

Honors 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	CETH41	Construction Technology	4	4	40	60	100	3
2	V	CETH51	Geotechnical Design	4	4	40	60	100	3
3	VI	CETH61	Fire-fighting system	4	4	40	60	100	3
4	VII	CETH71	Foundation Design	4	4	40	60	100	3
5	VIII	CETH81-1	Design of Environmental Structures	4	4	40	60	100	3
		CETH81-2	Geometric Design of Highways	4	4	40	60	100	3

Honors Specialization in Computer Science 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	CSTH41	Programing for Advanced Computing	4	4	40	60	100	3
2	V	CSTH51	Pattern Recognition	4	4	40	60	100	3
3	VI	CSTH61	Graph Mining	4	4	40	60	100	3
4	VII	CSTH71	Statistical Machine Learning	4	4	40	60	100	3
5	VIII	CSTH81	Big Data Analysis	4	4	40	60	100	3

Honors 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	ECTH41	Communication System Analysis	4	4	40	60	100	3
2	V	ECTH51	Radio Frequency Circuit Design	4	4	40	60	100	3
3	VI	ECTH61 – 1	Wireless Channel	4	4	40	60	100	3
		ECTH61 – 2	Broadband Communication	4	4	40	60	100	3
4	VII	ECTH71 – 1	Smart Antennas	4	4	40	60	100	3
		ECTH71 – 2	Cryptography and Information Security	4	4	40	60	100	3
5	VIII	ECTH81 – 1	Evolution of Air Interface towards 5G	4	4	40	60	100	3
		ECTH81 – 2	Artificial Intelligence and Machine Learning	4	4	40	60	100	3

Honors 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	EETH41	DC Microgrid	4	4	40	60	100	3
2	V	EETH51	Introduction to Smart Grid	4	4	40	60	100	3
3	VI	EETH61	Advance Power Electronics and Control	4	4	40	60	100	3
4	VII	EETH71	Mathematical Methods and Techniques in Signal Processing	4	4	40	60	100	3
5	VIII	EETH81-1	Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink	4	4	40	60	100	3
		EETH81-2	Mapping Signal Processing Algorithms to DSP Architectures	4	4	40	60	100	3
		EETH81-3	Power System Analysis	4	4	40	60	100	3
		EETH81-4	Power System Dynamics, Control and Monitoring	4	4	40	60	100	3

Honors 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	ENTH 41	Digital System Design	4	4	40	60	100	3
2	V	ENTH 51	VLSI Technology	4	4	40	60	100	3
3	VI	ENTH 61	VLSI Signal Processing	4	4	40	60	100	3
4	VII	ENTH 71	Low Power VLSI	4	4	40	60	100	3
5	VIII	ENTH 81	VLSI Design Automation	4	4	40	60	100	3

Honors Specialization in Electronics Engineering

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	ENTH 42	* Introduction to Artificial Intelligence and Machine Learning	4	0	0	4	40	60	100	3Hrs
		ENTH 43	# Introduction to IoT								
2	V	ENTH 52	*Deep Learning for Visual Recognition	4	0	0	4	40	60	100	3Hrs
		ENTH 53	# Sensor Interfacing with Arduino and ESP8266								
3	VI	ENTH 62	*Edge for AI Fundamentals	4	0	0	4	40	60	100	3Hrs
		ENTH 63	# Cloud Computing using Raspberry pi								
4	VII	ENTH 72	*Hardware Designing for AI/ML applications	4	0	0	4	40	60	100	3Hrs
		ENTH 73	# Data Management and Analytics for IoT								
5	VIII	ENTH 81	Project	0	0	4	4	50	50	100	3Hrs

Honors 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	INTH41	Industry 4.0	4	0	0	4	40	60
2	V	INTH51	Soft Computing	4	0	0	4	40	60
3	VI	INTH61	Taguchi Methods for Experimentation	4	0	0	4	40	60
4	VII	INTH71	Supply Chain Optimization	4	0	0	4	40	60
5	VIII	INTH81-1	Business Analytics	4	0	0	4	40	60
		INTH81-2	Strategic Information Management System	4	0	0	4	40	60

Honors 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	ITTH41	Foundation to Computer System Design	4	4	40	60	100	3
2	V	ITTH51-1	Applied data Science with Python	4	4	40	60	100	3
		ITTH51-2	Capstone : Retrieving, Processing and Visualizing Data using Python	4	4	40	60	100	3
3	VI	ITTH61	Data Mining	4	4	40	60	100	3
4	VII	ITTH71	Big Data Computing	4	4	40	60	100	3
5	VIII	ITTH81	Block Chain Architecture and use cases.	4	4	40	60	100	3

Honors 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	METH267	Digital Manufacturing	4	4	40	60	100	3
2	V	METH357	Tool Design	4	4	40	60	100	3
3	VI	METH371	Turbo Machinery	4	4	40	60	100	3
4	VII	METH457	Design of Heat Exchangers	4	4	40	60	100	3
5	VIII	METH464-1	Tribology	4	4	40	60	100	3
		METH464-2	Robotics	4	4	40	60	100	3