

### Minor Specialization in Civil Engineering

Sr. No.	Semester	Course Code	Course Title	Hours per Week	Credits	Maximum Marks			ESE Duration in Hours
						Continuous Evaluation	End Sem Exams	Total	
1	IV	CETM41	Basics of Civil Engineering	4	4	40	60	100	3
2	V	CETM51	Basics of Surveying in Civil Engineering	4	4	40	60	100	3
3	VI	CETM61	Basics of Soil Engineering	4	4	40	60	100	3
4	VII	CETM71-1	Plumbing System	4	4	40	60	100	3
		CETM71-2	Intelligent Transport System	4	4	40	60	100	3
5	VIII	CETM81-1	Instrumentation	4	4	40	60	100	3
		CETM81-2	Rural Water Supply & Sanitation	4	4	40	60	100	3

### Minor Specialization in Computer Science and Engineering

Sr. No.	Semester	Course Code	Course Title	Hours per Week	Credits	Maximum Marks			ESE Duration in Hours
						Continuous Evaluation	End Sem Exams	Total	
1	IV	CSTM41	Data Structures & Algorithms	4	4	40	60	100	3
2	V	CSTM51	Software Engineering & Project Management	4	4	40	60	100	3
3	VI	CSTM61	AI and Machine Learning	4	4	40	60	100	3
4	VII	CSTM71	Mobile Application Programming	4	4	40	60	100	3
5	VIII	CSTM81	Database Management System	4	4	40	60	100	3

### Minor Specialization in Electronics and Communication Engineering

Sr. No.	Semester	Course Code	Course Title	Hours per Week	Credits	Maximum Marks			ESE Duration in Hours
						Continuous Evaluation	End Sem Exams	Total	
1	IV	ECTM41 – 1	Electromagnetic Fields	4	4	40	60	100	3
		ECTM41 – 2	Analog and Digital Communication	4	4	40	60	100	3
2	V	ECTM51 – 1	Electromagnetic Waves	4	4	40	60	100	3
		ECTM51 – 2	Digital Signal Processing	4	4	40	60	100	3
3	VI	ECTM61 – 1	Antennas	4	4	40	60	100	3
		ECTM61 – 2	Computer Communication Networks	4	4	40	60	100	3
4	VII	ECTM71 – 1	Microwave Engineering	4	4	40	60	100	3
		ECTM71 – 2	Wireless Sensor Network	4	4	40	60	100	3
5	VIII	ECTM81 – 1	Satellite Communication	4	4	40	60	100	3
		ECTM81 – 2	Mobile Communication	4	4	40	60	100	3

### Minor Specialization in Electrical Engineering

Sr. No.	Semester	Course Code	Course Title	Hours per Week	Credits	Maximum Marks			ESE Duration in Hours
						Continuous Evaluation	End Sem Exams	Total	
1	IV	EETM41	Electrical Machines	4	4	40	60	100	3
2	V	EETM51	Power Semiconductor Based Drives	4	4	40	60	100	3
3	VI	EETM61	Renewable Energy Sources	4	4	40	60	100	3
4	VII	EETM71	Power system	4	4	40	60	100	3
5	VIII	EETM81	Power system protection	4	4	40	60	100	3

### Minor Specialization in Electronics Design Technology

Sr. No.	Semester	Course Code	Course Title	Hours per Week	Credits	Maximum Marks			ESE Duration in Hours
						Continuous Evaluation	End Sem Exams	Total	
1	IV	EDTM 41	Fundamentals of Electronic Devices & Circuits	4	4	40	60	100	3
2	V	EDTM 51	Digital Circuits & Fundamentals of Microcontroller Based Design	4	4	40	60	100	3
3	VI	EDTM 61	PCB Technology	4	4	40	60	100	3
4	VII	EDTM 71	Design of Electronic Equipment	4	4	40	60	100	3
5	VIII	EDPM 81	Mini Project	4	4	40	60	100	3

### Minor Specialization in Electronics Engineering

#### Electronics with Minors in Industry 4.0

Sr. No.	Semester	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration (Hrs)
				L	T	P		Continuous Evaluation	End Sem Exam	Total	
1	IV	ENTM 42	Sensors and Actuators for Cyber Physical Systems	4	0	0	4	40	60	100	3Hrs
2	V	ENTM 52	Factory Automation	4	0	0	4	40	60	100	3Hrs
3	VI	ENTM 62	Industrial IoT network	4	0	0	4	40	60	100	3Hrs
4	VII	ENTM 72	Technologies of Smart Factory	4	0	0	4	40	60	100	3Hrs
5	VIII	ENTM 82	Mini Project	0	0	4	4	50	50	100	3Hrs

### Minor Specialization in Industrial Engineering

Sr. No.	Semester	Course Code	Course Title	Hours per Week	Credits	Maximum Marks			ESE Duration in Hours
						Continuous Evaluation	End Sem Exams	Total	
1	IV	INTM41	Methods Engineering	4	4	40	60	100	3
2	V	INTM51-1	Material Management	4	4	40	60	100	3
		INTM51-2	Production Planning and Control	4	4	40	60	100	3
3	VI	INTM61	Operations Research	4	4	40	60	100	3
4	VII	INTM71	Quality Engineering and Management	4	4	40	60	100	3
5	VIII	INTM81	Project Engineering & Management	4	4	40	60	100	3

### Minor Specialization in Information Technology

Sr. No.	Semester	Course Code	Course Title	Hours per Week	Credits	Maximum Marks			ESE Duration in Hours
						Continuous Evaluation	End Sem Exams	Total	
1	IV	ITTM41	Python for Everybody	4	4	40	60	100	3
2	V	ITTM51	Object Oriented Programming in Java	4	4	40	60	100	3
3	VI	ITTM61	Web Design for Everybody	4	4	40	60	100	3
4	VII	ITTM71-1	Machine Learning	4	4	40	60	100	3
		ITTM71-2	The Bits and Bytes of Computer Networking	4	4	40	60	100	3
5	VIII	ITTM81	Emerging Technologies : IOT, Wireless and Cloud Computing	4	4	40	60	100	3

### Minor Specialization in Mechanical Engineering

Sr. No.	Semester	Course Code	Course Title	Hours per Week	Credits	Maximum Marks			ESE Duration in Hours
						Continuous Evaluation	End Sem Exams	Total	
1	IV	METM268	Automotive Engineering	4	4	40	60	100	3
2	V	METM358	Computer Aided Design	4	4	40	60	100	3
3	VI	METM372	Automation and Robotics	4	4	40	60	100	3
4	VII	METM458	Solar Energy Technology	4	4	40	60	100	3
5	VIII	METM466-1	Manufacturing Engineering	4	4	40	60	100	3
		METM466-2	Mechanical Engineering Design	4	4	40	60	100	3