

Department of Computer Science and Engineering (AI&ML)

Circular

It is informed that the first BOS Meeting will be held on 20-10-2022 at 2.00 PM in the HOD's chamber to discuss the following agenda points.

AGENDA

- Item-1: To discuss about R-22 regulations.
- Item-2: To discuss and approve the course structure of UG Programme in Computer Science and Engineering (AI&ML) for the regulations R-22 with effect from the Academic Year 2022-23.
- Item-3: To discuss and approve the syllabus of I Year I Semester courses offered by Computer Science and Engineering (AI&ML) for the regulation R-22.
- Item-4 : To discuss and approve the syllabus of I Year II Semester courses offered by Computer Science and Engineering (AI&ML) for the regulation R-22.
- **Item-5**: Any other points by the permission of chair.

Dr. U.M. Fernandes Dimlo

Chairman BoS & HoD of CSE (AI&ML)

SREYAS INSTITUTE OF ENGINEERING AND TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad Accredited by NAAC with 'A' Grade and ISO 9001: 2015 Certified







Department of Computer Science and Engineering

(Artificial Intelligence and Machine Learning)

Board of Studies Members

S.No	Name	Designation	Position
1	Dr. U.M.Fernandes Dimlo	HoD, CSE(AI&ML)	Chairman
2	Dr. G.Narsimha	Prof of CSE, JNTUH, UCES	University Nominee
3	Mr. M.Manoj	Scientist-E, RCI, Hyderabad	Industrialist
4	Dr. SK.Abdul Nabi	Prof, HoD of CSE, SIET	Specialized Faculty-1
5	Dr. M.Jayaram	Prof, HoD of CSE (DS), SIET	Specialized Faculty-2
6	Mrs. Swathi Varala	Co-Founder, Techshine Solutions, Hyderabad	Alumni Student
7	Dr. V.Vijaya Kumar	Professor, Dean, Anurag Univ., Hyderabad	Subject Expert-1
8	Dr. Sandeep Kumar Panda	Professor, ICFAI Univ, Hyderabad	Subject Expert-2
9	Dr. V.Sidda Reddy	Professor, SIET	Faculty
10	Dr. V.Biksham	Professor, SIET	Faculty
11	Mrs. N.Padma Joshi	Associate Professor, SIET	Faculty.
12	Mr. M.Anand R. Kumar	Associate Professor, SIET	Faculty
13	Mr. G.Sravan Kumar	Associate Professor, SIET	Faculty
14	Mr. M Naresh Choudary	Associate Professor, SIET	Faculty
15	Mr. MV.Nagesh	Associate Professor, SIET	Faculty

Dr. S. Sal Satyanaryana Reddy
PRINCIPAL

PRINCIPAL

SREYAS INSTITUTE OF ENGG., AND TECH. #9-39, Beside Indu Aranya, Bandlaguda Nagole, Thattiannaram, Hyd-68.



Department of Computer Science and Engineering

Minutes of Meeting

Board of Studies meeting was held on 20-10-2022 at 2.00 PM in the Department Conference Hall. Chairman welcomed honorable members of Board of Studies.

The Course Structure of B.Tech. Computer Science and Engineering (AI&ML) and the syllabus of I Year I & II Semesters was proposed by Dr.U.M.Fernandes Dimlo ,HOD & Chairman of BOS, Dept of CSE(AI&ML), SIET for the discussion of honorable members.

The BOS members noted Vision and Mission of Institute & Department, PEOs and POs of the Programme. Then they discussed the Course Structure of UG Programme in Computer Science and Engineering for this autonomous institute in line with Vision and Mission of Institute & Department, PEOs and POs of the Programme for the regulations R-22 with effect from the academic year 2022-23.

The following points discussed.

- Item-1: The Chairman has presented R-22 regulations.
- Item-2: Course structure of UG Programme (I Year to IV Year) in Computer Science and Engineering (AI&ML) for the regulation R-22.Committee has reviewed and approved the course structure of the UG Programme in Computer Science and Engineering (AI&ML) (I Year to IV Year).
- Item-3: The Syllabus of I Year I Semester courses offered by Computer Science and Engineering (AI&ML) for the regulation R-22.

Courses:

- Programming for Problem Solving (CSE,CSE(AI&ML),CSE(DS))
- Programming for Problem Solving Laboratory (CSE, CSE(AI&ML), CSE(DS))
- Elements of Computer Science and Engineering (CSE,CSE(AI&ML),CSE(DS))
- Programming and Data Structures (Mech., Civil)



- C Programming and Data Structures Laboratory (Mech., Civil)
- C Programming for Engineers (ECE)
- C Programming for Engineers Laboratory (ECE)

Committee has reviewed and approved the syllabus proposed by chairman.

Item-4: The syllabus of I Year II Semester Courses offered by Computer Science and Engineering (AI&ML) for the regulation R-22.

Courses:

- Python Programming Laboratory (CSE,CSE(AI&ML),CSE(DS))
- IT Workshop (CSE,CSE(AI&ML),CSE(DS))
- Python Programming Laboratory (Mech, Civil)
- Applied Python Programming Laboratory (ECE)

Committee has reviewed and approved the syllabus proposed by chairman.

List of enclosures:

1. B.Tech in CSE (AI&ML) Course Structure and Detailed Syllabus of I Year I Semester and II Semester.



Department of CSE (AI&ML)

Board of Studies Meeting Members Attended

20-10-2022

S.No	Name	Designation	Position	Signature
1	Dr. U.M.Fernandes Dimlo	Prof, HoD of CSE (AI&ML), SIET	Chairman	U
2	Dr. G.Narsimha	Prof of CSE, JNTUH, UCES	University Nominee	G- Heinly
3	M Manoj	Scientist-E, RCI, Hyderabad Industrialist	Industrialist	(2)
4	Dr. SK.Abdul Nabi	HoD, CSE	Specialized Faculty-1	A I
5	Dr. M.Jayaram	Prof, HoD of CSE (DS), SIET	Specialized Faculty-2	M. Toward
6	Mrs. Swathi Varala	Co-Founder, Techshine Solutions, Hyderabad	Alumni Student	guatri
7	Dr. V.Vijaya Kumar	Professor, Dean, Anurag Univ.,Hyderabad	Subject Expert-1	1.11/2
8	Dr. Sandeep Kumar Panda	Professor, ICFAI Univ, Hyderabad	Subject Expert-2	C. Jamo
9	Dr. M.Sidda Reddy	Prof, SIET	Faculty	suf
10	Dr. V.Biksham	Prof, SIET	Faculty ·	13
11	Mrs. N.Padma Joshi	Assoc.Prof, SIET	Faculty	45
12	Mr. M.Anand R. Kumar	Assoc.Prof, SIET	Faculty	2/
13	Mr. G.Sravan Kumar	Assoc.Prof, SIET	Faculty	Gercu
14	Mr. M Naresh Choudary	Assoc.Prof, SIET	Faculty	Enle
15	Mr. MV.Nagesh	Assoc.Prof, SIET	Faculty	3-ri6

Dr. S. Sai Satyanaryana Reddy

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Nagole, Thattiannaram, Hyd-68.

SREYAS INSTITUTE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

B.Tech. in COMPUTER SCIENCE AND ENGINEERING (AI&ML) COURSE STRUCTURE, I & II YEAR SYLLABUS (R22 Regulations)

I YEAR I SEMESTER Applicable from AY 2022-23 Batch

S. No.	Course Code	Course	L	T	Р	Credits
1.	22BS01	Matrices and Calculus	3	1	0	4
2.	22BS02	Applied Physics	3	1	0	4 .
3.	22PC20	Programming for Problem Solving	3	0	0	3
4.	22PC02	Engineering Workshop	0	1	3	2.5
5.	22HS01	English for Skill Enhancement	2	0	0	2
6.	22PC21	Elements of Computer Science & Engineering	0	0	2	1
7.	22HS02	Applied Physics Laboratory	0	0	3	1.5
8.	22PC22	Programming for Problem Solving Laboratory	0	0	2	1
9.	22HS03	English Language and Communication Skills Laboratory	0	0	2	1
		Total	11	3	12	20

I YEAR II SEMESTER

S. No.	Course Code	Course	L	Т	Р	Credits
1.	22BS03	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	22BS04	Engineering Chemistry	3	1	0	4
3.	22PC05	Computer Aided Engineering Graphics	1	0	4	3
4.	22PC15	Basic Electrical Engineering	2	0	0	2
5.	22PC16	Electronic Devices and Circuits	2	0	0	2
6.	22BS05	Engineering Chemistry Laboratory	0	0	2	1
7.	22PC18	Basic Electrical Engineering Laboratory	0	0	2	1
8.	22PC08	Python Programming Laboratory	0	1	2	2
9.	22PC23	IT Workshop	0	0	2	1
		Total	11	3	12	20

II YEAR I SEMESTER

S. No.	Course Code	. Course Title	L	Т	Р	Credits
1		Discrete Mathematics	3	0	0	3
2		Data Structures	3	0	0	3
3		Computer Organization and Architecture	3	0	0	3
4		Software Engineering	3	0	0	3
5		Operating Systems	3	0	0	3
6		Data Structures Lab	0	0	3	1.5
7		Operating Systems Lab	0	0	3	1.5
8		Software Engineering Lab	0	0	2	1
9		Constitution of India	3	0	0	0
		Skill Development Course (Node JS/ React JS/ Django)	0	0	2	1
		Total	18	0	10	20



YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1		Mathematical and Statistical Foundations	3	0	0	3
2		Automata Theory and Compiler Design	3	0	0	3
3		Database Management Systems	3	0	0	3
4		Introduction to Artificial Intelligence	3	0	0	3
5		Object Oriented Programming through Java	3	0	0	3
6		Database Management Systems Lab	0	0	2	1
7		Java Programming Lab	0	0	2	1
8		Real-time Research Project/Field-Based Research Project	0	0	4	2
9		Gender Sensitization Lab	0	0	2	0
10		Skill Development Course (Prolog/ Lisp/ Pyswip)	0	0	2	1
		Total	15	0	12	20

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1		Design and Analysis of Algorithms	3	1	0	4
2		Machine Learning	3	0	0	3
3		Computer Networks	3	0	0	3
4		Business Economics & Financial Analysis	3	0	0	3
5		Professional Elective-I	3	0	0	3
6		Machine Learning Lab	0	0	2	1
7		Computer Networks Lab	0	0	2	1
8		Advanced Communication Skills lab	0	0	2	1
9		Intellectual Property Rights	3	0	0	0
10		Skill Development Course (UI design- Flutter)	0	0	2	1
		Total	18	1	08	20

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1		Knowledge Representation and Reasoning	3	0	0	3
2		Data Analytics	3	0	0	3
3		Natural Language Processing	3	0	0	3
4		Professional Elective – II	3	0	0	3
5		Open Elective-I	3	0	0	3
6		Natural Language Processing Lab	0	0	3	1.5
7		Data Analytics Lab	0	0	3	1.5
8		Industrial Oriented Mini Project/ Internship/Skill Development Course (DevOps)	0	0	4	2
9		Environmental Science	3	0	0	0
		Total	18	0	10	20

Environmental Science in III Yr II Sem Should be Registered by Lateral Entry Students Only.

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R22 B. Tech. CSE (AI&ML) Syllabus IV

YEAR I SEMESTER

S. No.	Course	Course Title	L	Т	Р	Credits
1		Deep Learning	3	0	0	3
2		Nature Inspired Computing	2	0	0	2
3		Professional Elective -III	3	0	0	3
4		Professional Elective -IV	3	0	0	3
5		Open Elective - II	3	0	0	3
6		Professional Practice, Law & Ethics	0	0	4	2
7		Professional Elective - III Lab	0	0	2	1
8		Project Stage - I	0	0	6	3
		Total Credits	14	0	12	20

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	Т	P	Credits
1		Professional Elective - V	3	0	0	3
2		Professional Elective – VI	3	0	0	3
3		Open Elective – III	3	0	0	3
4		Project Stage – Il including Seminar	0	0	22	9+2
	¥i.	Total Credits	9	0	22	20

^{*}MC - Satisfactory/Unsatisfactory

#Skill Course - 1 credit with 2 Practical Hours

Professional Elective-I

Graph Theory	
Introduction to Data Science	
Web Programming	
Image Processing	
Computer Graphics	

Professional Elective - II

Software Testing Methodologies	
Information Retrieval Systems	
Pattern Recognition	
Computer Vision and Robotics	
Data Warehousing and Business Intelligence	

Professional Elective - III

Internet of Things	
Data Mining	
Scripting Languages	
Mobile Application Development	
Cloud Computing	

^{*} Courses in PE - III and PE - III Lab must be in 1-1 correspondence.



RESIDENTIAL CSE (AI&ML) Syllabus

Professional Flective JV

Quantum Computing	
Expert Systems	
Semantic Web	
Game Theory	
Mobile Computing	

Professional Elective - V

	Social Network Analysis	
	Federated Machine Learning	
	Augmented Reality & Virtual Reality	
*	Web Security	
	Ad-hoc & Sensor Networks	

Professional Elective - VI

Speech and Video Processing	
Robotic Process Automation	
Randomized Algorithms	
Cognitive Computing	
Conversational AI	

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