

SHRI G.S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

DEPARTMENT OF COMPUTER ENGINEERING



M. TECH. (Computer Engineering)

Year: 2021-22

Department Vision and Mission

Vision

To become a strong centre of excellence for creating competent human resource in the field of Computer Science and Engineering meeting the dynamic societal and industrial needs.

Mission

- M1:** To produce technically competent professionals in Computer Science and Engineering having a blend of theoretical knowledge and practical skills.
- M2:** To encourage innovation, research and analytical activities with professional ethics and responsibilities through quality education.
- M3:** To provide learning ambience in collaboration with industries to keep pace with dynamic technological advancements and promote spirit of entrepreneurship.
- M4:** To motivate students to apply knowledge to resolve societal and environmental challenges and engage in continuous learning towards sustainable development.

M.Tech. Computer Engineering

- PO1** An ability to independently carry out research/investigation and development work to solve practical problems.
- PO2** An ability to write and present a substantial technical report/document.
- PO3** Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program.

M.Tech. Computer Engineering

- PEO1** To prepare post graduates with strong theoretical fundamentals and practical skills to take up technical challenges.
- PEO2** To equip post graduates with skill and attitude for research and development towards solving real life socio-economic problems.
- PEO3** To develop good team builders with competency to become entrepreneurs in line with national mission of self-reliant India.

M.Tech. Computer Engineering

- PSO1** To gain ability to use knowledge to identify research gaps and provide new ideas and innovative solutions to meet needs of industry and society.
- PSO2** To be able to take up higher studies, research and development, and entrepreneurship in the contemporary computing environment.
- PSO3** To inculcate professional ethics, communication abilities and quest for continuous learning.

SCHEME OF EXAMINATION 2021 - 22

M.Tech. COMPUTER ENGINEERING

SEMESTER - I

S. No.	Subject Code	Subject	No. of Hours			No. of Credits			Maximum Marks				
			L	T	P	Th.	Pr.	Total	Th.	CW	SW	Pr.	Total
1.	CO 71016	Programming Systems	3	-	-	3	-	3	70	30	-	-	100
2.	CO 71017	Modern Computer Networks	3	-	-	3	-	3	70	30	-	-	100
3.	CO 71018	Advances in Operating Systems	3	-	-	3	-	3	70	30	-	-	100
4.		Elective-I	3	-	-	3	-	3	70	30	-	-	100
5.		Elective – II	3	-	-	3	-	3	70	30	-	-	100
6.	CO 71455	Laboratory-I	-	-	4	-	2	2	-	-	40	60	100
7.	CO 71456	Laboratory-II	-	-	4	-	2	2	-	-	40	60	100
8.	CO 71499	Comprehensive Viva	-	-	-	-	-	-	-	-	-	Grade	Grade
Total			15	-	8	15	4	19	350	150	80	120	700

SEMESTER - II

S. No.	Subject Code	Subject	No. of Hours			No. of Credits			Maximum Marks				
			L	T	P	Th.	Pr.	Total	Th.	CW	SW	Pr.	Total
1.	CO 71511	Database Engineering	3	-	-	3	-	3	70	30	-	-	100
2.	CO 71512	Algorithmics	3	-	-	3	-	3	70	30	-	-	100
3.	CO 71513	Agile Software Development	3	-	-	3	-	3	70	30	-	-	100
4.		Elective – III	3	-	-	3	-	3	70	30	-	-	100
5.		Elective –IV	3	-	-	3	-	3	70	30	-	-	100
6.	CO 71882	Seminar	-	-	2	-	1	1	-	-	100	-	100
7.	CO 71856	Laboratory-III	-	-	2	-	1	1	-	-	40	60	100
8.	CO 71857	Laboratory-IV	-	-	4	-	2	2	-	-	40	60	100
9.	CO 71899	Comprehensive Viva	-	-	-	-	-	-	-	-	-	Grade	Grade
Total			15	-	8	15	4	19	350	150	180	120	800

SEMESTER – III

			No. of Periods	No. of Credits	Maximum Marks
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S. No.	Subject Code	Subject	L	T	P	Th.	Pr.	Total	Th.	CW	Pr.	SW	Total
1.	CO 7162	Dissertation Phase-I	-	-	20	-	20	20	-	-	150	100	250
Total			-	-	20	-	20	20	-	-	150	100	250

SEMESTER – IV

S. No.	Subject Code	Subject	No. of Periods			No. of Credits			Maximum Marks				
			L	T	P	Th.	Pr.	Total	Th.	CW	Pr.	SW	Total
1.	CO 7194	Dissertation Phase-II	-	-	30	-	30	30	-	-	240	160	400
Total			-	-	30	-	30	30	-	-	240	160	400

LIST OF ELECTIVES

Elective-I			Elective-II		
1.	CO 71221	Machine Learning	1.	CO 71311	Computational Intelligence
2.	CO 71222	Information Security	2.	CO 71312	Cloud Computing
3.	CO 71223	Web based Apps Development	3.	CO 71313	Object Oriented Software Engineering
4.	CO 71224	Augmented Reality and Virtual Reality	4.	CO 71314	Robotics
5.	CO 71225	Multimedia System	5.	CO 71315	Game Design
Elective-III			Elective-IV		
1.	CO 71720	Deep and Reinforcement Learning	1.	CO 71764	Data Science & Analytics
2.	CO 71721	Machine Learning for Security	2.	CO 71765	Cyber Security and Forensics
3.	CO 71722	Software Architecture	3.	CO 71766	Big Data
4.	CO 71723	Embedded Systems and Internet of Things	4.	CO 71767	Block Chain
5.	CO 71724	Human Computer Interaction	5.	CO 71768	High Performance Computing