



## Department of Computer Science and Engineering (Data Science)

### Circular

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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 (Data Science) 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 (Data Science) 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(Data Science) for the regulation R-22.

**Item-5** : Any other points by the permission of chair.

Dr. M. Jaya Ram


**HoD & Chairman BOS**



## Department of Computer Science and Engineering (Data Science)

### Board of Studies (BoS) Members

S.No	Name	Designation	Position
1	Dr. M.Jayaram	HoD of CSE (Data Science)	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. U.M.Fernandes Dimlo	Prof., HoD of CSE (AI&ML), SIET	Specialized Faculty-2
6	Mrs. Swathi Varala	Co-Founder, Techshine Solutions, Hyderabad	Alumni Student
7	Dr. V.Vijaya Kumar	Professor, Dean, Anurag University, Hyderabad	Subject Expert-1
8	Dr. Sandeep Kumar Panda	Professor, ICFAI University, Hyderabad	Subject Expert-2
9	Dr. V. Sidda Reddy	Professor, SIET	Faculty
10	Dr. V. Biksham	Professor, SIET	Faculty
11	Mrs. Y. Sirisha	Associate Professor, SIET	Faculty
12	Mr. M.V. Nagesh	Associate Professor, SIET	Faculty
13	Mr C. Phaneendra	Assistant Professor, SIET	Faculty
14	Mr. G. Sravan Kumar	Associate Professor, SIET	Faculty
15	Mrs. N. Padma Joshi	Associate Professor, SIET	Faculty

  
**Dr. S. Sai Satyanaryana Reddy**  
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PRINCIPAL  
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#9-39, Beside Indu Aranya, Bandlaguda,  
Nagole, Thattianaram, Hyd-68.



## Department of Computer Science and Engineering (Data Science)

### Minutes of Meeting

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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(Data Science) and the syllabus of I Year I & II Semesters was proposed by Dr. M. Jaya Ram ,HOD & Chairman of BOS, Dept of CSE(DS), 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 were discussed.

**Item-1** : The Chairman has presented R-22 regulations.

**Item-2** : Course structure of UG Programme (from I-Year to IV-Year) in Computer Science and Engineering (Data Science) for the regulation R-22.

Committee has reviewed and approved the course structure of the UG Programme in Computer Science and Engineering (Data Science) ( I Year to IV Year).

**Item-3** : The Syllabus of I Year I Semester courses offered by Computer Science and Engineering (Data Science) for the regulation R-22.

#### Courses:

- Programming for Problem Solving (CSE(DS),CSE(AI&ML),CSE)
- Programming for Problem Solving Laboratory (CSE(DS),CSE(AI&ML),CSE)



- Elements of Computer Science and Engineering (CSE(DS),CSE(AI&ML),CSE)
- Programming and Data Structures (Mechanical., Civil)
- C Programming and Data Structures Laboratory ( Mechanical., 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 (Data Science) for the regulation R-22.

**Courses:**

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

Committee has reviewed and approved the syllabus proposed by chairman.

**List of enclosures:**

1. B.Tech in CSE(Data Science) Course Structure and Detailed Syllabus of I-Year of I-Semester and II Semester.



**Department of CSE (Data Science)**

**Board of Studies Meeting**

20-10-2022

**Members Attended**

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

*Sreyas*  
**Dr. S. Sai Satyanaryana Reddy**  
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**SREYAS INSTITUTE OF ENGINEERING AND TECHNOLOGY  
(AUTONOMOUS)**

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

**I Year I Semester**

Applicable from AY 2022-23 Batch

S. No.	Course Code	Course Title	L	T	P	Credits
1.	22BS01	Matrices and Calculus	3	1	0	4
2.	22BS04	Engineering Chemistry	3	1	0	4
3.	22PC20	Programming for Problem Solving	3	0	0	3
4.	22PC15	Basic Electrical Engineering	2	0	0	2
5.	22PC05	Computer Aided Engineering Graphics	1	0	4	3
6.	22PC21	Elements of Computer Science & Engineering	0	0	2	1
7.	22BS05	Engineering Chemistry Laboratory	0	0	2	1
8.	22PC22	Programming for Problem Solving Laboratory	0	0	2	1
9.	22PC18	Basic Electrical Engineering Laboratory	0	0	2	1
<b>Total</b>			<b>12</b>	<b>2</b>	<b>12</b>	<b>20</b>

**I Year II Semester**

S. No.	Course Code	Course Title	L	T	P	Credits
1.	22BS03	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	22BS02	Applied Physics	3	1	0	4
3.	22PC02	Engineering Workshop	0	1	3	2.5
4.	22HS01	English for Skill Enhancement	2	0	0	2
5.	22PC16	Electronic Devices and Circuits	2	0	0	2
6.	22HS02	Applied Physics Laboratory	0	0	3	1.5
7.	22PC08	Python Programming Laboratory	0	1	2	2
8.	22HS03	English Language and Communication Skills Laboratory	0	0	2	1
9.	22PC23	IT Workshop	0	0	2	1
<b>Total</b>			<b>10</b>	<b>4</b>	<b>12</b>	<b>20</b>

**II YEAR I SEMESTER**

S. No.	Course Code	Course Title	L	T	P	Credits
1		Digital Electronics	3	0	0	3
2		Data Structures	3	0	0	3
3		Computer Oriented Statistical Methods	3	1	0	4
4		Computer Organization and Architecture	3	0	0	3
5		Object Oriented Programming through Java	3	0	0	3
6		Data Structures Lab	0	0	3	1.5
7		Object Oriented Programming through Java Lab	0	0	3	1.5
8		Gender Sensitization Lab	0	0	2	0
9		Skill Development Course (Data visualization- R Programming/ Power BI)	0	0	2	1
<b>Total</b>			<b>15</b>	<b>1</b>	<b>10</b>	<b>20</b>

*G. Arind*

**II YEAR II SEMESTER**

S. No.	Course Code	Course Title	L	T	P	Credits
1		Discrete Mathematics	3	0	0	3
2		Business Economics & Financial Analysis	3	0	0	3
3		Operating Systems	3	0	0	3
4		Database Management Systems	3	0	0	3
5		Software Engineering	3	0	0	3
6		Operating Systems Lab	0	0	2	1
7		Database Management Systems Lab	0	0	2	1
8		Real-time Research Project/ Societal Related Project	0	0	4	2
9		Constitution of India	3	0	0	0
10		Skill Development Course (Node JS/ React JS/ Django)	0	0	2	1
<b>Total</b>			<b>18</b>	<b>0</b>	<b>10</b>	<b>20</b>

**III YEAR I SEMESTER**

S. No.	Course Code	Course Title	L	T	P	Credits
1		Algorithm Design and Analysis	3	0	0	3
2		Introduction to Data Science	3	1	0	4
3		Computer Networks	3	0	0	3
4		Professional Elective - I	3	0	0	3
5		Professional Elective - II	3	0	0	3
6		R Programming 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 (ETL-Kafka/Talend)	0	0	2	1
<b>Total</b>			<b>18</b>	<b>1</b>	<b>12</b>	<b>20</b>

**III YEAR II SEMESTER**

S. No.	Course Code	Course Title	L	T	P	Credits
1		Automata Theory and Compiler Design	3	0	0	3
2		Machine Learning	3	0	0	3
3		Big Data Analytics	3	0	0	3
4		Professional Elective – III	3	0	0	3
5		Open Elective - I	3	0	0	3
6		Machine Learning Lab	0	0	2	1
7		Big Data Analytics Lab	0	0	2	1
8		Professional Elective - III Lab	0	0	2	1
9		Environmental Science	3	0	0	0
10		Industrial Oriented Mini Project/ Summer Internship/ Skill Development Course (UI design- Flutter)	0	0	4	2
<b>Total</b>			<b>18</b>	<b>0</b>	<b>10</b>	<b>20</b>

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

*G. Ajith*

**IV YEAR I SEMESTER**

S. No.	Course Code	Course Title	L	T	P	Credits
1		Predictive Analytics	3	0	0	3
2		Web and Social Media Analytics	3	0	0	3
3		Professional Elective – IV	3	0	0	3
4		Professional Elective – V	3	0	0	3
5		Open Elective – II	3	0	0	3
6		Web and Social Media Analytics Lab	0	0	2	1
7		Predictive Analytics Lab	0	0	2	1
8		Project Stage – I	0	0	6	3
		<b>Total Credits</b>	<b>15</b>	<b>0</b>	<b>10</b>	<b>20</b>

**IV YEAR II SEMESTER**

S. No.	Course Code	Course Title	L	T	P	Credits
1		Organizational Behavior	3	0	0	3
2		Professional Elective – VI	3	0	0	3
3		Open Elective – III	3	0	0	3
4		Project Stage – II including Seminar	0	0	22	9+2
		<b>Total Credits</b>	<b>9</b>	<b>0</b>	<b>22</b>	<b>20</b>

\*MC – Satisfactory/Unsatisfactory

#Skill Course - 1 credit with 2 Practical Hours

**Professional Elective - I**

	Data Warehousing and Business Intelligence
	Artificial Intelligence
	Web Programming
	Image Processing
	Computer Graphics

**Professional Elective - II**

	Spatial and Multimedia Databases
	Information Retrieval Systems
	Software Project Management
	DevOps
	Computer Vision and Robotics

**Professional Elective - III**

	Software Testing Methodologies
	Data Visualization Techniques
	Scripting Languages
	Mobile Application Development
	Cryptography and Network Security

# Courses in PE - III and PE - III Lab must be in 1-1 correspondence.

*G. Arin*



**Professional Elective -IV**

	Quantum Computing
	Database Security
	Natural Language Processing
	Information Storage Management
	Internet of Things

**Professional Elective -V**

	Privacy Preserving in Data Mining
	Cloud Computing
	Data Science Applications
	Mining Massive Datasets
	Exploratory Data Analysis

**Professional Elective – VI**

	Data Stream Mining
	Web Security
	Video Analytics
	Blockchain Technology
	Parallel and Distributed Computing

G. Anil