Semester I

S.No	Course Code	Course Title	L	T	P	S	Hours Per Week	Credits
1	MTH115C	Calculus for Engineers	3	1	0	0	4	4
2	PHY102C	Engineering Physics	3	0	2	0	5	4
3	CHM102C	Engineering Chemistry	3	0	2	0	5	4
4	CIV101A	Introduction to Environmental Science and Engineering	2	0	0	1	2	0
5	MEC102C	Engineering Visualisation	1	0	4	0	5	3
6	ENG107F	Technical Communication	2	0	2	0	4	3
7	MEC104A	Engineering Perspectives	1	0	0	1	1	0

Semester II

S.No	Course Code	Course Title	L	T	P	S	Hours Per Week	Credits
1	MTH155C	Linear Algebra and Differential Equations	3	1	0	0	4	4
2	CIV152C	Engineering Mechanics	3	0	0	0	3	3
3	ELE150C	Basic Electrical Engineering	3	0	2	0	5	4
4	CSE160F	Programming for Problem Solving	3	0	2	0	5	4
5	ECE151C	Basic Electronic Devices	3	0	0	0	3	3
6	MEC152C	Product Realisation through Manufacturing	0	0	2	1	2	2
7	SS01A	Ethics and Social Responsibilities	1	0	0	0	1	0

Semester III

S. No	*Course Code*	*Course Title*	*Hours Per Week*			*Credits*
			L	*T*	*P*	
1.	ELE202C	Network Analysis	3	1	0	4
2.	ELE205C	Signals and Systems	3	0	0	3
3	PHY201C	Electrical Engineering Materials	3	0	0	3
4	PHY202C	Engineering Electromagnetics	3	0	0	3
5	ECE213C	Analog Electronics	3	0	0	3
6.	ELE208C	Introduction to Matrix Programming	0	0	2	1
7.	MTH204C	Advanced Engineering Mathematics	3	0	0	3
8.	ECE214C	Analog Electronics Lab	0	0	2	1
9.	XXX0xx	Open Elective	-	-	-	Y
10.	MTH210B	Bridge Course in Mathematics – I*	2	0	0	0
11.	XXXxxxS	Specialization Course – I #				S
Total Credits						21+Y+S

** Audit course for lateral entry students only*
 # is for those students who opt for specialization (Honors/Minor)

Semester IV

S. No	*Course Code*	*Course Title*	*Hours Per Week*			*Credits*
			L	*T*	*P*	
1.	ELE256C	Electrical Machines-I	3	1	0	4
2.	ELE257C	Data Science with Statistical Foundations	2	0	2	3
3.	ELE258C	Control Systems Principles	3	1	0	4
4.	ELE259C	Electrical Measurements	3	1	0	4
5.	ECE263C	Digital Electronics and Logic Design	3	0	0	3
6.	ELE260C	Electrical Machines-I Lab	0	0	2	1
7.	ELE261C	Electrical Measurements Lab	0	0	2	1
8.	ELE262C	Control System Principles Lab	0	0	2	1
9.	ELE263A	Seminar	-	-	-	0
10.	ECE264C	Digital Electronics and Logic Design Lab	0	0	2	1
11.	XXX0xx	Open Elective	-	-	-	Y
12.	MTH260B	Bridge Course in Mathematics – II*	2	0	0	0
13.	XXXxxxS	Specialization Course II #				S
Total Credits						22 + Y +S

** Audit course for lateral entry students only*
 # is for those students who opt for specialization (Honors/Minor)

Semester V

S. No.	*Course Code*	*Course Title*	*Hours Per Week*			*Credits*
			L	*T*	*P*	
1.	ELE302C	Electrical Machines-II	3	1	0	4
2.	ELE304C	Elements of Power Systems	3	1	0	4
3.	ELE308C	Numerical Methods Using Scientific Computing	2	0	2	3
4.	ECE318C	Microprocessors and Microcontrollers	3	0	0	3
5.	ECO301C	Fundamentals of Economics	3	0	0	3
6.	ELE310C	Electrical Machines II Lab	0	0	2	1
7.	ELE311C	Elements of Power Systems Lab	0	0	2	1
8.	ECE319C	Microprocessors and Microcontrollers Lab	0	0	2	1
9.	XXX0xx	Open Elective	-	-	-	Y
10.	XXXxxxS	Specialization Course 3 #				S
Total Credits						20+Y+S

 # is for those students who opt for specialization (Honors/Minor)

Semester VI

S. No	*Course Code*	*Course Title*	*Hours Per Week*			*Credits*
			L	*T*	*P*	
1.	ELE352C	Power Electronics	3	1	0	4
2.	ELE357C	Power System Analysis	3	1	0	4
3.	ELE358C	Control System Design	2	0	2	3
4.	ECE364C	Communication Systems	3	0	0	3
5.	ELE359C	Power Electronics Lab	0	0	2	1
6.	ELE362C	Tinkering Lab	0	0	2	1
7.	ELE360C	Power System Analysis Lab	0	0	2	1
8.	xxx3xxG	Elective (Generic)	X	0	0	X
9.	ELE3XXE	Elective (Discipline Centric)	3	0	0	3
10.	XXX0xx	Open Elective	-	-	-	Y
11.	ELE361A	Industrial Training (15 days)				0
12.	XXXxxxS	Specialization Course 4 #				S
Total Credits						20+X+Y+S

 # is for those students who opt for specialization (Honors/Minor)

Discipline Centric Elective Courses:

S. No.	*Course Code*	*Course Title*	*Hours Per Week*			*Credits*
			L	T	P	
1	ELE354E	Power Station Practice	3	0	0	3
2	ELE355E	Special Electrical Machines	3	0	0	3
3	ELE356E	Computational Electromagnetics	3	0	0	3
4	ELE357E	Electrical Machine Design	3	0	0	3
5	ELE358E	Applied Linear Algebra for Electrical Engineering	3	0	0	3
6	ELE359E	Power Generation Plants	3	0	0	3

Generic Elective Courses:

S. No.	***Course Code***	***Course Title***	***Hours Per Week***			***Credits***
			L	T	P	
1	ELE354G	Renewable Energy Systems	3	0	0	3
2	ELE355G	Sensors, Transducers & Instrumentation Systems	3	0	0	3

Semester VII

S. No	***Course Code***	***Course Title***	***Hours Per Week***			***Credits***
			L	T	P	
1.	ELE401C	Electric Drives	3	1	0	4
2.	ELE407C	Introduction to Machine Learning for Electrical Engineering	2	0	2	3
3.	ELE410C	Switchgear and Protection	3	1	0	4
4.	DMS4EEC	Project Management & Reporting	3	0	0	3
5.	ELE4xxE	Elective (Discipline Centric)	3	0	0	3
6.	XXX4xxG	Elective (Generic)	X	0	0	X
7.	XXX0xx	Open Elective	-	-	-	Y
8.	ELE409C	Electric Drives Lab	0	0	2	1
9.	ELE411C	Switchgear and Protection Lab	0	0	2	1
10.	ELE408C	Project (Minor)	0	0	4	2
11.	XXXxxxS	Specialization Course 5 #				S
Total Credits						21+X+Y+S

 # is for those students who opt for specialization (Honors/Minor)

Discipline Centric Elective Courses:

S. No.	***Course Code***	***Course Title***	***Hours Per Week***			***Credits***
			L	T	P	
1	ELE403E	Power System Operation and Control	3	0	0	3
2	ELE404E	High Voltage Engineering	3	0	0	3
3	ELE405E	Energy Conservation and Auditing	3	0	0	3
4	ELE406E	Advanced Power Electronics	3	0	0	3
5	ELE407E	Nonlinear Control Systems	3	0	0	3

Generic Elective Courses:

S. No	***Course Code***	***Course Title***	***Hours Per Week***			***Credits***
			L	T	P	
1	ELE404G	Electrical Installations	3	0	0	3
2	ELE405G	Design of Solar PV Systems	3	0	0	3

Semester VIII

S. No	*Course Code*	*Course Title*	*Hours Per Week*			*Credits*
			L	**T**	**P**	
1.	ELE451C	Project (Major)	0	0	16	8
2.	ELE4xxE	Elective (Discipline Centric)	3	0	0	3
3.	ELE4xxE	Elective (Discipline Centric)	3	0	0	3
4.	XXX4xxG	Elective (Generic)	X	0	0	X
5.	XXX0xx	Open Elective	-	-	-	Y
6	XXXxxxS	Specialization Course 6 #				S
7	ELE452A	Internship (30 days/4 weeks)				0
Total Credits						14+X+Y+S

 # is for those students who opt for specialization (Honors/Minor)

Discipline Centric Elective Courses:

S. No	*Course Code*	*Course Title*	*Hours Per Week*			*Credits*
			L	T	P	
1	ELE452E	Flexible AC Transmission System (FACTS)	3	0	0	3
2	ELE453E	EHV AC & DC Transmission	3	0	0	3
3	ELE455E	Utilization of Electrical Energy	3	0	0	3
4	ELE456E	Electric Vehicle Technology	3	0	0	3
5	ELE457E	Power System Dynamics and Stability	3	0	0	3
6	ELE458E	Power Quality	3	0	0	3
7	ELE459E	Fundamentals of Smart Grids	3	0	0	3
8	ELE460E	Principles of System Identification	3	0	0	3
9	ELE461E	Optimal Control Methods	3	0	0	3

Generic Elective Courses:

S. No	***Course Code***	***Course Title***	***Hours Per Week***			***Credits***
			L	T	P	
1	ELE450G	Small Hydro Plants	3	0	0	3
2	ELE451G	Wind Energy Technology	3	0	0	3
3	ELE452G	Optimization for Engineering Design	2	0	2	3
4	ELE454G	Carbon Audit and Net Zero Energy Buildings	3	0	0	3