



SIDDHARTHA INSTITUTE OF TECHNOLOGY & SCIENCES (UGC – AUTONOMOUS)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A+' Grade

Narapally, Korremula Road, Ghatkesar, Medchal-Malkajgiri(Dist)-501 301



M.Tech – Computer Science and Engineering

Course Structure (SITS - R22)

Applicable From 2022-23 Admitted Batch

Structure Breakup

S. No	Category	Breakup of credits (Total 68 credits)
1	Programme Core (PC)	20
2	Professional Elective (PE)	15
3	Open Elective (OE)	3
4	Mandatory Credit Course (MCC)	2
5	Project Work / Seminars (PS)	28
6	Audit Course (AC)	-
Total Credits		68

M.Tech – Computer Science and Engineering**Course Structure (SITS - R22)**

Applicable From 2022-23 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Name	Course Area	Periods per week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIE)	External (EIE)	Total
1	2215801	Mathematical Foundations of Computer Science	PC	3	0	0	3	40	60	100
2	2215802	Advanced Data Structures	PC	3	0	0	3	40	60	100
3		Professional Elective-I	PE	3	0	0	3	40	60	100
4		Professional Elective-II	PE	3	0	0	3	40	60	100
5	2215803	Advanced Data Structures Lab	PC	0	0	4	2	40	60	100
6		Professional Elective - I Lab	PC	0	0	4	2	40	60	100
7	2215804	Research Methodology & IPR	MCC	2	0	0	2	40	60	100
8		Audit Course – I	*AC-I	2	0	0	0	-	-	-
TOTAL				16	0	8	18	280	420	700

I YEAR II SEMESTER

S. No.	Course Code	Course Name	Course Area	Periods per week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIE)	External (EIE)	Total
1	2225801	Advanced Algorithms	PC	3	0	0	3	40	60	100
2	2225802	Advanced Computer Architecture	PC	3	0	0	3	40	60	100
3		Professional Elective-III	PE	3	0	0	3	40	60	100
4		Professional Elective-IV	PE	3	0	0	3	40	60	100
5	2225803	Advanced Algorithms Lab	PC	0	0	4	2	40	60	100
6		Professional Elective - III Lab	PC	0	0	4	2	40	60	100
7	2225804	Mini Project with Seminar	PS	0	0	4	2	100	-	100
8		Audit Course – II	*AC-II	2	0	0	0	-	-	-
TOTAL				14	0	12	18	340	360	700

*Non-credit Audit Courses will not carry any credits.

II YEAR I SEMESTER

S. No.	Course Code	Course Name	Course Area	Periods per week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIE)	External (SEE)	Total
1		Professional Elective - V	PE	3	0	0	3	40	60	100
2		Open Elective	OE	3	0	0	3	40	60	100
3	2235801	Dissertation Work Review - II	PS	0	0	12	6	100	0	100
TOTAL				6	0	12	12	180	120	300

II YEAR II SEMESTER

S. No.	Course Code	Course Name	Course Area	Periods per week			Credits	Scheme of Examination Maximum Marks		
				L	T	P		Internal (CIE)	External (SEE)	Total
1	2245801	Dissertation Work Review-III	PS	0	0	12	6	100	0	100
2	2245802	Dissertation Viva - Voce	PS	0	0	28	14	0	100	100
TOTAL				0	0	40	20	100	100	200

Professional Elective (PE) Courses**Professional Elective-I**

S. No.	Course Code	Course Title
1	2215805	Database Programming with PL/SQL
2	2215806	Deep Learning
3	2215807	Natural Language Processing

Professional Elective-I Lab

S. No.	Course Code	Course Title
1	2215808	Database Programming with PL/SQL Lab
2	2215809	Deep Learning Lab
3	2215810	Natural Language Processing Lab

Professional Elective-II

S. No.	Course Code	Course Title
1	2215811	Applied Cryptography
2	2215812	Software Quality Engineering
3	2215813	Mining Massive Datasets

Professional Elective-III

S. No.	Course Code	Course Title
1	2225805	Enterprise Cloud Concepts
2	2225806	Advanced Computer Networks
3	2225807	Edge Analytics

Professional Elective-III Lab

S. No.	Course Code	Course Title
1	2225808	Enterprise Cloud Concepts Lab
2	2225809	Advanced Computer Networks Lab
3	2225810	Edge Analytics Lab

Professional Elective-IV

S. No.	Course Code	Course Title
1	2225811	Bio Informatics
2	2225812	Nature Inspired Computing
3	2225813	Robotic Process Automation

Professional Elective-V

S. No.	Course Code	Course Title
1	2235802	Digital Forensics
2	2235803	High Performance Computing
3	2235804	Quantum Computing

Audit Courses (AC) – I & II

S. No.	Course Code	Course
1	22XAC01	English for Research Paper Writing and its Significance
2	22XAC02	Disaster Management
3	22XAC03	Sanskrit for Technical Knowledge
4	22XAC04	Value Education
5	22XAC05	Constitution of India
6	22XAC06	Pedagogy Studies
7	22XAC07	Stress Management by Yoga
8	22XAC08	Personality Development Through Life Enlightenment Skills

Open Elective (OE) Courses for other Departments

S. No.	Course Code	Course Title
1	2235805	IPR
2	2235806	Fault Tolerance Systems
3	2235807	Intrusion Detection Systems
4	2235808	Digital Forensics
5	2235809	Optimization Techniques
6	2235810	Cyber Physical Systems
7	2235811	Graph Analytics

Note:

1. For Audit Courses 'X' indicates 1 or 2 Sem
2. *Open Elective subject's syllabus is provided in a separate document. Student should take open electives from the list of offered by other departments/branches only.*