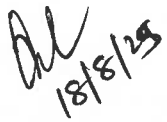
Department of CSE (Artificial Intelligence & Machine Learning)

Board of Studies – Members

S. No.	Name & Address of the member	Designation	BOS Position	Signature
1.	Dr. A. Swathi Dept. of CSE(AI&ML), Sreyas Institute of Engineering and Technology, Hyderabad	Associate Professor & Head of the Department	Chairperson	
2.	Dr. Devara Vasumathi Professor, Professor & Director of University Foreign Relations, Professor of Computer Science & Engineering, JNTUH, Hyderabad.	Professor	Member JNTUH Nominee	18/8/2025
3.	Dr. K. Shyamala Professor, Department of Computer Science & Engineering University College of Engineering, Osmania University	Professor	Subject expert - 1	
4.	Dr. T. Ramakrishnudu Associate Professor Department of Computer Science and Engineering, NIT Warangal	Associate Professor	Member from NIT Subject expert - 2	
5.	Dr.Varsha Srivastava Staff Scientist & Head CDFD-Hyd	Scientist	Member From Industry /R&D Expert	
6.	Mrs. K.Sruthi Vice President Wells Fargo Hyderabad	Senior Assistant	Industrialist	K Sruthi
7.	Mr. K. Siddhardha Asset Sense Private Limited	SDE-1	Alumni	
8.	Mrs. N. Swapna Virtusa, Hyderabad	Lead S/W Engineer	Alumni	N. Swapna

9.	Dr. S. Kavitha Associate Professor & HoD, CSE (AI&ML), ACE Engineering College	Expert from other autonomous colleges	Special Invitee	
10.	Dr. B. Jyoshna Dept. Of CSE(AI&ML), Sreyas Institute of Engineering and Technology, Hyderabad	Associate Professor	Member Internal Faculty	
11.	Dr. Priyanka Gupta Dept. Of CSE(AI&ML), Sreyas Institute of Engineering and Technology, Hyderabad	Associate Professor	Member Internal Faculty	
12.	Prof. M. Kalidas Dept. Of CSE(AI&ML), Sreyas Institute of Engineering and Technology, Hyderabad	Assistant Professor	Member Internal Faculty	
13.	Mrs. A.Swapna Dept. Of CSE(AI&ML), Sreyas Institute of Engineering and Technology, Hyderabad	Assistant Professor	Member Internal Faculty	

Department of CSE (Artificial Intelligence & Machine Learning)

Circular

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It is informed that the 5th BoS Meeting will be held on 18th August 2025 at 10:30 AM in the principal's chamber to discuss the following agenda points.

AGENDA

Item 1. Introduction of Board of Studies (BoS) members.

Item 2. To confirm previous BoS Meeting held on 7th Feb 2025.

Item 3. To Approve R25 regulation Course Structure of B.Tech CSE(AI&ML) branch.

Item 4. To approve syllabus proposal for I B.Tech I Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

Item 5. To approve syllabus proposal for I B.Tech II Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

Item 6. To approve syllabus proposal for II B.Tech I Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

Item 7. To approve syllabus proposal for II B.Tech II Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

Item 8. Any other points with the permission of chair.

Dr. A.Swathi

HoD & Chairperson BoS

Department of CSE (Artificial Intelligence & Machine Learning)

Minutes of meeting:

The Minutes of the Meeting of the 5th Board of Studies (BoS), CSE (AI&ML) Department was conducted in hybrid mode on 18th August at 10:30 AM in the Principal's Chamber.

AGENDA:

Item 1. Introduction of Board of Studies (BoS) members.

Item 2. To confirm previous BoS Meeting held on 7th Feb 2025.

Item 3. To Approve R25 regulation Course Structure of B.Tech CSE(AIML) branch.

Item 4. To approve syllabus proposal for I B.Tech I Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

Item 5. To approve syllabus proposal for I B.Tech II Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

Item 6. To approve syllabus proposal for II B.Tech I Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

Item 7. To approve syllabus proposal for II B.Tech II Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

Item 8. Any other points with the permission of chair.

Agenda Points elaborated:

Item 1. Introduction of new members of BoS.

Item 2. To confirm the minutes of previous BOS meeting held on 7th Feb 2025, and introduce CSE(AI&ML) department.

Item 3. To Approve Course Structure of B.Tech CSE(AIML) branch in the following points.

Item 4. To approve syllabus proposal for I B.Tech I Semester Theory & Practical subjects, taught by CSE (AI&ML) department.

S.No.	Course Code	Course	L	T	P	Credits	Remarks
1.		Programming for Problem Solving	3	0	0	3	
2.		Programming for Problem	0	0	2	1	

		Solving Lab					
3.		IT Workshop	0	0	2	1	

Item 5. To approve syllabus proposal for I B.Tech II Semester Theory & Practical subjects, handled by CSE (AI&ML) department to CSE (AI&ML) students of SIET.

S.No.	Course Code	Course	L	T	P	Credits	Remarks
1.		Data Structures	3	0	0	3	
2.		Data Structures Lab	0	0	2	1	

Item 6. To approve syllabus proposal for II B.Tech I Semester Theory & Practical subjects, handled by CSE (AI&ML) department to CSE (AI&ML) students of SIET.

S.No.	Course Code	Course	L	T	P	Credits	Remarks
1.		Python Programming	3	0	0	3	
2.		Software Engineering	3	0	0	3	
3.		Data Base Management System	3	0	0	3	
4.		Python Programming Lab	0	0	2	1	
5.		Data Base Management Systems Lab	0	0	2	1	
6.		Data Visualization-Tableau	0	0	2	1	

Item 7. To approve syllabus proposal for II B.Tech II Semester Theory & Practical subjects, handled by CSE (AI&ML) department to CSE (AI&ML) students of SIET.

S.No.	Course Code	Course	L	T	P	Credits	Remarks
1.		Operating Systems	3	0	0	3	
2.		Object Oriented Programming through Java	3	0	0	3	
3.		Computer Networks	3	0	0	3	
4.		Machine Learning	3	0	0	3	

5.		Operating Systems Lab	0	0	2	1	
6.		Computer Networks Lab	0	0	2	1	
7.		Object Oriented Programming through Java Lab	0	0	2	1	
8.		Machine Learning Lab	0	0	2	1	
9.		UI Design – Flutter	0	0	2	1	

Item 8. Any other matter as per approval of chairman BOS.

Points discussed:

1. The meeting commenced with a formal introduction of the BoS members.
2. The Chairperson welcomed all the members and highlighted their contributions to curriculum development.
3. An overview of the department's achievements, faculty expertise, research contributions, and student outcomes was presented.
4. The proposed course structure of the CSE(AI&ML) course structure were presented and discussed.
5. **Confirmation of Minutes of the Previous BOS Meeting:**
   The minutes of the previous BOS meeting were reviewed and confirmed by all members.
6. **Approval of Syllabus Proposal for I B.Tech I Semester Theory & Practical Subjects:**
   The following courses were approved to be handled by the CSE (AI&ML) department for CSE (AI&ML) students of SIET:

   - Programming for Problem Solving (3-0-0) – 3 credits
   - Programming for Problem Solving Lab (0-0-2) – 1 credit
   - IT Workshop (0-0-2) – 1 credit

7. **Approval of Syllabus Proposal for I B.Tech II Semester Theory & Practical Subjects:**
   The following courses were approved to be handled by the CSE (AI&ML) department for CSE (AI&ML) students of SIET:

   - Data Structures (3-0-0) – 3 credits
   - Data Structures Lab (0-0-2) – 1 credit

8. **Approval of Syllabus Proposal for II B.Tech I Semester Theory & Practical Subjects:** The following courses were approved to be handled by the CSE (AI&ML) department for CSE (AI&ML) students of SIET:

   - Python Programming (3-0-0) – 3 credits
   - Software Engineering (3-0-0) – 3 credits
   - Data Base Management System (3-0-0) – 3 credits
   - Python Programming Lab (0-0-2) – 1 credit
   - Data Base Management Systems Lab (0-0-2) – 1 credit
   - Data Visualization – Tableau (0-0-2) – 1 credit

9. **Approval of Syllabus Proposal for II B.Tech II Semester Theory & Practical Subjects:** The following courses were approved to be handled by the CSE (AI&ML) department for CSE (AI&ML) students of SIET:

   - Operating Systems (3-0-0) – 3 credits
   - Object Oriented Programming through Java (3-0-0) – 3 credits
   - Computer Networks (3-0-0) – 3 credits
   - Machine Learning (3-0-0) – 3 credits
   - Operating Systems Lab (0-0-2) – 1 credit
   - Computer Networks Lab (0-0-2) – 1 credit
   - Object Oriented Programming through Java Lab (0-0-2) – 1 credit
   - Machine Learning Lab (0-0-2) – 1 credit
   - UI Design – Flutter (0-0-2) – 1 credit

10. **Any Other Matter as per Approval of Chairperson of BOS:**

    - **Dr. Devara Vasumathi, Professor, Dept. of CSE, JNTUH University College of Engineering (JNTUH Nominee)** suggested checking the prerequisites while framing the course structure and advised to focus more on strengthening the core subjects.
    - **Dr. T. Ramakrishnudu, Associate Professor, Dept. of CSE, NIT Warangal (Subject Expert – 2)** also emphasized the same point, stressing the importance of prerequisites and consolidation of core subjects.
    - **Dr. S. Kavitha, Associate Professor & HoD, CSE (AI&ML), ACE Engineering College (Member from Affiliated Autonomous College)** along with **Dr. Devara Vasumathi, Professor, JNTUH** approved the syllabus revision in *Object Oriented Programming through Java* to incorporate **Collection Framework** and **JDBC concepts**.
    - **Dr. Devara Vasumathi, Professor, Dept. of CSE, JNTUH University College of Engineering (JNTUH Nominee)** suggested adding more programs in *Object Oriented Programming through Java Lab* as additional practice exercises. She also encouraged the use of the **CodeTantra platform** for effective hands-on learning and student engagement.

- **Other members of BoS agreed to the discussion.**

11. Conclusion of Meeting:

The Principal and Chairperson thanked all the members for their valuable contributions.

The Board of Studies meeting was concluded with vote of thanks.

1) 2) 3) 4)

5) 6) K Sruthi 7) 8) N. Swapna

9) 10) 11) Priyanka Gupta. 12)

13)

Sreyas Institute of Engineering and Technology

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COURSE STRUCTURE & SYLLABUS

CSE(AI&ML)- R25 Regulations-Autonomous

Applicable from 2025-26 Batch

I B.Tech – I Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.		Matrices and Calculus	3	1	0	4
2.		Advanced Engineering Physics	3	0	0	3
3.		Engineering Drawing and Computer Aided Drafting	2	0	2	3
4.		Basic Electrical Engineering	3	0	0	3
5.		Programming for Problem Solving	3	0	0	3
6.		Advanced Engineering Physics Lab	0	0	2	1
7.		Programming for Problem Solving Lab	0	0	2	1
8.		IT Workshop	0	0	2	1
9.		Basic Electrical Engineering Lab	0	0	2	1
10.		Induction Program				
		Total Credits	**14**	**1**	**10**	**20**

I B.Tech – II Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.		Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.		Engineering Chemistry	3	0	0	3
3.		English for Skill Enhancement	3	0	0	3
4.		Electronic Devices and Circuits	3	0	0	3
5.		Data Structures	3	0	0	3
6.		Engineering Chemistry Lab	0	0	2	1
7.		Data Structures Lab	0	0	2	1
8.		English Language and Communication Skills Lab	0	0	2	1
9.		Engineering Workshop	0	0	2	1
		Total Credits	**15**	**1**	**8**	**20**

1) 2) 3) 4)

5) 6) K. Sruthi 7) 8) N. Swapna

9) 10) 11) Priyanka Gupta. 12)

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II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1.		Mathematical and Statistical Foundations	3	0	0	3
2.		Computer Organization and Architecture	3	0	0	3
3.		Python Programming	3	0	0	3
4.		Software Engineering	3	0	0	3
5.		Database Management System	3	0	0	3
6.		Computational Mathematics Lab	0	0	2	1
7.		Python Programming Lab	0	0	2	1
8.		Database Management Systems Lab	0	0	2	1
9.		Data Visualization- Tableau	0	0	2	1
10.		Indian Knowledge System	0	0	2	1
		Total Credits	**15**	**0**	**10**	**20**

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1.		Discrete Mathematics	3	0	0	3
2.		Operating Systems	3	0	0	3
3.		Object Oriented Programming through Java	3	0	0	3
4.		Computer Networks	3	0	0	3
5.		Machine Learning	3	0	0	3
6.		Innovation and Entrepreneurship	2	0	0	2
7.		Operating Systems Lab	0	0	2	1
8.		Computer Networks Lab	0	0	2	1
9.		Object Oriented Programming through Java Lab	0	0	2	1
10.		Machine Learning Lab	0	0	2	1
11.		UI Design – Flutter	0	0	2	1
		Total Credits	17	**0**	**10**	**22**

***Note:** Students who wish to exit after II Year II Semester has to register for this optional course and acquire the credits allotted by doing 6 weeks Work-based Vocational Course/ Internship or Apprenticeship. Please refer R25 Academic Regulations for more information.

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1.		Artificial Intelligence	3	0	0	3
2.		Algorithm Design and Analysis	3	0	0	3
3.		Automata theory and Compiler Design	3	0	0	3
4.		Professional Elective-I	3	0	0	3
5.		Open Elective-I	2	0	0	2
6.		Artificial Intelligence Lab	0	0	2	1
7.		Algorithm Design and Analysis Lab	0	0	2	1
8.		PE-1 Lab	0	0	2	1
9.		Field Based Research Project	0	0	4	2
10.		Node JS/React JS/Django	0	0	2	1
11.		Gender Sensitization Laboratory*/ Human Values and Professional Ethics*	1	0	0	1
		Total Credits	**15**	**0**	**12**	**21**

***Note: For the courses Gender Sensitization Lab and Human Values and Professional Ethics** - one hour of instruction will be conducted on alternate weeks. For example, if a one-hour class for Gender Sensitization Lab is conducted this week, then a one-hour class for Human Values and Professional Ethics will be conducted in the following week.

III YEAR II SEMESTER

S. No	Course Code	Course Title	L	T	P	Credits
1.		Natural Language Processing	3	0	0	3
2.		Deep Learning	3	0	0	3
3.		Business Economics and Financial Analysis	3	0	0	3
4.		Professional Elective-II	3	0	0	3
5.		Open Elective – II	2	0	0	2
6.		Natural Language Processing Lab	0	0	2	1
7.		Deep Learning Lab	0	0	2	1
8.		Chatbots Lab	0	0	2	1
9.		Advanced English Communication Skills Laboratory	0	0	2	1
10.		Prompt Engineering	0	0	2	1
11.		Environmental Science	1	0	0	1
		Total Credits	**15**	**0**	**10**	**20**

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IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1.		Reinforcement Learning	3	0	0	3
2.		Generative AI	3	0	0	3
3.		Fundamentals of Management for Engineers	3	0	0	3
4.		Professional Elective-III	3	0	0	3
5.		Professional Elective – IV	3	0	0	3
6.		Open Elective – III	2	0	0	2
7.		Reinforcement Learning Lab	0	0	2	1
8.		Generative AI Lab	0	0	2	1
9.		Industry Oriented Mini Project/ Internship	0	0	4	2
		Total Credits	**17**	**0**	**08**	**21**

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1.		Professional Elective – V	3	0	0	3
2.		Professional Elective – VI	3	0	0	3
3.		Project Work	0	0	28	14
		Total Credits	**6**	**0**	**28**	**20**

Professional Elective - I

1.	Data Analytics and Visualization
2.	Cryptography and Network Security
3.	Software Testing Methodologies
4.	Data Mining
5.	Web Technologies
6.	DevOps

Professional Elective - I Lab

1.	Data Analytics and Visualization Lab
2.	Cryptography and Network Security Lab
3.	Software Testing Methodologies Lab
4.	Data Mining Lab
5.	Web Technologies Lab
6.	DevOps Lab

Professional Elective - II

1	Image Processing

2	Blockchain Technology
3	Software Project Management
4	Mining Massive Datasets
5	Full Stack Development
6	Distributed Systems

Professional Elective-III

1	Computer Vision
2	Cognitive Computing
3	Penetration Testing and Incident Response
4	Data Stream Mining
5	Cloud Computing
6	Information Retrieval Systems

Professional Elective-IV

1	Augmented Reality & Virtual Reality
2	Agile Methodology
3	Big Data Technologies
4	Quantum Computing
5	Robotic Process Automation
6	Cyber Forensics

Professional Elective-V

1	Social Media Mining
2	Nature Inspired Computing
3	Internet of Things
4	Game Theory
5	Mobile Application Development
6	Human Computer Interaction

Professional Elective-VI

1	High Performance Computing
2	Edge Computing
3	Graph Theory
4	Explainable AI
5	Sustainable Engineering
6	Distributed Databases

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OPEN ELECTIVES

Open Elective I:

1. Fundamentals of AI
2. Machine Learning Basics

Open Elective II:

1. Introduction to Natural Language Processing
2. AI applications

Open Elective III:

1. Chatbots
2. Computer Vision with Open CV

1) 2) 3) 4)

5) 6) K. Sowthri 7) 8) N. Swapna

9) 10) 11) 12)

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