025–2026 admitted batch. He explained the curriculum structure in detail, including the list of courses, course objectives, syllabuses, and proposed modifications.

The Chairman of the BoS presented the proposed new courses for the B.Tech (IoT) program based on stakeholder feedback for students admitted to the Y25 batch.

a. Based on local needs, industry personnel proposed introducing the Embedded System Design and IoT course to B. Tech (IoT) students.
b. Based on local needs, industry personnel proposed introducing the Operating Systems course for B. Tech (IoT) students.
c. Based on local and regional needs, industry personnel proposed introducing the Full Stack Web Development course for B. Tech (IoT) students.
d. Based on local and regional needs, industry personnel proposed introducing the Mathematics for Data Science and Analytics course for B. Tech (IoT) students.

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e. Based on local and regional needs, industry personnel proposed introducing the Deep Learning with Accelerated Computing course for B. Tech (IoT) students.

f. Based on local and regional needs, industry personnel proposed introducing the Embedded Software Development course for B. Tech (IoT) students.

g. Based on local and regional needs, industry personnel proposed introducing the IoT Protocols and Cloud Integration course for B. Tech (IoT) students.

h. Based on local and regional needs, industry personnel proposed introducing the Embedded AI and Tiny ML course for B. Tech (IoT) students.

i. Based on local and regional needs, industry personnel proposed introducing the Big Data Engineering and Data Pipelines course for B. Tech (IoT) students.

j. Based on local and regional needs, industry personnel proposed introducing the Generative AI and AI Platform Engineering course for B. Tech (IoT) students.

k. Based on local and regional needs, industry personnel proposed introducing the Natural Language Processing and LLM Engineering course for B. Tech (IoT) students.

l. Based on local and regional needs, industry personnel proposed introducing the Wireless Technologies And 5G In IoT course for B. Tech (IoT) students.

m. Based on local and regional needs, industry personnel proposed introducing the Agentic AI And Autonomous Enterprise Systems course for B. Tech (IoT) students.

Sl. No.	Course Title	Course Type	Remarks
1	Embedded System Design and IoT	PCC	Introduced based on stakeholders feedback to strengthen embedded systems and IoT application development skills.
2	Operating Systems	PCC	Introduced based on stakeholders feedback to enhance students understanding of operating system concepts and resource management.
3	Full Stack Web Development	PCC	Introduced based on stakeholders feedback to equip students with end-to-end web application development skills.
4	Deep Learning with Accelerated Computing	PCC	Introduced based on stakeholders feedback to provide expertise in deep learning using GPU-accelerated computing platforms.
5	Mathematics for Data Science and Analytics	BSC	Introduced to strengthen the mathematical foundations required for data science, analytics, and AI applications.
6	Embedded Software Development	PCC	Introduction to develop embedded programming skills for microcontroller- and IoT-based systems.

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7	IoT Protocols and Cloud Integration	PCC	Introduction to provide knowledge of IoT communication protocols and cloud-based IoT solutions.
8	Embedded AI and Tiny ML	PCC	Introduced to enable AI model deployment and optimization on resource-constrained embedded devices.
9	Big Data Engineering and Data Pipelines	PCC	Introduced to develop competencies in big data processing, data engineering, and scalable data pipelines.
10	Generative AI and AI Platform Engineering	PCC	Introduced to provide hands-on knowledge of generative AI models, AI platforms, and deployment workflows.
11	Natural Language Processing and LLM Engineering	PCC	Introduced to build expertise in natural language processing, large language models, and AI-driven language applications.
12	Wireless Technologies and 5G in IoT	PCC	Introduced strengthen knowledge of wireless communication technologies and 5G-enabled IoT applications.
13	Agentic AI and Autonomous Enterprise Systems	PCC	Introduction to provide knowledge of autonomous AI agents, intelligent enterprise systems, and next-generation AI applications.

The members are unanimously approved of the proposed curriculum modifications and recommended them to the Academic council for further approval. The detailed course structure and syllabus are enclosed as ***Annexure III***.

AGENDA ITEM-4

Description	Resolution Passed
To consider and approve the proposed revisions to the Y23 Batch syllabus in accordance with the Degree Requirements of the B.Tech (IoT) Program.	Approved Forwarded to the academic council for further approval

Resolutions:

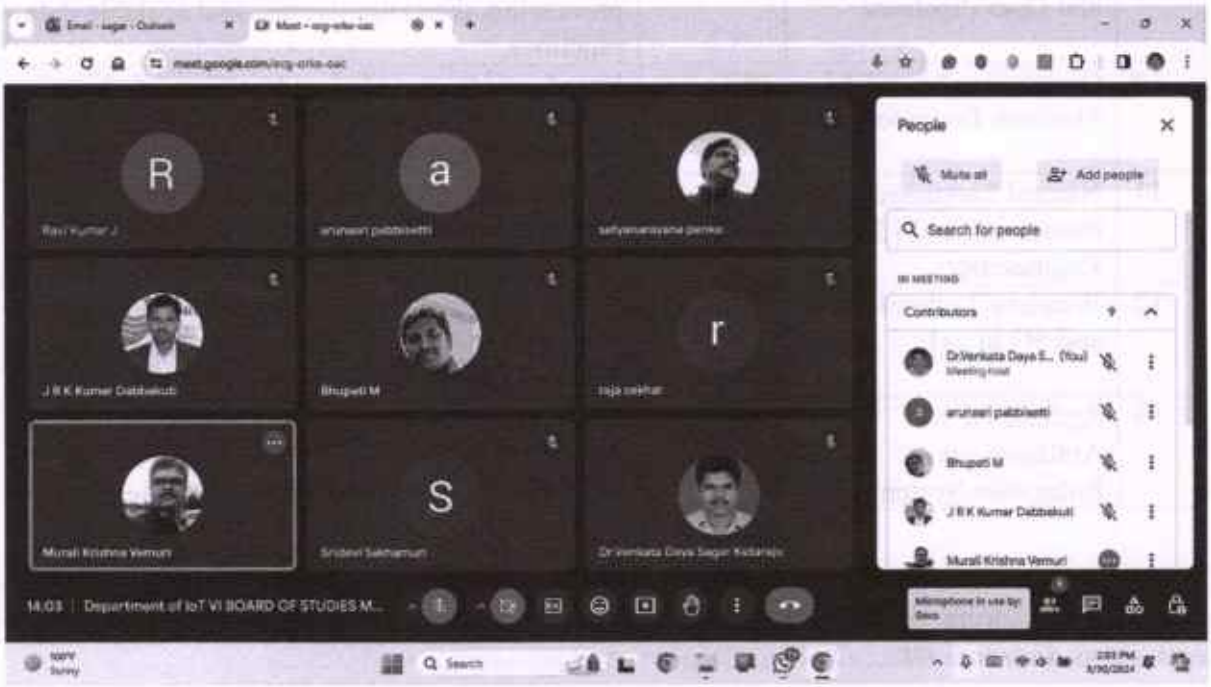
The BoS Chairman presented the proposed curriculum modifications for the B.Tech (IoT) program for the 2023–2024 admitted batch. He explained that the total program credits had reduced from 160 to 157 due to a change in the LTPS pattern of the Open Elective (OE) courses. Earlier, the OE courses had an LTPS of 4-0-0-0 carrying 4 credits each, which has now been revised to 3-0-0-0 while retaining the same 3 credits. This revision resulted in a deficiency in the overall required minimum credits of the program.

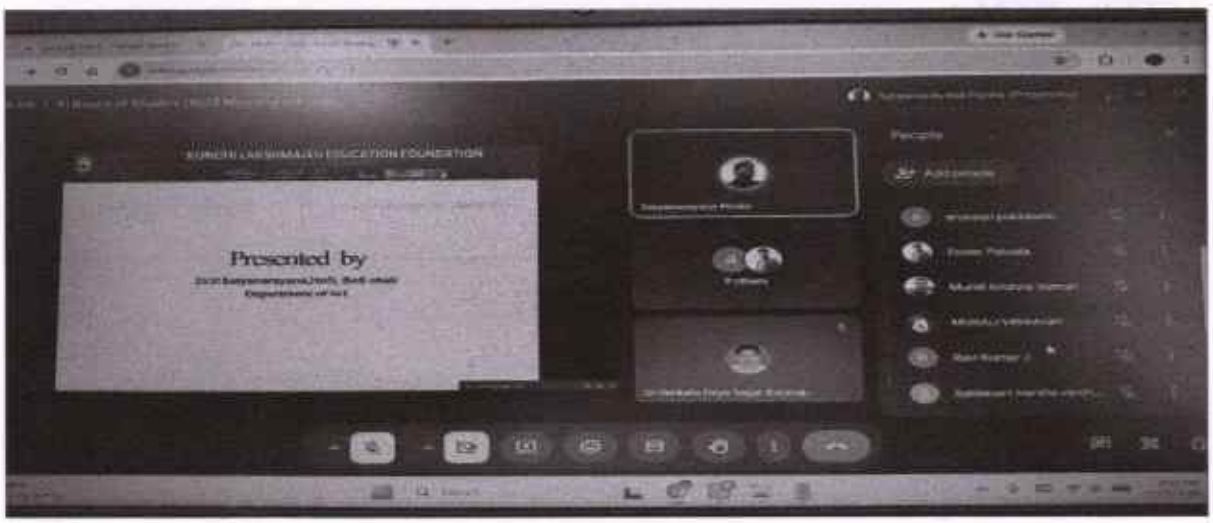
To address this deficiency, the Chairman proposed the introduction of an additional 3-credit course under the FCC/PCC category.

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All The members unanimously approved the modification and recommended it to the Academic council for further approval. The detailed course structure is enclosed as ***Annexure IV***.

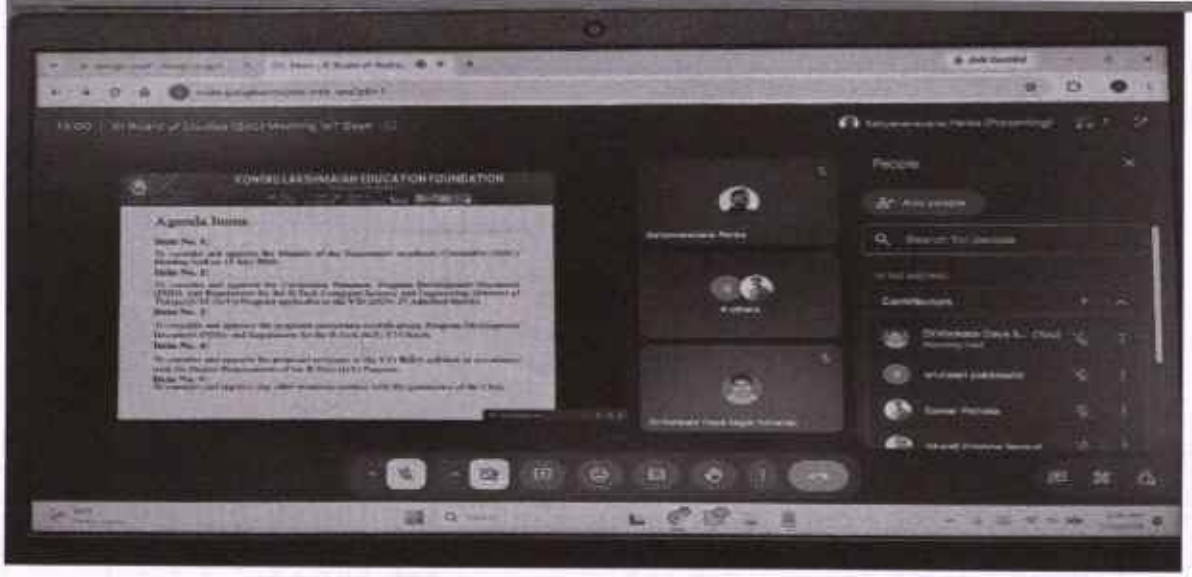
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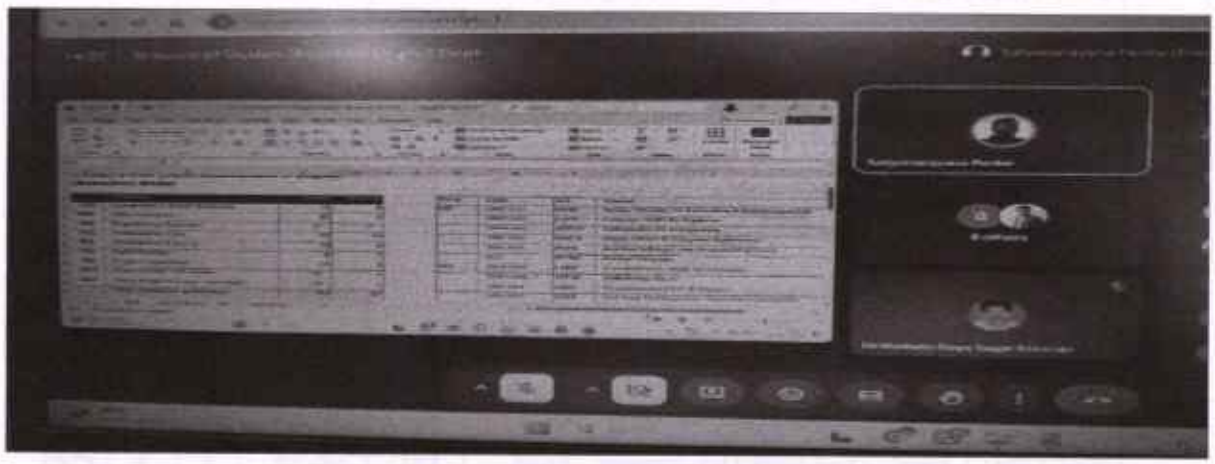




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BoS -Chairman

Annexure:1 DAC Meeting Minutes and relevant Annexures

Annexure:2

PROGRAMME STRUCTURE · Y26 B. TECH

CSE(Internet of Things)

Category-wise Credit Requirement — Regular (Semester) Model

	Category	Credits	Courses
HSS	Humanities & Social Sciences	13	6
BSC	Basic Sciences	20	5
ESC	Engineering Sciences	41	11

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PCC	Professional Core	50	14
PEC	Professional Elective	15	5
OEC	Open Elective	9	3
PRI	Project / Internship	15	5
AUC	Audit Course · non-credit	Nil	4
VAC	Value Added Course · non-credit	Nil	4
	Total credits for graduation	163	57

Term	Code	Acr	Course	Cat	L-T-P-S	CR	CH	Pre-req
S01	26UC1137	DTIE	Design Thinking for Innovation & Entrepreneurship	HSS	0-0-4-0	2	4	–
	26UC1102	LSFE	Language Skills for Engineers	HSS	0-0-4-0	2	4	–
	26MT1101	MTCP	Mathematics for Computation	BSC	2-2-0-0	4	4	–
	26EC1202	DDCA	Digital Design & Computer Architecture	ESC	2-0-0-4	3	6	–
	26SC1101	PSPJ	Problem Solving Using Programming (Java)	ESC	2-0-0-8	4	10	–
	FLP	FLNG	Foreign Language	HSS	0-0-4-0	2	4	–
S02	26UC1204	CSFE	Communication Skills for Engineers	HSS	0-0-4-0	2	4	LSFE
	26MT1202	MTAI	Mathematics for AI	BSC	2-2-0-0	4	4	MTCP
	26EC1101	FOIS	Fundamentals of IoT & Sensors	ESC	2-0-4-0	4	6	–
	26SC1204	FSFE	Full Stack Development – Front End Frameworks	ESC	2-0-2-4	4	8	PSPJ
	26SC1306	CFAI	Computational Foundations for AI	ESC	2-0-0-4	3	6	–
	26SC1203	DSA1	Data Structures & Algorithms – 1	ESC	2-0-0-4	3	6	PSPJ
Summer 1	26IE2040	INTS	Social Internship	PRI	0-0-4-0	0	4	–
	26UC0032	SDGL	Insights to Sustainable Development Goals	AUC	2-0-0-0	0	2	–
Year 1 — Courses: 14 · Credits: 37 · Contact Hours/Week: 72								

Term	Code	Acr	Course	Cat	L-T-P-S	CR	CH	Pre-req
S03	26MT1303	MTDS	Mathematics for Data Science & Analytics	BSC	2-2-0-0	4	4	MTCP
	26SC1307	FSBE	Full Stack Development – Database Systems & Back End Engineering	ESC	2-0-2-4	4	8	PSPJ
	26SC2110	MLRN	Machine Learning	ESC	2-0-4-0	4	6	CFAI

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	26EC2106	ESDI	Embedded System Design & IoT	ESC	2-0-4-0	4	6	FOIS
	26SC1305	DSA2	Data Structures & Algorithms – 2	ESC	2-0-2-4	4	8	DSA1
	26CS2101	OSYS	Operating Systems & Systems Programming	PCC	2-0-4-0	4	6	DSA1
	VAC- 1	VAC1	Value Added Course 1 - Sports	VAC	0-0-0-2	0	2	–
S04	26CS2203	CNET	Computer Networks & Network Programming	PCC	2-0-0-4	3	6	–
	26EC2310	ESWD	Embedded Software Development	PCC	2-0-4-0	4	6	ESDI
	26AD2305	BGDT	Big Data Engineering & Data Pipelines	PCC	2-0-0-4	3	6	MLR N
	26IN2102	WT5G	Wireless Technologies and 5G in IoT	ESC	2-0-2-4	4	8	FIOTS
	26IN2201	AOOP	IoT Protocols & Cloud Integration	PCC	2-0-2-4	4	8	PSPJ
	26AD2202	GNAI	Generative AI & AI Platform Engineering	PCC	2-0-4-0	4	6	MLR N
	VAC- 2	VAC2	Value Added Course 2 - Technical Global Certification 1	VAC	0-0-0-2	0	2	–
Summer 2	26IE3041	INTT	Technical Internship	PRI	0-0-4-0	0	4	–
	26UC0017	IKSL	Indian Knowledge Systems	AUC	2-0-0-0	0	2	–
Year 2 — Courses: 16 · Credits: 46 · Contact Hours/Week: 88								

Term	Code	Acr	Course	Cat	L-T-P-S	CR	CH	Pre-req
S05	SCE- 1	SCE1	Science Elective – 1	BSC	3-0-2-0	4	5	–
	26CS2204	CLDI	Cloud Infrastructure & Services	PCC	2-0-0-4	3	6	FSBE
	26IN2303	ISHT	IoT Security & Hardware Trust	PCC	2-0-4-0	4	6	OSYS
	26AD2304	DLRN	Deep Learning with Accelerated Computing	PCC	2-0-0-4	3	6	MLR N
	26EC3113	EATM	Embedded AI & Tiny ML	PCC	2-0-4-0	4	6	DLRN
	PE- 1	PEC1	Professional Elective – 1	PEC	2-0-0-4	3	6	–
	VAC- 3	VAC3	Value Added Course 3 - Technical Global Certification 2	VAC	0-0-0-2	0	2	–
S06	26IE4101	TMPR	Term Paper	PRI	0-0-6-0	3	6	–
	26CS2306	CICD	CI/CD and Cloud DevOps	PCC	2-0-0-4	3	6	FSBE
	26AD3207	NLLM	Natural Language Processing & LLM Engineering	PCC	2-0-4-0	4	6	MLR N
	26IN4104	IIDT	Industrial IoT, Digital Twins & Edge AI Deployment	PCC	2-1-2-0	4	5	OSYS
	PE- 2	PEC2	Professional Elective – 2	PEC	3-0-0-0	3	3	PEC1
	PE- 3	PEC3	Professional Elective – 3	PEC	2-0-0-4	3	6	PEC1
	VAC- 4	VAC4	Value Added Course 4 - Technical Global Certification 3	VAC	0-0-0-2	0	2	–
Summer 3	26UC0009	ECEN	Ecology & Environment	AUC	2-0-0-0	0	2	–
Year 3 — Courses: 15 · Credits: 41 · Contact Hours/Week: 73								

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Regular (Semester) Track — Year 4

Term	Code	Acr	Course	Cat	L-T-P-S	CR	CH	Pre-req
S07	26UC0008	INCT	Indian Constitution	AUC	2-0-0-0	0	2	–
	OE- 1	OEC1	Open Elective – 1	OEC	2-0-2-0	3	4	–
	SCE- 2	SCE2	Science Elective – 2	BSC	3-0-2-0	4	5	–
	26AD3308	AGAI	Agentic AI & Autonomous Enterprise Systems	PCC	2-0-0-4	3	6	DLRN
	PE- 4	PEC4	Professional Elective – 4	PEC	3-0-0-0	3	3	PEC1
	26IE4053	CAP1	Capstone Project – 1	PRI	0-0-12-0	6	12	TMPR
S08	26UC0026	HVEG	Human Values, Gender Equality & Professional Ethics	HSS	2-0-0-0	2	2	–
	OE- 2	OEC2	Open Elective – 2	OEC	2-0-2-0	3	4	–
	OE- 3	OEC3	Open Elective – 3	OEC	2-0-2-0	3	4	–
	ME	MGMT	Management Elective	HSS	2-0-2-0	3	4	–
	PE- 5	PEC5	Professional Elective – 5	PEC	3-0-0-0	3	3	PEC1
	26IE4054	CAP2	Capstone Project – 2	PRI	0-0-12-0	6	12	CAP1
Year 4 — Courses: 12 · Credits: 39 · Contact Hours/Week: 61								

Category-wise Credit Requirement — PBL (Trimester) Model

	Category	Credits	Courses
HSS	Humanities & Social Sciences	15	7
BSC	Basic Sciences	20	5
ESC	Engineering Sciences	41	11
PCC	Professional Core	68	19
PEC	Professional Elective	15	5
OEC	Open Elective	9	3
PRI	Project / Internship	15	6
AUC	Audit Course · non-credit	Nil	4
VAC	Value Added Course · non-credit	Nil	5
	Total credits for graduation	183	65

Term	Code	Acr	Course	Cat	L-T-P-S	CR	CH	Pre-req
T01	26SC1101E	PSPJ	Problem Solving Using Programming (Java)	ESC	3-0-6-0	4	9	–

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	26UC1137E	DTIE	Design Thinking for Innovation & Entrepreneurship	HSS	3-0-0-0	2	3	–
	26UC1102E	LSFE	Language Skills for Engineers	HSS	3-0-0-0	2	3	–
	26EC1202E	DDCA	Digital Design & Computer Architecture	ESC	3-0-0-6	3	9	–
	26MT1101E	MTCP	Mathematics for Computation	BSC	3-3-0-0	4	6	–
T02	26SC1203E	DSA1	Data Structures & Algorithms – 1	ESC	3-0-0-6	3	9	PSPJ
	26EC1101E	FOIS	Fundamentals of IoT & Sensors	ESC	3-3-0-0	4	6	–
	26MT1202E	MTAI	Mathematics for AI	BSC	3-3-0-0	4	6	MTCP
	26SC1204E	FSFE	Full Stack Development – Front End Frameworks	ESC	3-0-6-0	4	9	PSPJ
	26UC1204E	CSFE	Communication Skills for Engineers	HSS	3-0-0-0	2	3	LSFE
T03	26SC1305E	DSA2	Data Structures & Algorithms – 2	ESC	3-0-6-0	4	9	DSA1
	26SC1306E	CFAI	Computational Foundations for AI	ESC	3-0-0-6	3	9	MTAI
	26MT1303E	MTDS	Mathematics for Data Science & Analytics	BSC	3-3-0-0	4	6	MTCP
	26SC1307E	FSBE	Full Stack Development – Database Systems & Back End Engineering	ESC	3-0-6-0	4	9	PSPJ
	FLP- 1	FLG1	Foreign Language Proficiency – 1	HSS	3-0-0-0	2	3	–
Summer 1	26IE2040E	INTS	Social Internship	PRI	0-0-6-0	0	6	–
	26UC0032E	SDGL	Insights to Sustainable Development Goals	AUC	3-0-0-0	0	3	–
Year 1 — Courses: 17 · Credits: 49 · Contact Hours/Week: 108								

Term	Code	Acr	Course	Cat	L-T-P-S	CR	CH	Pre-req
T04	26IN2102E	WT5G	Wireless Technologies and 5G in IoT	ESC	3-0-6-0	4	9	FIOS
	26SC2110E	MLRN	Machine Learning	ESC	3-0-6-0	4	9	CFAI
	FLP- 2	FLG2	Foreign Language Proficiency – 2	HSS	3-0-0-0	2	3	FLG1
	26CS2101E	OSYS	Operating Systems & Systems Programming	PCC	3-0-6-0	4	9	DSA1
	26EC2106E	ESDI	Embedded System Design & IoT	ESC	3-0-6-0	4	9	FOIS
T05	26IN2201E	AOOP	IoT Protocols & Cloud Integration	PCC	3-0-6-0	4	9	PSPJ
	26AD2202E	GNAI	Generative AI & AI Platform Engineering	PCC	3-0-6-0	4	9	MLRN
	26CS2203E	CNET	Computer Networks & Network Programming	PCC	3-0-0-6	3	9	–
	26CS2204E	CLDI	Cloud Infrastructure & Services	PCC	3-0-0-6	3	9	FSBE

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	VAC- 1	VAC1	Value Added Course 1 - Sports	VAC	0-0-0-2	0	2	–
T06	26IN2303E	ISHT	IoT Security & Hardware Trust	PCC	3-0-6-0	4	9	OSYS
	26EC2310E	ESWD	Embedded Software Development	PCC	3-0-6-0	4	9	ESDI
	26AD2305E	BGDT	Big Data Engineering & Data Pipelines	PCC	3-0-0-6	3	9	MLRN
	26CS2306E	CICD	CI/CD and Cloud DevOps	PCC	3-0-0-6	3	9	FSBE
	VAC- 2	VAC2	Value Added Course 2 - Technical Global Certification 1	VAC	0-0-0-2	0	2	–
Summer 2	26IE3041E	INTT	Technical Internship	PRI	0-0-6-0	0	6	–
	26UC0017E	IKSL	Indian Knowledge Systems	AUC	3-0-0-0	0	3	–
Year 2 — Courses: 17 · Credits: 46 · Contact Hours/Week: 124								
Term	**Code**	**Acr**	**Course**	**Cat**	**L-T-P-S**	**CR**	**CH**	**Pre-req**
T07	26EC3112E	RBFN	Foundations of Robotics & Mechatronic Systems	PCC	3-0-0-6	3	9	FOIS
	26AD2304E	DLRN	Deep Learning with Accelerated Computing	PCC	3-0-0-6	3	9	MLRN
	26EC3113E	EATM	Embedded AI & Tiny ML	PCC	3-0-6-0	4	9	DLRN
	PE- 1	PEC1	Professional Elective – 1	PEC	3-0-0-6	3	9	–
	VAC- 3	VAC3	Value Added Course 3 - Technical Global Certification 2	VAC	0-0-0-2	0	2	–
T08	26EC3214E	RBPR	Robotic Perception, Computer Vision & Sensor Fusion	PCC	3-0-6-0	4	9	RBFN
	26AD3207E	NLLM	Natural Language Processing & LLM Engineering	PCC	3-0-6-0	4	9	MLRN
	PE- 2	PEC2	Professional Elective – 2	PEC	3-0-0-6	3	9	PEC1
	PE- 3	PEC3	Professional Elective – 3	PEC	3-0-0-6	3	9	PEC1
	VAC- 4	VAC4	Value Added Course 4 - Technical Global Certification 3	VAC	0-0-0-2	0	2	–
T09	26AD3308E	AGAI	Agentic AI & Autonomous Enterprise Systems	PCC	3-0-6-0	4	9	DLRN
	26EC3316E	RBMT	Robotic Motion Planning, Navigation & Control Systems	PCC	3-0-6-0	4	9	RBFN
	PE- 4	PEC4	Professional Elective – 4	PEC	3-0-0-6	3	9	PEC1
	PE- 5	PEC5	Professional Elective – 5	PEC	3-0-0-6	3	9	PEC1
	VAC- 5	VAC5	Value Added Course 5 - Technical Global Certification 4	VAC	0-0-0-2	0	2	–
Summer3	26IE4042E	INTR	Research / Industrial Internship	PRI	0-0-0-0	0	0	–
	26UC0009E	ECEN	Ecology & Environment	AUC	3-0-0-0	0	3	–
Year 3 — Courses: 17 · Credits: 41 · Contact Hours/Week: 117								

Term	Code	Acr	Course	Cat	L-T-P-S	CR	CH	Pre-req
T10	26EC4117E	ARBS	Autonomous Robotic Systems & Human-Robot Interaction	PCC	3-0-3-0	3	6	RBPR

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	26EC4118E	AGEM	Agentic Embedded Systems & Intelligent Edge Orchestration	PCC	3-0-0-6	3	9	ESDI
	26IN4104E	IIDT	Industrial IoT, Digital Twins & Edge AI Deployment	PCC	3-0-6-0	4	9	OSYS
	26IE4101E	TMPR	Term Paper	PRI	0-3-3-0	3	6	–
	SCE- 1	SCE1	Science Elective – 1	BSC	3-0-6-0	4	9	–
T11	26IE4053E	CAP1	Capstone Project – 1	PRI	0-0-12-12	6	24	TMPR
	SCE- 2	SCE2	Science Elective – 2	BSC	3-0-6-0	4	9	–
	OE- 1	OEC1	Open Elective – 1	OEC	3-0-3-0	3	6	–
	OE- 2	OEC2	Open Elective – 2	OEC	3-0-3-0	3	6	–
	26UC0008E	INCT	Indian Constitution	AUC	3-0-0-0	0	3	–
T12	26IE4054E	CAP2	Capstone Project – 2	PRI	0-0-12-12	6	24	CAP1
	26UC0026E	HVEG	Human Values, Gender Equality & Professional Ethics	HSS	3-0-0-0	2	3	–
	OE- 3	OEC3	Open Elective – 3	OEC	3-0-3-0	3	6	–
	ME	MGMT	Management Elective	HSS	3-0-3-0	3	6	–
Year 4 — Courses: 14 · Credits: 47 · Contact Hours/Week: 126								
PBL (Trimester) Track total — Courses: 65 · Credits: 183 · Contact Hours/Week: 475								

Annexure:3 **Y25B.Tech-CSE(IoT) Program Structure**

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Sl No	Category	Course Code	Course Title	L	T	P	S	Cr	CH	Pre-requisite	New Course/Revised Course/ Retained Course	Changes Proposed by	Focused on Employability/ Entrepreneurship/ Skill Development	Justification
1	AUC	25UC0017	Indian Ancient Knowledge Systems - Vedic Mathematics	2	0	0	0	0	2	–	Retained			
2	AUC	25UC0032	Insights To Sustainable Development Goals	2	0	0	0	0	2	–	Retained			
3	AUC	25UC0009	Ecology And Environment	2	0	0	0	0	2	–	Retained			
4	AUC	25UC0008	Indian Constitution	2	0	0	0	0	2	–	Retained			
5	HSS	25UC1203	Design Thinking for Innovation	0	0	4	0	2	4	–	Retained		Entrepreneurship	Design Thinking for Innovation fosters an entrepreneurial mindset by enabling students to identify user needs, generate innovative solutions, and develop viable business opportunities.

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6	HSS	25UC1102	Language Skills for Engineers	0	0	4	0	2	4	–	Retained		Employ ability	Enhances professional communication, technical writing, presentation, and interpersonal skills, improving graduates' employability across diverse engineering industries
7	HSS	25UC1204	Communication Skills for Engineers	0	0	4	0	2	4	LSFE	Retained		Employ ability	Develops workplace communication, teamwork, leadership, presentation, and interview skills are essential for professional success.
8	HSS	FL	Foreign Language	3	0	0	0	3	3	–	Retained		Employ ability	Enhances global communication skills and increases career opportunities in multinational organizations.
9	HSS	25UC0026	Human Values, Gender Equality & Professional Ethics	2	0	0	0	2	2	–	Retained		Skill Develop ment	Builds ethical decision-making, professional responsibility, and inclusive workplace behavior.
10	BSC	25MT1002	Discrete Mathematics	2	2	0	0	4	4	–	Retained		Skill Develop ment	Strengthens logical reasoning and mathematical foundations required for computing and algorithm design.
11	BSC	25MT1001	Linear Algebra and Calculus for Engineers	2	2	0	0	4	4	–	Retained		Skill Develop ment	Provides mathematical foundations essential for engineering analysis, AI, and data science applications.
12	BSC	25MT1306	Mathematics For Data Science and Analytics	2	2	0	0	4	4	DIM S	New course	External BoS Members	Skill Develop ment	Equips students with mathematical concepts required for data analytics, machine learning, and AI.

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13	ESC	25SC1101	Problem Solving Through C	3	0	2	4	5	9	–	Retained		Skill Development	Develops computational thinking and programming skills for software development.
14	ESC	25EC1102	Digital System Design	3	0	2	0	4	5	–	Retained		Skill Development	Builds digital circuit design skills essential for embedded systems and hardware engineering.
15	ESC	25EC1101	Basic Electrical and Electronic Circuits	3	0	2	0	4	5	–	Retained		Skill Development	Provides fundamental knowledge of electrical and electronic systems for engineering applications.
16	ESC	25SC1203	Data Structures	3	0	2	4	5	9	PSTC	Retained		Skill Development	Develops efficient problem-solving and algorithm implementation skills for software development.
17	ESC	25SC2007	Python Programming	2	0	2	0	3	4	–	Retained		Employability	Enhances programming proficiency in Python for AI, automation, data science, and software development careers.
18	ESC	25EC1203	Fundamentals of IoT and Sensors	2	0	2	0	3	4	–	Retained		Skill Development	Provides foundational knowledge of IoT architectures, sensors, and smart system development.
19	ESC	25ME1103	Design Tools Workshop	0	0	4	0	2	4	–	Retained		Skill Development	Develops practical engineering design and CAD tool proficiency.
20	ESC	25SC2006	Object Oriented Programming Using Java	2	0	0	4	3	6	PSTC	Retained		Employability	Builds object-oriented programming skills required for enterprise software development.

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21	ESC	25SC2008	Full Stack Web Development	0	0	2	4	2	6	DAST	New course	External BoS Members	Employability	Develops front-end and back-end web development skills aligned with industry requirements.
22	PCC	25EC1204	Computer Organization and Architecture	3	0	0	0	3	3	–	Retained		Skill Development	Strengthens understanding of computer hardware architecture and system performance.
23	PCC	25EC2206	Embedded System Design and IoT	2	0	0	4	3	6	DISD	New course	External BoS Members	Employability	Develops embedded hardware and IoT application development skills for smart systems.
24	PCC	25AD2102	Artificial Intelligence and Machine Learning	3	0	2	0	4	5	PYPG	Retained		Employability	Equips students with AI and ML techniques demanded across multiple industries.
25	PCC	25CS2102	Operating Systems	3	0	2	0	4	5	DISD	New course	External BoS Members	Skill Development	Develops knowledge of operating system concepts essential for system software and cloud computing.
26	PCC	25AD2101	Database Management Systems	2	0	2	0	3	4	DIMS	Retained		Employability	Builds database design and management skills for enterprise and cloud applications.
27	PCC	25EC1302	Analog Electronic Circuit Design	2	0	2	0	3	4	DISD	Retained		Skill Development	Develops analog circuit design skills required for electronic product development.
28	PCC	25CS3112	Deep Learning with Accelerated Computing	2	0	0	4	3	6	AIML	New course	External BoS Members	Employability	Enables development of high-performance deep learning applications using GPU acceleration.

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29	PCC	25EC2308	Embedded Software Development	2	0	0	4	3	6	EBSD	New course	External BoS Members	Employability	Develops firmware programming skills for embedded and IoT devices.
30	PCC	25CS2204	Computer Networks and Security	2	0	0	4	3	6	DIMS	Retained		Employability	Builds networking and cybersecurity skills required for secure digital infrastructure.
31	PCC	25EC2309	IoT Protocols and Cloud Integration	2	0	2	0	3	4	EBSD	New course	External BoS Members	Employability	Develops expertise in IoT communication protocols and cloud-enabled IoT solutions.
32	PCC	25CS3113	Embedded AI and Tiny ML	2	0	2	0	3	4	EBSD	New course	External BoS Members	Employability	Enables deployment of AI models on resource-constrained embedded devices.
33	PCC	25CS3216	Advanced Data Structures and Algorithms	3	0	2	0	4	5	DAST	Retained		Employability	Strengthens advanced algorithmic problem-solving skills for technical interviews and software engineering.
34	PCC	25CS2309	Big Data Engineering and Data Pipelines	3	0	2	0	4	5	MFDS	New course	External BoS Members	Employability	Develops scalable data engineering and pipeline development skills for modern data platforms.
35	PCC	25CS2207	Generative AI and AI Platform Engineering	2	0	0	4	3	6	AIML	New course	External BoS Members	Employability	Prepares students to build and deploy generative AI applications using modern AI platforms.

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36	PCC	25IN3201	IoT Hardware Programming	2	0	2	0	3	4	IPCI	Retained		Skill Development	Develops practical programming skills for IoT hardware platforms and controllers.
37	PCC	25CS3214	Natural Language Processing and LLM Engineering	2	0	0	4	3	6	GAPE	New course	External BoS Members	Employability	Builds expertise in NLP and Large Language Model development for AI-driven applications.
38	PCC	25IN3202	Wireless Technologies and 5G In IoT	3	0	2	0	4	5	IPCI	Retained		Employability	Develops knowledge of wireless communication and 5G technologies for IoT ecosystems.
39	PCC	25CS3315	Agentic AI and Autonomous Enterprise Systems	3	0	2	0	4	5	NLP L	New course	External BoS Members	Employability	Prepares students to design intelligent autonomous AI systems for enterprise automation.
40	PRI	25IE2040	Social Internship	0	0	0	4	0	4	–	Retained		Skill Development	Enhances social responsibility, teamwork, and community engagement through experiential learning.
41	PRI	25IE3041	Technical Internship	0	0	0	4	0	4	–	Retained		Employability	Provides real-world industry exposure and practical engineering experience.
42	PRI	25IE4101	Term Paper	0	0	6	0	3	6	–	Retained		Skill Development	Develops technical writing, literature review, research, and presentation skills.
43	PRI	25IE4053	Capstone Project - I	0	0	8	8	6	16	TMPR	Retained		Employability	Strengthens problem-solving, project planning, teamwork, and innovation through industry-oriented projects.

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44	PRI	25IE4054	Capstone Project - 2	0	0	8	8	6	16	CAP1	Retained		Employ ability	Demonstrates engineering competence through implementation of industry-relevant solutions.
45	PEC	25AAM3111	Agentic AI Systems: Architectures & Reasoning Frameworks	2	0	0	4	3	6	AIML /	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
46	PEC	25AAM3221	Autonomous Perception & Multi-Modal Sensor Fusion	2	0	0	4			NLPL	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
47	PEC	25AAM3231	Motion Planning, Control Systems & Autonomous Simulation	2	0	0	4	3	6	AAM1	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
48	PEC	25AAM3341	V2X Communications & Connected Mobility Intelligence	2	0	0	4			DLAC	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.

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49	PEC	25AAM3351	Agentic AI Deployment, Safety Engineering & Field Integration	2	0	0	4	3	6	AAM1	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
50	PEC	25DLB3111	Distributed Ledger & Blockchain Protocol Engineering	2	0	0	4	3	6	AAM2	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
51	PEC	25DLB3221	Smart Contract Engineering & Web3 Application Development	2	0	0	4	3	6	AAM1 ·AAM3	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
52	PEC	25DLB3231	Smart Contract Security, Auditing & Formal Verification	2	0	0	4	3	6	AAM4(and AAM3	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
53	PEC	25DLB3341	DeFi Protocol Engineering, Tokenomics & Cross-Chain Systems	2	0	0	4	3	6	NIL	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.

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54	PEC	25DLB3351	Zero-Knowledge Proofs, Layer 2 Scaling & AI-Native Blockchain Systems	2	0	0	4	3	6	DLB1	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
55	PEC	25ACS3111	Offensive Security & Ethical Hacking	2	0	0	4	3	6	DLB1	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
56	PEC	25ACS3221	Vulnerability Assessment & Advanced Penetration Testing	2	0	0	4	3	6	DLB2/ DLB3	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
57	PEC	25ACS3231	Digital Forensics & Cyber Incident Response	2	0	0	4	3	6	DLB3/ DLB4	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
58	PEC	25ACS3341	SOC Engineering & Cyber Threat Intelligence	2	0	0	4	3	6	NIL	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.

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59	PEC	25ACS3351	AI-Driven Security Operations & Zero Trust Architecture	2	0	0	4	3	6	ACS1	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, preparing graduates for high-demand industry roles and innovation-driven careers.
60	PEC	25CNP3111	Kubernetes Orchestration & Cloud-Native Architecture	2	0	0	4	3	6	NIL	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, preparing graduates for high-demand industry roles and innovation-driven careers.
61	PEC	25CNP3221	Zero Trust Security & Cloud-Native Network Engineering	2	0	0	4	3	6	CNP1	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
62	PEC	25CNP3231	Platform Engineering & Internal Developer Platforms	2	0	0	4	3	6	CNP2	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
63	PEC	25CNP3341	Distributed Systems Design & Cloud-Native Data Engineering	2	0	0	4	3	6	CNP3	New course	External BoS Members	Employ ability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.

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64	PEC	25CNP3351	Hyperscale Cloud Architecture & Site Reliability Engineering	2	0	0	4	3	6	CNP4	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, preparing graduates for high-demand industry roles and innovation-driven careers.
65	PEC	25GDI3111	Game Engine Architecture & Real-Time Rendering Systems	2	0	0	4	3	6	NIL	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
66	PEC	25GDI3221	Gameplay Systems Engineering & Networked Multiplayer Architecture	2	0	0	4	3	6	GDI1	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
67	PEC	25GDI3231	AI-Driven Game Systems: Procedural Generation & Generative Content	2	0	0	4	3	6	GDI1	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.
68	PEC	25GDI3341	Extended Reality (XR) Engineering: VR, AR & Mixed Reality	2	0	0	4	3	6	GDI3	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, prepare graduates for high-demand industry roles and innovation-driven careers.

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69	PEC	25GDI3351	Cloud-Native Game Platform Engineering & Live Operations	2	0	0	4	3	6	GDI3	New course	External BoS Members	Employability	Develop advanced specialization skills aligned with emerging technologies, preparing graduates for high-demand industry roles and innovation-driven careers.

No of courses previsioned by syllabus : 0

No new courses Introduced: 37

Percentage of syllabus revision: 86%

Percentage of Courses focusing on Employability: 43%

Percentage of Courses focusing on Entrepreneurship: 5%

Percentage of Courses focusing on Skill Development: 25%

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Annexure:4

Y23B.Tech-CSE(IoT) Program Structure

Sl No	Category	Course Code	Course Title	Short Name	MODE	L	T	P	S	Cr	CH	Pre-Requisite
1	AUC	23UC0017	INDIAN KNOWLEDGE SYSTEMS - VEDIC MATHEMATICS	IKS-VM	R	0	0	0	2	0	2	NIL
2	AUC	23UC0018	FUNDAMENTALS OF MATHEMATICS (Bi.P.C)	FOM	R	3	0	0	0	0	3	NIL
3	AUC	23UC0013	GLOBAL LOGIC BUILDING CONTEST PRACTICUM	GLBCP	R	0	0	0	2	0	0	NIL
4	AUC	23UC0014	GLOBAL LOGIC BUILDING CONTEST PRACTICUM	GLBCP	R	0	0	0	2	0	0	NIL
5	AUC	23UC0008	INDIAN CONSTITUTION	IC	R	2	0	0	0	0	2	NIL
6	AUC	23UC0009	ECOLOGY AND ENVIRONMENT	E&E	R	2	0	0	0	0	2	NIL
7	HAS	22UC0021	SOCIAL IMMERSIVE LEARNING	SIL-1	R	0	0	0	4	1	0	NIL
8	HAS	22UC0022	SOCIAL IMMERSIVE LEARNING	SIL-2	R	0	0	0	4	1	0	NIL
9	HAS	22UC0023	SOCIAL IMMERSIVE LEARNING	SIL-3	R	0	0	0	4	1	0	NIL
10	HAS	23UC1101	INTEGRATED PROFESSIONAL ENGLISH	IPE	R	0	0	4	0	2	4	NIL
11	HAS	23UC1202	ENGLISH PROFICIENCY	EP	R	0	0	4	0	2	4	NIL
12	HAS	23UC0026	HUMAN VALUES, GENDER EQUALITY & PROFESSIONAL ETHICS	UHV&PE	R	2	0	0	0	2	2	NIL
13	HAS	23UC1203	DESIGN THINKING AND INNOVATION	DTI	R	0	0	4	0	2	4	NIL
	TOTAL					**2**	**0**	**12**	**12**	**11**	**14**	
14	FL	23FL3055	GERMAN LANGUAGE	FLE	R	3	0	0	0	3	3	NIL
15	FL	23FL3058	JAPANESE LANGUAGE	FLE	R	3	0	0	0	3	3	NIL
	TOTAL					**3**	**0**	**0**	**12**	**3**	**3**	
16	ME	23MBXXXX	MANAGEMENT ELECTIVE	ME	R	4	0	0	0	4	4	NIL
	TOTAL					**4**	**0**	**0**	**12**	**4**	**4**	
17	BSC	23MT1001	LINEAR ALGEBRA AND CALCULUS FOR ENGINEERS	LACE	R	2	2	0	0	4	4	NIL
18	BSC	22MT2003	MATHEMATICAL MODELLING AND NUMERICAL METHODS	MMNM	R	2	2	0	0	4	4	LACE
19	BSC	23MT2007	RANDOM VARIABLES AND STOCHASTIC PROCESS	RVSP	R	2	2	0	0	4	4	MMNM
20	BSC	23MT2004	MATHEMATICAL PROGRAMMING	MP	R	2	2	0	0	4	4	RVASP
21	BSC	23CS3201	DATA SCIENCE AND STATISTICS	SCE-1	R	2	2	0	0	4	5	NIL

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	TOTAL					**16**	**10**	**4**	**0**	**20**	**31**	
22	PHY	22PH1005	ENGINEERING PHYSIS	SCE-2	R	3	0	2	0	4	5	NIL
23	CHE	23CY1001	ENGINEERING CHEMISTRY	SCE-3	R	3	0	2	0	4	5	NIL
	TOTAL					**5**	**2**	**2**	**0**	**8**	**10**	
25	ESC	23SC1101	COMPUTATIONAL THINKING FOR STRUCTURED DESIGN	CTSD	R	3	0	2	4	5	9	NIL
26	ESC	23SC1202	DATA STRUCTURES	DST	R	2	0	2	4	4	8	CTSD
27	ESC	23ME1103	DESIGN TOOLS WORKSHOP	DTW	R	0	0	4	0	2	4	NIL
28	ESC	23EC1203	BASIC ELECTRICAL AND ELECTRONIC CIRCUITS	BEEC	R	2	0	0	0	2	2	NIL
29	ESC	23EC1202	DIGITAL DESIGN & COMPUTER ARCHITECTURE	DDCA	R	3	0	2	0	4	5	NIL
30	ESC	23SC1203	COMPUTATIONAL THINKING FOR OBJECT-ORIENTED DESIGN	CTOD	R	2	0	2	4	4	8	CTSD
31	ESC	23EC1101	FUNDAMENTALS OF IOT AND SENSORS	FITS	R	3	0	4	0	5	7	NIL
32	ESC	23AD2001O	ARTIFICIAL INTELLIGENCE & MACHINE LEARNING	AML	O	3	0	2	0	4	5	CTSD
	TOTAL					**18**	**0**	**18**	**12**	**30**	**48**	
33	PCC	23EC2210R	NETWORK PROTOCOLS AND SECURITY	NPS	R	3	0	2	0	4	5	DDCA
34	PCC	23IN2102	ELECTRONIC DEVICES AND INTEGRATED CIRCUITS	EDAIC	R	3	0	2	0	4	5	BEEC
35	PCC	23IN2101R	IOT SYSTEM DESIGN	IOTSD	R	3	0	2	0	4	5	FITS
36	PCC	23IN2203R	WIRELESS TECHNOLOGIES FOR IOT	WTIOT	P	3	0	2	0	4	5	NPS
37	PCC	23EC2106R	PROCESSORS AND CONTROLLERS	PRC	R	3	0	2	0	4	5	DDCA
38	PCC	23AD2102R	DATABASE MANAGEMENT SYSTEMS	DBMS	R	3	0	2	0	4	5	CTSD
39	PCC	23IN3105R	EMBEDDED SYSTEMS DESIGN	ESD	R	2	0	2	0	3	4	PRC
40	PCC	23IN3104R	REAL TIME OPERATING SYSTEMS	RTOS	R	3	0	2	0	4	5	DDCA
	TOTAL					**23**	**0**	**16**	**0**	**31**	**39**	
41	FC		**FLEXI-CORE - 1**	FC-1	R	3	0	0	0	3	3	
42	FC		**FLEXI-CORE - 2**	FC-2	R	3	0	0	0	3	3	
			total			**6**	**0**	**0**	**0**	**6**	**6**	
43	PEC		PROFESSIONAL ELECTIVE - 1	PE-1	R	3	0	2	4	5	9	
44	PEC		PROFESSIONAL ELECTIVE - 2	PE-2	R	**3**	**0**	**0**	**0**	3	3	
45	PEC		PROFESSIONAL ELECTIVE - 3	PE-3	R	**3**	**0**	**2**	**4**	5	9	
46	PEC		PROFESSIONAL ELECTIVE - 4	PE-4	M	**3**	**0**	**0**	**0**	3	3	

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47	PEC		PROFESSIONAL ELECTIVE - 5	PE-5	R	**3**	**0**	**0**	**0**	3	3	
	TOTAL					**15**	**0**	**4**	**8**	**19**	**27**	
48	SDC	23SDIN01R	IOT HARDWARE PROGRAMMING	SDP-1	R	0	0	2	4	2	6	FITS
49	SDC	23SDIN03R	IOT FULL STACK DEVELOPMENT	SDP-2	R	0	0	2	4	2	6	FITS
50	SDC	23SDIN04R	CLOUD COMPUTING FOR IOT	SDP-3	R	0	0	2	4	2	6	NIL
51	SDC	22SDIN05R	SKILL DEVELOPMENT PROJECT - 4 (SPECIALIZATION) IoT ANALYTICS FOR CLOUD	SDP-4	R	0	0	2	4	2	6	NIL
						0	**0**	**8**	**16**	**8**	**24**	
52	PRI	23IE2040	SOCIAL INTERNSHIP	SIP	R	0	0	0	4	0	4	NIL
53	PRI	23IE3041	TECHNICAL INTERNSHIP	TIP	R	0	0	0	4	0	4	NIL
54	PRI	23IE4053 R	ENGINEERING CAPSTONE PROJECT - PHASE 1	ECP-1	R	0	0	8	16	8	24	NIL
55	PRI	23IE4054R	ENGINEERING CAPSTONE PROJECT - PHASE 2	ECP-2	R	0	0	8	16	8	24	NIL
56	PRI	23IE4048	ENGINEERING PROJECT	EPJ								NIL
57	PRI	23IE4051	INDUSTRIAL INTERNSHIP - PHASE 1	IIP-1								NIL
58	PRI	23IE4052	INDUSTRIAL INTERNSHIP - PHASE 2	IIP-2								NIL
59	PRI	23IE4042	INDUSTRIAL INTERNSHIP	IIP								NIL
	TOTAL					**0**	**0**	**16**	**40**	**16**	**56**	
60	OEC		OPEN ELECTIVE - 1	OE-1	R / M	3	0	0	0	3	3	NIL
61	OEC		OPEN ELECTIVE - 2	OE-2	R / M	3	0	0	0	3	3	NIL
62	OEC		OPEN ELECTIVE - 3	OE-3	R / M	3	0	0	0	3	3	NIL
			Total			**9**	**0**	**0**	**0**	**9**	**9**	
63	VAC		VALUE ADDED COURSE-1	VAC-1	R / M	0	0	0	8	0	0	N/A
64	VAC		VALUE ADDED COURSE-2	VAC-2	R / M	0	0	0	8	0	0	N/A
65	VAC		VALUE ADDED COURSE-3	VAC-3	R / M	0	0	0	8	0	0	N/A
66	VAC		SPORTS/YOGA CERTIFICATION	SPORT	R / M	0	0	0	8	0	0	N/A
			Total							**165**		

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