

Minor Specialization in Biomedical Engineering (Bio imaging)

Sr. No.	Sem	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration (Hrs)
				L	T	P		CA	ESE	TOTAL	
1	III	BMTM 301	Biomedical Engineering Fundamentals	3	0	0	3	40	60	100	3
2	IV	BMTM 401	Biomedical Imaging Modalities	3	0	0	3	40	60	100	3
3	V	BMTM 501	Computer Analysis of Biomedical Images	4	0	0	4	40	60	100	3
4	VI	BMTM 601	Imaging Applications of AI in Healthcare	4	0	0	4	40	60	100	3
5	VII	BMPM 701	Mini Project	0	0	8	4	50	50	100	3

Minor Specialization in Civil Engineering

S.N	Semester	Course Code	Course Title	Hours per week			Credits	Max Marks			
				L	T	P		CA	ESE	TOTAL	ESE Duration (Hrs)
1	III	CETM301	Basic of Civil Engineering	3	0	0	3	40	60	100	3
2	IV	CETM401	Energy Efficient building	3	0	0	3	40	60	100	3
3	V	CETM501	Plumbing system	3	0	0	3	40	60	100	3
4	V	CEPM501	Plumbing system lab	0	0	2	1	25	25	50	0
5	VI	CETM601	Basic of surveying in civil Engineering	3	0	0	3	40	60	100	3
6	VI	CEPM601	Basic of surveying in civil Engineering lab	0	0	2	1	25	25	50	0
7	VII	CEPM 701	Project	0	0	8	4	50	50	100	0

Minor Specialization in Computer Science and Engineering

Sr. No.	Sem	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration (Hrs)
				L	T	P		CA	ESE	TOTAL	
1	III	CSTM301	Programming Frameworks	3	0	0	3	40	60	100	3
2	IV	CSTM401	Software Engineering & Project Management	3	0	0	3	40	60	100	3
3	V	CSTM501	Database Management System	4	0	0	4	40	60	100	3
4	VI	CSTM601	AI and Machine Learning	4	0	0	4	40	60	100	3
5	VII	CSPM701	Project	0	0	8	4	50	50	100	-

Minor Specialization in Computer Science and Engineering (Artificial Intelligence & Machine Learning)

Sr. No.	Sem	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration Hrs
				L	T	P		CA	ESE	TOTAL	
1	III	CATM301	Programming and Data structure with Python	3	0	0	3	40	60	100	3
2	IV	CATM401	Artificial Intelligence	3	0	0	3	40	60	100	3
3	V	CATM501	Machine Learning	4	0	0	4	40	60	100	3
4	VI	CATM601	Deep Learning and its Applications	4	0	0	4	40	60	100	3
5	VII	CAPM701	Project	0	0	8	4	50	50	100	-

**Minor Specialization in Computer Science and Engineering
(Data Science)**

Sr. No.	Sem	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE DurationHrs
				L	T	P		CA	ESE	TOTAL	
1	III	CDTM301	Programming for Data Science	3	0	0	3	40	60	100	3
2	IV	CDTM401	Databases and SQL for Data Science	3	0	0	3	40	60	100	3
3	V	CDTM501	Data Handling and Visualization	4	0	0	4	40	60	100	3
4	VI	CDTM601	Statistical Machine Learning	4	0	0	4	40	60	100	3
5	VII	CDPM701	Project	0	0	8	4	50	50	100	-

**The Scheme of Teaching & Examination of MINORS Specialization
In Information Technology**

Sr. No.	Sem	Course Code	Course Name	Hours/week			Credits	Maximum Marks			ESE Duration Hrs
				L	T	P		CA	ESE	TOTAL	
01	III	ITTM301	Web Designing	2	1	-	3	40	60	100	3
02	IV	ITTM401	Advanced Java Programming	2	1	-	3	40	60	100	3
03	V	ITTM501	Mobile App Development	3	1	-	4	40	60	100	3
04	VI	ITTM601	Amazon Web Services	3	1	-	4	40	60	100	3
05	VII	ITTM701	Project			8	4	50	50	100	
				8	8	8	18			500	

***Note: In case any of the above motioned courses are offered by the parent department, another course will be offered in lieu of that course.**

Minor Specialization in Electronics and Communication Engineering

S N	Seme ster	Course Code	Course Title	Hours per Week			Credits	Maximum Marks			ESE Durati on in Hours
				L	T	P		CA	ESE	T O T A L	
1	III	ECTM301	Communication Engineering	4	-	-	4	40	60	100	3
2	IV	ECTM401	Sensors for Smart City	3	1	-	4	40	60	100	3
3	V	ECTM501	IoT for Industrial Application	2	1	-	3	40	60	100	3
4	VI	ECTM601	Future Generation Networks	3	-	-	3	40	60	100	3
5	VII	ECPM701	Project	-	-	8	4	50	50	100	3

Minor Specialization in Electronics and Computer Science Engineering

Sr. No	Sem	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duratio n (Hrs)
				L	T	P		CA	ESE	Tot al	
1	III	ECSTM301	IoT fundamentals	3	0	0	3	40	60	100	3
2	IV	ECSTM401	Sensor Interfacing with Arduino and ESP 8266	3	0	0	3	40	60	100	3
3	V	ECSTM501	Cloud Computing Using Raspberry Pi	3	1	0	4	40	60	100	3
4	VI	ECSTM601	Data Management and Analytics for IoT	3	1	0	4	40	60	100	3
5	VII	ECSPM701	Project	0	0	8	4	50	50	100	-

Minors Specialization in Electrical Engineering Electric Vehicles (EV)

S.N.	Semester	Course code	Course Title	Hours/week			Credits	Maximum Marks			ESE Duration (Hrs)
				L	T	P		CA	ESE	Total	
1	III	EETM301	Basics of Electrical Engineering and EV	3	0	0	3	40	60	100	3
2	IV	EETM401	EV Motors and their Control	3	0	0	3	40	60	100	3
3	V	EETM501	EV Energy Management and Charging Infrastructure	4	0	0	4	40	60	100	3
4	VI	EETM601	EV Communication and Instrumentation	4	0	0	4	40	60	100	3
5	VII	EETM701	EV Policies and Safety Aspects	4	0	0	4	40	60	100	3

Minor Specialization in Mechanical Engineering

Sr. No	Semester	Course Code	Course Title	Hours/Week			Credits	Maximum Marks			ESE Duration (Hrs.)
				L	T	P		CA	ESE	Total	
1	III	METM301	Manufacturing Engineering	3	0	0	3	40	60	100	3
2	IV	METM401	Automotive Engineering	3	0	0	3	40	60	100	3
3	V	METM501	Computer-Aided Design	3	1	0	4	40	60	100	3
4	VI	METM601	Solar Energy Technology	3	1	0	4	40	60	100	3
5	VII	METM701	Project (Minors)	0	0	8	4	50	50	100	-

Department of Humanities Minor Undergraduate Programme in Economics

Sr. No.	Sem	Course Code	Course Title	Hours/week			Credits	Maximum marks			ESE duration (Hrs.)
				L	T	P		CA	ESE	Total	
1.	III	HUTM301	Micro Economics	3	0	0	3	50	50	100	3
2.	IV	HUTM401	Macro Economics and Public Finance	3	0	0	3	50	50	100	3
3.	V	HUTM501	Indian Economy	3	0	0	3	50	50	100	3
4.	VI	HUTM601	Environmental Economics and Sustainability	3	0	0	3	50	50	100	3
5.	VII	HUTM701	Project	4	0	0	4	50	50	100	Viva

Minor Undergraduate Programme in Applied Psychology

Sr. No.	Sem	Course Code	Course Name	Hours/week			Credits	Maximum marks			ESE duration (Hrs.)
				L	T	P		CA	ESE	Total	
1.	III	HUTM302	General Psychology	3	0	0	3	50	50	100	3
2.	IV	HUTM402	Social Psychology	3	0	0	3	50	50	100	3
3.	V	HUTM502	Personality Psychology	3	0	0	3	50	50	100	3
4.	VI	HUTM602	Research Methodology	3	0	0	3	50	50	100	3
5.	VII	HUTM702	Project	4	0	0	4	50	50	100	Viva