



SIPNA COLLEGE OF ENGINEERING & TECHNOLOGY, AMRAVATI

An Autonomous Institute Affiliated to

Sant Gadge Baba Amravati University, Amravati, Maharashtra (India)

(Approved by AICTE, New Delhi and Recognized by DTE, Maharashtra)

(Scheme of Examination w.e.f. 2025-26 onward)

Department of Computer Science and Engineering

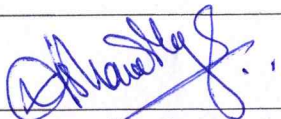
(Semester Pattern)

M. Tech. Computer Science and Engineering

**SoE No.
24MTCS-1.2**

Academic Evaluation Scheme/Credit System

Year: 2026-27

			30/03/2026	1.2
Chairman Board of Studies	Dean Academics	Chairman Academic Council	Date of Release	Version



Sipna College of Engineering & Technology, Amravati
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SoE No.
24MTCS-1.1

Course Category: Programme Core Course (PCC)		
Sr. No.	Course Name	Course Code
1	Advanced Computer Architecture	MTCSPC01CS1T
2	Database Processing	MTCSPC02CS1T
3	Database Processing-Lab	MTCSPC03CS1P
4	Operating System Design	MTCSPC04CS1T
5	Algorithmics	MTCSPC05CS2T
6	Algorithmics Lab	MTCSPC06CS2P
7	Computer Communication Networks	MTCSPC07CS2T
8	Network Security	MTCSPC08CS2T

Course Category: Research Methodology
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Course Category: Dissertation		
Sr. No.	Course Name	Course Code
1	Seminar II	MTCSDI01CS3P
2	Paper Publication I	MTCSDI02CS3T
3	Dissertation (Phase I)	MTCSDI03CS3P
4	Seminar III	MTCSDI04CS4P
5	Paper Publication II	MTCSDI05CS4T
6	Pre-Defense	MTCSDI06CS4P
7	Dissertation (Phase II)	MTCSDI07CS4P
Sr. No.	Course Name	Course Code
1	Research Methodology	MTCSRM01CS1T

Approved in.....
Academic Council Meeting
Dated:.....30/03/2020.....



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SoE No.
24MTCS-1.1

Course Category: Technical Paper Writing

Sr. No.	Course Name	Course Code
1	Seminar	MTCSSSE01CS2P
2	Technical Paper Writing	MTCSTP01CS2T

Course Category: Programme Elective Course (PEC)

Sr. No.	Course Name	Course Code
1	Deep Learning	MTCSPPE01CS1T
2	Deep Learning Lab	MTCSPPE02CS1P
3	Expert System Design	MTCSPPE03CS1T
4	Expert System Design- Lab	MTCSPPE04CS1P
5	Real Time System	MTCSPPE05CS1T
6	Real Time Systems-Lab	MTCSPPE06CS1P
7	Data Mining and Analytics	MTCSPPE07CS1T
8	Cryptography and Cryptanalysis	MTCSPPE08CS1T
9	Cloud Computing and Virtualization	MTCSPPE19CS1T
10	Natural Language Processing	MTCSPPE10CS2T
11	Natural Language Processing Lab	MTCSPPE11CS2P
12	Distributed Operating Systems	MTCSPPE12CS2T
13	Distributed Operating Systems Lab	MTCSPPE13CS2P
14	Big Data Analysis	MTCSPPE14CS2T
15	Big Data Analysis Lab	MTCSPPE15CS2P
16	Soft Computing Techniques	MTCSPPE16CS2T
17	Ethical Hacking	MTCSPPE17CS2T
18	Computer Vision and Image Processing	MTCSPPE18CS2T

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SoE No.
24MTCS-1.1

Scheme of Semester-I

Scheme for First Year M. Tech. in Computer Science and Engineering (Semester -I)															
Sr. No.	Course Name	Course Code	Course Plan per Week (Hrs)				Credits	Theory Evaluation			Practical Evaluation		Total	Min Passing Marks	ESE Time (Hrs.)
			L	P	T	Hrs		MSE	TA	ESE	INT	EXT			
Core Courses															
1	Program Core I Advanced Compute Architecture	MTCSPC01CS1T	3	0	0	3	3	20	20	60	-	-	100	50	2.5
2	Program Core II- Database Processing	MTCSPC02CS1T	3	0	0	3	3	20	20	60	-	-	100	50	2.5
3	Program Core III - Operating System Design	MTCSPC04CS1T	3	0	0	3	3	20	20	60			100	50	2.5
Elective Courses															
4	Program Elective I	--	3	0	0	3	3	20	20	60	-	-	100	50	2.5
5	Program Elective II	--	3	0	0	3	3	20	20	60	-	-	100	50	2.5
Laboratory Courses															
6	Laboratory I (Based on Program Core) Database Processing-LAB	MTCSPC03CS1P	0	2	0	2	1	-	-	-	25	25	50	25	-
7	Laboratory II (Based on Program Elective - I)	--	0	2	0	2	1	-	-	-	25	25	50	25	-
Research Methodology															
8	Research Methodology	MTCSRM01CS1T	3	0	0	3	3	20	20	60	-	-	100	50	2.5
TOTAL			18	4	0	22	20						700	350	
L: Lecture P: Practical T : Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External															

List of Program Elective Course-I (Semester-I) (Choose course and its associated lab if any)

Sr. No.	Course Name	Course Code
1	Deep Learning	MTCSPC01CS1T
2	Expert System Design	MTCSPC03CS1T
3	Real Time Systems	MTCSPC05CS1T
4	Deep Learning Lab	MTCSPC02CS1P
5	Expert System Design- Lab	MTCSPC04CS1P
6	Real Time Systems-Lab	MTCSPC06CS1P

List of Program Elective Course-II (Semester-I) (Choose any one Course)

Sr. No.	Course Name	Course Code
1	Data Mining and Analytics	MTCSPC07CS1T
2	Cryptography and Cryptanalysis	MTCSPC08CS1T
3	Cloud Computing and Virtualization	MTCSPC09CS1T

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Scheme of Semester-II

Scheme for First Year M. Tech. in Computer Science and Engineering (Semester -II)															
Sr. No.	Course Name	Course Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation			Practical Evaluation		Total	Min Passing Marks	ESE Time (Hrs.)
			L	P	T	Hrs.		MSE	TA	ESE	INT	EXT			
Core Courses															
1	Program Core IV Algorithmics	MTCSPC05CS2T	3	0	0	3	3	20	20	60	-	-	100	50	2.5
2	Program Core V Computer Communication Networks	MTCSPC07CS2T	3	0	0	3	3	20	20	60	-	-	100	50	2.5
3	Program Core VI Network Security	MTCSPC08CS2T	3	0	0	3	3	20	20	60	-	-	100	50	2.5
Elective Courses															
4	Program Elective III	--	3	0	0	3	3	20	20	60	-	-	100	50	2.5
5	Program Elective IV	--	3	0	0	3	3	20	20	60	-	-	100	50	2.5
Laboratory Courses															
6	Laboratory III - Algorithmics Lab	MTCSPC06CS2P	0	2	0	2	1	-	-	-	25	25	50	25	-
7	Laboratory IV - (Based on Program Elective - III)	--	0	2	0	2	1	-	-	-	25	25	50	25	-
Technical Paper Writing															
8	Seminar - I	MTCSSE01CS2P	0	4	0	4	2	-	-	-	50	-	50	25	-
9	Technical Paper Writing	MTCSTP01CS2T	0	0	1	1	1	-	50	-	-	-	50	25	-
TOTAL			15	8	1	24	20						700	350	
L: Lecture P: Practical T : Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External															

List of Program Elective Course-III (Semester-II) (Choose course and its associated lab if any)

Sr. No.	Course Name	Course Code
1	Natural Language Processing	MTCSPPE10CS2T
2	Distributed Operating Systems	MTCSPPE12CS2T
3	Big Data Analysis	MTCSPPE14CS2T
4	Natural Language Processing Lab	MTCSPPE11CS2P
5	Distributed Operating Systems Lab	MTCSPPE13CS2P
6	Big Data Analysis Lab	MTCSPPE15CS2P

List of Program Elective Course-IV (Semester-II) (Choose any one Course)

Sr. No.	Course Name	Course Code
1	Soft Computing Techniques	MTCSPPE16CS2T
2	Ethical Hacking	MTCSPPE17CS2T
3	Computer Vision and Image Processing	MTCSPPE18CS2T

Exit Point: After completion of First Year, student must complete minimum 10 credit online course (NPTEL/MOOCs/SWAYAM) suitable for Computer Science and Engineering domain to qualify for Post-Graduate Diploma in Computer Science and Engineering.

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Scheme of Semester-III

Scheme for First Year M. Tech. in Computer Science and Engineering (Semester - III)																
Sr. No.	Course Name	Course Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation			Practical Evaluation		Total	Min Passing Marks	ESE Time (Hrs.)	
			L	P	T	Hrs.		MSE	TA	ESE	INT	EXT				
Dissertation																
1	Seminar II	MTCSDI01CS3P	0	4	0	4	2	-	-	-	50	-	50	25		
2	Paper Publication I	MTCSDI02CS3T	0	0	4	4	4	-	50	-	-	-	50	25		
3	Dissertation (Phase I)	MTCSDI03CS3P	0	20	0	20	10	-	-	-	100	-	100	50		
TOTAL			0	24	4	28	16						200	100		
L: Lecture P: Practical T : Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External																

Seminar II	Based on literature survey, objective of proposed work, methodology etc.
Paper Publication I	Survey paper based on proposed work

Scheme of Semester-IV

Scheme for Second Year M. Tech. in Computer Science and Engineering (Semester -IV)															
Sr. No.	Course Name	Course Code	Course Plan per Week (Hrs.)				Credits	Theory Evaluation			Practical Evaluation		Total	Min. Passing Marks	ESE Time (Hrs.)
			L	P	T	Hrs.		MSE	TA	ESE	INT	EXT			
Dissertation															
1	Seminar III	MTCSDI04CS4P	0	4	0	4	2	-	-	-	50	-	50	25	
2	Paper Publication II	MTCSDI05CS4T	0	0	4	4	4	-	50	-	-	-	50	25	
3	Dissertation (Phase II)	MTCSDI06CS4P	0	2	5	7	6	-	-	-	100		100	50	
4	Dissertation (Phase III)	MTCSDI07CS4P	0	24	0	24	12	-	-	-	100	200	300	150	
TOTAL			0	30	09	39	24						500	250	
L: Lecture P: Practical T : Tutorial MSE: Mid Semester Exam ESE: End Semester Exam TA: Teacher Assessment INT: Internal EXT: External															

Seminar III	Based on dissertation.
Paper Publication II	Result-oriented paper based on dissertation.
Dissertation (Phase II)	Internal Review and Progress Presentation of dissertation.
Dissertation (Phase III)	With continued guidance from dissertation guide, students should carry out data collection, analysis, results, discussion, and conclusions.

Note: For Syllabus of Semester - I and Semester - II - [Click Here](#)

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Definition of Course Code

1 st & 2 nd letter (Degree Program)	3 rd & 4 th letter Applicable to which students	5 th & 6 th letter (Course category)	7 th & 8 th letter (Sr. no. of Subject)	9 th & 10 th Letters Teaching Deptt	11 th letter (Semester)	12 th letter (Theory or Practical)
MT: M. Tech.	CS: Computer Science and Engineering IT: Information Technology ME: Mechanical Engineering ET: Electronics and Telecommunication Engineering CE: Civil Engineering	PC: Program Core PE: Program Elective RM: Research Methodology SE: Seminar TP: Technical Paper Writing DI: Dissertation	Sr. no. of course in the particular course category from 1 st to 4 th semester.	CS: Computer Science and Engineering IT: Information Technology ME: Mechanical Engineering ET: Electronics and Telecommunication Engineering CE: Civil Engineering	1: First Semester 2: Second Semester 3: Third Semester 4: Fourth Semester	T: Theory P: Practical


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