HONORS Specialization in Biomedical Engineering in Bioinformatics

Sr. No.	Semester	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration (Hrs)
				L	T	P		CA	ESE	TOTAL	
1	III	BMTH301	Biological Data and Databases	3	0	0	3	40	60	100	3
2	V	BMTH401	Computational Biology and Bioinformatics	3	0	0	3	40	60	100	3
3	VI	BMTH501	Programming in Bioinformatics	4	0	0	4	40	60	100	3
4	VII	BMTH601	Computer Aided Drug Design and Chemoinformatics	4	0	0	4	40	60	100	3
5	VIII	BMPH701	Project	0	0	8	4	50	50	100	3

Honors Specialization in Civil Engineering

Sr. No.	Semester	Course Code	Course Title	Hours per week			Credits	Maximum Marks			
				L	T	P		CA	ESE	TOTAL	ESE Duration(Hrs)
1	III	CETH301	Construction Technology	3	0	0	3	40	60	100	3
2	IV	CETH401	Firefighting system	3	0	0	3	40	60	100	3
3	V	CETH501	Geotechnical Design	3	0	0	3	40	60	100	3
4	V	CEPH501	Geotechnical Design Lab	0	0	2	1	25	25	50	0
5	VI	CETH601	Foundation Design	3	0	0	3	40	60	100	3
6	VI	CEPH601	Foundation Design Lab	0	0	2	1	25	25	50	0
7	VII	CEPH701	Project	0	0	8	4	50	50	100	0

Honors Specialization in Computer Science Engineering

(Full stack Development Track)

Sr. No.	Sem	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration Hrs
				L	T	P		CA	ESE	TOTAL	
1	III	CSTH301	Web Development	3	0	0	3	50	50	100	-
2	IV	CSTH401	Full Stack-I	3	0	0	3	50	50	100	-
3	V	CSTH501	Full Stack-II	4	0	0	4	50	50	100	-
4	VI	CSTH601	Software Development Automation	4	0	0	4	50	50	100	-
5	VII	CSPH701	Project	0	0	8	4	50	50	100	-

Note: Marks division for all the courses mentioned above (CSE, Honors) will be off 50 marks for Continuous Evaluation and 50 marks for End Sem Exam. Evaluation pattern for Continuous Evaluation and ESE can be lab conduction, viva-voce, and execution-based test and MCQ test.

Honors Specialization in Computer Science Engineering

(AIML & Data Science Track)

Sr. No.	Sem	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration Hrs
				L	T	P		CA	ESE	TOTAL	
1	III	CSTH302	Data Science Programming Languages	3	0	0	3	40	60	100	3
2	IV	CSTH402	Statistics for Data Analysis	3	0	0	3	40	60	100	3
3	V	CSTH502	Data Engineering	4	0	0	4	40	60	100	3
4	VI	CSTH602-1	Business and Web Analytics	4	0	0	4	40	60	100	3
		CSTH602-2	Machine Learning	4	0	0	4	40	60	100	3
5	VII	CSPH70	Project	0	0	8	4	50	50	100	-

Honors Specialization in Computer Science Engineering

(Cyber Security Track)

Sr. No.	Sem	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration Hrs
				L	T	P		CA	ESE	TOTAL	
1	III	CSTH303	Information and Cyber Security	3	0	0	3	40	60	100	3
2	IV	CSTH403	Cyber Security Auditing	3	0	0	3	40	60	100	3
3	V	CSTH503	Cyber Forensics: Threats, Vulnerability, Malware	4	0	0	4	40	60	100	3
4	VI	CSTH603	Security Strategiesin Windows and Linux	4	0	0	4	40	60	100	3
5	VII	CSPH703	Project	0	0	8	4	50	50	100	_

Scheme of Teaching & Examination of HONORS 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	ITTH301	Introduction to Web3 Programming	3	-	-	3	40	60	100	3
02	IV	ITTH401	Development of Progressive Web Application	3	-	-	3	40	60	100	3
03	V	ITTH501	Cloud Native App Development	4	-	-	4	100	-	100	-
04	VI	ITTH601	Introduction to DevOps	4	-	-	4	100	-	100	-
05	VII	ITPH701	Project	-	-	08	4	50	50	100	-
			Total	**14**	**-**	**08**	**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.**

HONORS Specialization in Electronics and Communication Engineering

Sr No	Semester	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration in Hours
				L	T	P		CA	ESE	TOTAL	
01	III	ECTH301	Communication System Analysis	4	0	0	4	40	60	100	3
02	IV	ECTH401	Multimedia Networks	4	0	0	4	40	60	100	3
03	V	ECTH501	Cryptography and Information Security	3	0	0	3	40	60	100	3
04	VI	ECTH601	Evolution of Air Interface towards 5G	3	0	0	3	40	60	100	3
05	VII	ECPH701	Project	0	0	8	4	50	50	100	3

Honors Specialization in Electronics and Computer Science Engineering

Sr. No.	Semester	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE Duration(Hrs)
				L	T	P		CA	ESE	TOTAL	
1	III	ECSTH301	Edge for AI fundamentals	3	0	0	3	40	60	100	3
2	IV	ECSTH401	Embedded Machine Learning	3	0	0	3	40	60	100	3
3	V	ECSTH501	Computer Vision with Embedded Machine Learning	3	1	0	4	40	60	100	3
4	VI	ECSTH601	Business Considerations for Edge Computing	3	1	0	4	40	60	100	3
5	VII	ECSPH701	Project	0	0	8	4	50	50	100	-

Honors Specialization in Electrical Engineering
(Distributed Energy Generation Systems)

S.N	Sem	Course code	Course Title	Hours/week			Credits	Maximum Marks			ESE Duration (Hrs)
				L	T	P		CA	ESE	TOTAL	
1	III	EETH301	Renewable and Distributed Energy Sources	3	0	0	3	40	60	100	3
2	IV	EETH401	Energy Storage System	3	0	0	3	40	60	100	3
3	V	EETH501	Distributed Generation and Smart grids Or Equivalent SWAYAM NPTEL course approved by the Department	4	0	0	4	40	60	100	3
4	VI	EETH601	Design of Power Converter for Distributed Generation System Or Equivalent SWAYAM NPTEL course approved by the Department	4	0	0	4	40	60	100	3
5	VII	EETH701	Power Quality Improvement Techniques Or Equivalent SWAYAM NPTEL course approved by the Department Or Project	4	0	0	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(Hrs)
				L	T	P		CA	ESE	TOTAL	
1	III	METH301	Digital Manufacturing	3	0	0	3	40	60	100	3
2	IV	METH401	Tool Design	3	0	0	3	40	60	100	3
3	V	METH501	Turbo Machinery	3	1	0	4	40	60	100	3
4	VI	METH601	Design of Heat Exchangers	3	1	0	4	40	60	100	3
5	VII	METH701	Project (Honors)	0	0	8	4	50	50	100	-