



Department of Electrical Engineering
Study & Evaluation Scheme (As per NEP2020)
w.e.f. 2024-25

Program: B.Tech. ECS

Semester I

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme							Sub. Total	Credit	Total Credits	Attributes						
				L	T	P	CT		TA		Total	TE	PE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics
1	EE103	Basic Electrical Engg.	ESC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√	√	√				
2	PY101	Physics	BSC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√		√				√
3	LN132	Communication Skills: Theory and Practices	HSSM	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√		√	√			√
4	MT101	Mathematics I	BSC	3	1	0	50	-	25	-	75	75	-	150	3:1:0	4	√	√	√				
5	EC101	Basic Electronics	ESC	3	0	0	50	-	25	-	75	75	-	150	3:0:0	3			√				
6	ME103	Engineering Graphics	ESC	0	0	2	-	15	-	10	25	-	25	50	0:0:2	1	√	√	√				
7	*HM101	Rashtra Gaurav	MC	2	0	0	-	-	-	-	-	100	-	100	2:0:0	0						√	
Total				17	1	8	310		165		475	375	100	950		20							

* HM101 Rashtra Gaurav: This is a mandatory noncredit course in which a student must clear this paper with 50% passing marks up to the final year and marks will not be included in the result.

Semester II

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme							Sub. Total	Credit	Total Credits	Attributes						
				L	T	P	CT		TA		Total	TE	PE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics
1	CS101	Computer Programming	ESC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√	√	√				
2	ME101	Basic Mechanical Engineering. & Workshop	ESC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√		√				
3	CH101	Chemistry	BSC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√	√	√		√		
4	MT112	Mathematics II	BSC	3	1	0	50	-	25	-	75	75	-	150	3:1:0	4	√	√	√				
5	ES102	Concept of Environmental Studies	HSSM	2	1	0	50	-	25	-	75	75	-	150	2:1:0	3			√		√	√	
6	EE102	Electrical Workshop	PCC	0	0	2	-	15	-	10	25	-	25	50	0:0:2	1	√	√	√				
Total				14	2	8	310		165		475	375	100	950		20							

Semester III

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme							Sub. Total	Credit	Total Credits	Attributes							
				L	T	P	CT		TA		Total	TE	PE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
							Th	P	Th	P														
1	EE201	Network Analysis	PCC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4			√					
2	EE203	Analog and Digital Electronics	PCC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√							
3	CS204	Data Structure using C	ESC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√	√						
4	CS270	Object Oriented Concepts using Java	PCC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4		√	√					
5	CS206	Discrete Structure	PCC	3	0	0	50	-	25	-	75	75	-	150	3:0:0	3			√					
6	CS203	Cyber Law and Information Security	ESC	3	0	0	50	-	25	-	75	75	-	150	3:0:0	3			√					
7	EE204	Measurement and Instrumentation	PCC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√	√						
8	*BM226	Human Values and Professional Ethics	MC	2	0	0	-	-	-	-	-	100	-	100	0:0:0	0	√	√						
Total				23	0	10	425		225		650	525	125	1300		26								

* BM226 Human Values and Professional Ethics: This is a mandatory noncredit course in which a student must clear this paper with 50% passing marks up to the final year and marks will not be included in the result.

Semester IV

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme							Sub. Total	Credit	Total Credits	Attributes							
				L	T	P	CT		TA		Total	TE	PE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
							Th	P	Th	P														
1	EE211	Control System	PCC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√							
2	EE214	Signals and Systems	PCC	3	0	0	50	-	25	-	75	75	-	150	3:0:0	3	√							
3	EE217	Electrical Machines	PCC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4	√							
4	CS212	Database Management System	ESC	3	0	2	50	15	25	10	100	75	25	200	3:0:2	4		√	√					
5	ES203	Disaster Management & Mitigation	HSSM	3	0	0	50	-	25	-	75	75	-	150	3:0:0	3			√					
6		Elective-I	PEC	3	0	0	50	-	25	-	75	75	-	150	3:0:0	3								
7	CS272	Python Programming Lab	PCC	0	0	2	-	15	-	10	25	-	25	50	0:0:2	1	√	√	√					
8	EE215	Mini Project	IPC	0	0	3	-	-	-	100	100	-	-	100	0:0:3	2	√	√	√		√		√	
Total				18	0	11	360		290		650	450	100	1200		24								

Elective- I		
S.No.	Course Code	Course Name
1.	EE221	Numerical Analysis
2.	CS292	Theory of computation
3.	CS303	Principles of Operating System
4.	CS320	Real Time System
5.	CS348	Human Computer Interaction

Minor								
S. No.	Course Name	Category	L	T	P	C	Contact hours	Remark
1.	Minor-I/ II/ III	MN	3	0	0	3	3	
Total			3	0	0	3	3	

The department offers Three different minors (Minor-I/II/III) for the students of other departments starting from the fourth semester. (Each Minor course is of Three Credits). The details are as follows:

Minor I: Energy Analytics & Management

S. No.	Sem.	Course Code	Course Name	Category	L	T	P	C	Contact hours	Remark
2.	IV	EE251	Energy Conservation, Energy Audit and Management	MN	3	0	0	3	3	

Minor II: Renewable Energy & Sustainability

S. No	Sem.	Course Code	Course Name	Category	L	T	P	C	Contact hours	Remark
1	IV	EE341	Fundamentals of Renewable Energy Systems	MN	3	0	0	3	3	

Minor III: Electric Vehicle & Smart Grid

S. No	Sem.	Course Code	Course Name	Category	L	T	P	C	Contact hours	Remark
1	IV	EE342	Fundamentals of Power Electronics for EV's	MN	3	0	0	3	3	