

ACADEMIC CURRICULA

UNDERGRADUATE DEGREE PROGRAMMES

Bachelor of Technology

(B.Tech. - Four Years)

(Choice Based Flexible Credit System)

Regulations 2018

Volume - 1

(Revised in March 2019)



SRM

INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

**SRM INSTITUTE OF SCIENCE AND
TECHNOLOGY**

(Deemed to be University u/s 3 of UGC Act, 1956)

**Kattankulathur, Kancheepuram District 603203, Tamil Nadu,
India**

21. B.Tech. in Electrical and Electronics Engineering

21. (a) Mission of the Department

Mission Stmt - 1	To educate the student to become better practicing engineers to meet global excellence
Mission Stmt - 2	To provide better environment through latest developments in electrical engineering involving problem solving, design, practice and training
Mission Stmt - 3	To motivate the graduates to become a good leader, designer and researcher through industry oriented trainings with social and ethical responsibilities

21. (b) Program Educational Objectives (PEO)

PEO - 1	Graduates are in a position to apply their knowledge acquired in Mathematics, Basic Sciences and Electrical and Electronics Engineering courses, to the solution of complex problems encountered in the modern Engineering practice
PEO - 2	Graduates learn and adapt themselves to the constantly evolving technology by pursuing higher studies
PEO - 3	Graduates are better employable and achieve success in their chosen areas of Electrical and Electronics Engineering and related fields
PEO - 4	Graduates are good leaders and managers by effectively communicating at both technical and interpersonal levels

21. (c) Mission of the Department to Program Educational Objectives (PEO) Mapping

	Mission Stmt. - 1	Mission Stmt. - 2	Mission Stmt. - 3
PEO - 1	H	M	L
PEO - 2	M	H	L
PEO - 3	M	M	L
PEO - 4	L	L	H

H – High Correlation, M – Medium Correlation, L – Low Correlation

21. (d) Mapping Program Educational Objectives (PEO) to Program Learning Outcomes (PLO)

	Program Learning Outcomes (PLO)												Program Specific Outcomes (PSO)		
	Graduate Attributes (GA)														
	Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modern Tool Usage	Society & Culture	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO - 1	PSO - 2	PSO - 3
PEO - 1	H	H	H	L			L						M	M	
PEO - 2				H	H		M					H	H		M
PEO - 3		H	H		M	H		H	M		M			M	H
PEO - 4									H	H	H		L	M	

H – High Correlation, M – Medium Correlation, L – Low Correlation, PSO – Program Specific Outcomes (PSO)

PSO – Program Specific Outcomes (PSO)

PSO - 1	Ability to perform in a Global & Industrial Perspective
PSO - 2	Ability to acquire Skills and are Career ready
PSO - 3	Ability to Utilize Energy, Safety and Practices

21. (e) Program Structure: B.Tech. in Electrical and Electronics Engineering

Humanities & Social Sciences including Management Courses (H)					
Course Code	Course Title	Hours/ Week			
		L	T	P	C
18LEH101J	English	2	0	2	3
18LEH102J	Chinese				
18LEH103J	French				
18LEH104J	German	2	0	2	3
18LEH105J	Japanese				
18LEH106J	Korean				
18PDH101T	General Aptitude	0	0	2	1
18PDH102T	Management Principles for Engineers	2	0	0	2
18PDH103T	Social Engineering	2	0	0	2
18PDH201T	Employability Skills and Practices	0	0	2	1
Total Learning Credits					12

Basic Science Courses (B)					
Course Code	Course Title	Hours/ Week			
		L	T	P	C
18PYB101J	Physics: Electromagnetic Theory, Quantum Mechanics, Waves and Optics	3	1	2	5
18CYB101J	Chemistry	3	1	2	5
18MAB101T	Calculus and Linear Algebra	3	1	0	4
18MAB102T	Advanced Calculus and Complex Analysis	3	1	0	4
18MAB201T	Transforms and Boundary Value Problems	3	1	0	4
18MAB202T	Numerical Methods for Engineers	3	1	0	4
18MAB301T	Probability and Statistics	3	1	0	4
18MAB302T	Discrete Mathematics for Engineers	3	1	0	4
18BTB101T	Biology	2	0	0	2
Total Learning Credits					36

Engineering Science Courses (S)					
Course Code	Course Title	Hours/ Week			
		L	T	P	C
18MES101L	Engineering Graphics and Design	1	0	4	3
18EES101J	Basic Electrical and Electronics Engineering	3	1	2	5
18MES103L	Civil and Mechanical Engineering Workshop	1	0	4	3
18CSS101J	Programming for Problem Solving	3	0	4	5
Total Learning Credits					16

Project Work, Seminar, Internship In Industry / Higher Technical Institutions (P)					
Course Code	Course Title	Hours/ Week			
		L	T	P	C
18EEP101L	Massive Open Online Course - I				
18EEP102L	Industrial Training-I	0	0	2	1
18EEP103L	Seminar - I				
18EEP104L	Massive Open Online Course - II				
18EEP105L	Industrial Training-II	0	0	2	1
18EEP106L	Seminar - II				
18EEP107L	Minor Project	0	0	6	3
18EEP108L	Internship				
18EEP109L	Project	0	0	20	10
18EEP110L	Semester Internship				
Total Learning Credits					15

Professional Core Courses (C)					
Course Code	Course Title	Hours/ Week			
		L	T	P	C
18EEC201J	Analysis of Electric Circuits	3	0	2	4
18EEC202T	Electromagnetic Theory	3	1	0	4
18EEC203J	Digital System Design	3	0	2	4
18EEC204J	Electrical Machines I	3	0	2	4
18EEC205J	Electrical Machines II	3	0	2	4
18EEC206J	Analog Electronics	3	0	2	4
18EEC207J	Electrical and Electronics Measurements and Instrumentation	3	0	2	4
18EEC208T	Generation, Transmission and Distribution	3	0	0	3
18EEC301J	Control Systems	3	0	2	4
18EEC302J	Power electronics	3	0	2	4
18EEC303T	Power System Analysis	3	0	0	3
18EEC304J	Microcontrollers	3	0	2	4
18EEC305T	Power System Protection	3	0	0	3
18EEC401J	Power System Operation and Control	3	0	2	4
18EEC350T	Comprehension	0	1	0	1
Total Learning Credits					54

Mandatory Courses (M)					
Code	Course Title	L	T	P	C
18PDM101L	Professional Skills and Practices	0	0	2	0
18PDM201L	Competencies in Social Skills				
18PDM203L	Entrepreneurial Skill Development	0	0	2	0
18PDM202L	Critical and Creative Thinking Skills				
18PDM204L	Business Basics for Entrepreneurs	0	0	2	0
18PDM301L	Analytical and Logical Thinking Skills				
18PDM302L	Entrepreneurship Management	0	0	2	0
18LEM101T	Constitution of India	1	0	0	0
18LEM102J	Value Education	1	0	1	0
18GNM101L	Physical and Mental Health using Yoga	0	0	2	0
18GNM102L	NSS				
18GNM103L	NCC	0	0	2	0
18GNM104L	NSO				
18LEM109T	Indian Traditional Knowledge	1	0	0	0
18LEM110L	Indian Art Form	0	0	2	0
18CYM101T	Environmental Science	1	0	0	0

Open Elective Courses (O) (Any 3 Open Elective Courses)					
Course Code	Course Title	Hours/ Week			
		L	T	P	C
18EEO301T	Sustainable Energy	3	0	0	3
18EEO302T	Analog Electronics	3	0	0	3
18EEO303T	Electrical Materials	3	0	0	3
18EEO304T	Power Plant Engineering	3	0	0	3
18EEO305T	Electrical Drives	3	0	0	3
18EEO306T	Energy Conservation	3	0	0	3
18EEO307T	Electrical Power Utilization and Illumination	3	0	0	3
18EEO308T	Electrical Power System	3	0	0	3
Total Learning Credits					9

Professional Elective Courses (E) (Any 6 Elective Courses)					
Course Code	Course Title	Hours/ Week			
		L	T	P	C
Sub-stream: Machines and Drives					
18EEE301T	Optimization Techniques in Power Electronics	3	0	0	3
18EEE302T	Finite Element Analysis for Electrical Machines	3	0	0	3
18EEE303T	Power Converter Analysis and Design	3	0	0	3
18EEE304T	Switched Mode Power Conversion	3	0	0	3
18EEE305T	Design of Electrical Machines	3	0	0	3
18EEE306T	Special Electrical Machines	3	0	0	3
18EEE401T	Solid State Drives	3	0	0	3
18EEE402T	Modeling and Analysis of Electrical Machines	3	0	0	3
18EEE403T	Hybrid Electric Vehicles	3	0	0	3
Sub-stream: Sustainable Energy Sources					
18EEE307T	Solar Photovoltaic System	3	0	0	3
18EEE308T	Energy Management System and SCADA	3	0	0	3
18EEE309T	Distributed Energy Resources	3	0	0	3
18EEE404T	Distributed Generation and Micro grid	3	0	0	3

Professional Elective Courses (E)					
Course Code	Course Title	Hours/ Week			
		L	T	P	C
Sub-stream: Control Systems and Robotics					
18EEE317T	System Theory	3	0	0	3
18EEE318T	Robust Control System	3	0	0	3
18EEE319T	Fundamentals of Robotics	3	0	0	3
18EEE320T	Signals and Systems	3	0	0	3
18EEE412T	Advanced Control Theory	3	0	0	3
18EEE413T	Distributed Control Systems	3	0	0	3
18EEE414T	Control System Design	3	0	0	3
18EEE415T	Digital Control System	3	0	0	3
Sub-stream: Electronics					
18EEE321T	Photonics	3	0	0	3
18EEE322T	Principles of Biomedical Instrumentation	3	0	0	3
18EEE323T	Automotive Electronics	3	0	0	3
18EEE324T	Analog and Digital Communication	3	0	0	3
18EEE325T	Wavelet Transform	3	0	0	3
18EEE326T	Advanced CMOS Devices and Technology	3	0	0	3
18EEE327T	Sensors and Transducers	3	0	0	3

18EEE405T	Power Electronics in Renewable Energy System	3	0	0	3	18EEE416T	Medical Electronics	3	0	0	3
18EEE406T	Wind and Solar Energy System	3	0	0	3	18EEE417T	Advanced Semiconductor Devices	3	0	0	3
	Sub-stream : Power System					18EEE418T	Mobile Communication	3	0	0	3
18EEE310T	Energy Conservation and Auditing	3	0	0	3	18EEE419T	Satellite Communication	3	0	0	3
18EEE311T	Industrial Power System	3	0	0	3	18EEE420T	Embedded System	3	0	0	3
18EEE312T	Flexible AC Transmission Systems	3	0	0	3	18EEE421T	VLSI Design	3	0	0	3
18EEE313T	High Voltage Engineering	3	0	0	3		Sub-stream: AI based Techniques				
18EEE314T	Power Quality	3	0	0	3	18EEE328T	Data Structures	3	0	0	3
18EEE315T	Smart Grid	3	0	0	3	18EEE329T	Computer System Architecture	3	0	0	3
18EEE316T	Vehicular Power System	3	0	0	3	18EEE330T	Computer Networking	3	0	0	3
18EEE407T	Power System Harmonics	3	0	0	3	18EEE331T	Internet of Things	3	0	0	3
18EEE408T	HVDC and EHVAC Systems	3	0	0	3	18EEE332T	Principles of Object Oriented Programming	3	0	0	3
18EEE409T	Power System Dynamics	3	0	0	3	18EEE422T	Modern Optimization Technique	3	0	0	3
18EEE410T	Modern Power System Analysis	3	0	0	3	18EEE423T	Neuro Fuzzy and Genetics Programming	3	0	0	3
18EEE411T	Power System Deregulation	3	0	0	3	18EEE424T	Artificial Intelligence	3	0	0	3
						18EEE425T	Fundamentals of Big Data Analytics	3	0	0	3
						18EEE426T	Fundamentals of Cloud Computing	3	0	0	3

21. (f) Program Articulation: B.Tech. in Electrical and Electronics Engineering

Course Code	Course Name	Program Learning Outcomes (PLO)														
		Graduate Attributes												PSO		
		Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modern Tool Usage	Society & Culture	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO - I	PSO - II	PSO III
18EEC201J	Analysis of Electric Circuits	H	H	M	-	M	-	-	-	M	M	-	-	M	M	-
18EEC202T	Electromagnetic Theory	H	H	M	L	M	-	-	-	M	M	-	-	M	M	-
18EEC203J	Digital System Design	H	M	M	M	L	-	-	-	M	M	-	-	L	M	-
18EEC204J	Electrical Machines I	H	M	L	L	L	-	-	L	M	M	-	-	M	M	L
18EEC205J	Electrical Machines II	H	M	M	-	-	-	-	-	M	M	-	-	L	M	-
18EEC206J	Analog Electronics	H	H	H	M	M	-	L	-	M	M	-	-	M	M	-
18EEC207J	Electrical and Electronics Measurements and Instrumentation	H	L	-	-	L	-	-	-	M	M	-	-	L	M	-
18EEC208T	Generation, Transmission and Distribution	H	H	M	M	M	-	M	-	M	M	-	-	H	M	M
18EEC301J	Control Systems	H	H	H	H	M	-	-	L	M	M	-	-	H	H	L
18EEC302J	Power Electronics	H	M	M	M	M	-	-	-	M	M	-	-	M	M	-
18EEC303T	Power System Analysis	H	H	L	-	M	-	-	-	-	-	-	-	M	M	-
18EEC304J	Microcontrollers	H	M	M	M	M	-	-	-	M	M	-	-	H	H	-
18EEC305T	Power System Protection	H	H	-	-	M	-	-	M	-	-	-	-	H	H	M
18EEC401J	Power System Operation and Control	H	H	M	L	H	-	-	M	M	-	-	-	M	M	M
18EEE301T	Optimization Techniques in Power Electronics	H	H	H	H	-	-	-	-	-	-	-	-	H	H	-
18EEE302T	Finite Element Analysis for Electrical Machines	H	H	M	M	M	-	-	-	-	-	-	-	H	M	-
18EEE303T	Power Converter Analysis and Design	H	H	M	M	H	-	-	-	-	-	-	-	M	H	-
18EEE304T	Switched Mode Power Conversion	H	M	M	L	-	-	-	-	-	M	-	-	M	H	-
18EEE305T	Design of Electrical Machines	H	H	H	H	L	-	-	L	-	-	-	-	M	M	L
18EEE306T	Special Electrical Machines	H	M	-	-	M	-	-	-	-	-	-	-	M	M	-
18EEE307T	Solar Photovoltaic System	H	M	M	M	M	-	M	H	M	M	-	-	H	M	M
18EEE308T	Energy Management System and SCADA	H	M	-	-	-	-	-	L	-	-	-	-	M	M	L
18EEE309T	Distributed Energy Resources	H	M	-	-	-	-	M	-	-	-	-	-	M	M	L
18EEE310T	Energy Conservation and auditing	H	H	M	-	-	-	M	H	-	-	H	-	H	M	H
18EEE311T	Industrial Power System	H	M	M	L	M	-	-	M	-	-	-	-	M	M	L
18EEE312T	Flexible AC transmission systems	H	-	-	-	M	-	-	-	M	M	-	-	H	M	-
18EEE313T	High Voltage Engineering	H	M	L	L	L	-	M	H	M	M	-	-	M	M	M
18EEE314T	Power Quality	H	L	L	L	M	-	M	M	-	-	-	-	M	M	M
18EEE315T	Smart Grid	H	L	-	-	M	-	M	H	-	-	-	-	M	H	M
18EEE316T	Vehicular Power System	H	L	M	-	-	-	-	-	L	-	-	-	M	M	-
18EEE317T	System Theory	H	H	H	H	-	-	-	-	-	-	-	-	M	M	-
18EEE318T	Robust Control System	H	H	M	M	M	-	-	-	M	M	-	-	H	M	-
18EEE319T	Fundamentals of Robotics	H	H	H	H	-	-	-	-	-	-	-	-	H	M	-
18EEE320T	Signals and Systems	H	H	H	H	L	-	-	-	-	-	-	-	H	M	-
18EEE321T	Photonics	H	-	-	-	-	-	-	-	-	-	-	-	M	M	-
18EEE322T	Principles of Biomedical Instrumentation	H	-	-	-	-	-	-	L	-	-	-	-	M	M	L
18EEE323T	Automotive Electronics	H	M	M	L	-	-	-	-	-	-	-	-	M	M	-
18EEE324T	Analog and digital Communication	H	H	M	L	-	-	-	L	-	M	-	-	L	L	L
18EEE325T	Wavelet Transform	H	M	L	-	M	-	-	-	-	-	-	-	H	H	-
18EEE326T	Advanced CMOS Devices and Technology	H	-	-	-	-	-	-	-	-	-	-	-	H	H	-
18EEE327T	Sensors and Transducers	H	H	-	-	-	-	-	M	-	-	-	-	H	M	M
18EEE328T	Introduction to Data Structures	H	H	M	-	-	-	-	-	-	-	-	-	H	M	-
18EEE329T	Computer System Architecture	H	H	M	L	-	-	-	-	-	-	-	-	M	M	-
18EEE330T	Computer Networking	H	H	M	L	-	-	-	M	-	-	-	-	H	M	M
18EEE331T	Internet of Things	H	-	-	-	M	H	-	M	H	-	-	H	H	M	M

18EEE332T	Principles of Object Oriented Programming	H	H	M	M	M	-	-	-	-	-	-	M	M	-
18EEE401T	Solid State Drives	H	M	M	M	M	-	-	-	-	-	-	M	M	-
18EEE402T	Modeling and Analysis of Electrical Machines	H	H	H	M	H	-	-	-	-	-	-	M	H	-
18EEE403T	Hybrid Electric Vehicles	H	M	M	M	M	L	L	-	M	-	-	H	H	L
18EEE404T	Distributed Generation and Micro grid	H	M	M	L	-	-	H	M	-	-	-	M	M	H
18EEE405T	Power Electronics in Renewable Energy System	H	M	M	-	M	-	M	-	-	-	-	H	M	-
18EEE406T	Wind and Solar Energy System	H	M	L	-	-	-	L	-	-	-	-	H	M	-
18EEE407T	Power System Harmonics	H	H	M	M	-	-	-	M	-	-	-	M	M	M
18EEE408T	HVDC and EHVAC Systems	H	M	M	-	M	-	M	L	M	M	-	H	M	L
18EEE409T	Power System Dynamics	H	H	H	H	H	-	-	-	-	H	-	M	M	-
18EEE410T	Modern Power System Analysis	H	M	M	M	M	-	-	-	-	-	-	M	M	-
18EEE411T	Power System Deregulation	H	M	M	M	-	-	-	M	-	-	-	H	H	M
18EEE412T	Advanced Control Theory	H	H	H	H	-	-	-	-	-	-	-	M	M	-
18EEE413T	Distributed Control Systems	H	H	M	M	-	-	-	-	-	-	-	M	M	-
18EEE414T	Control System Design	H	H	L	L	-	-	-	-	-	-	-	M	M	-
18EEE415T	Digital Control System	H	M	M	M	M	-	-	-	-	-	-	H	M	-
18EEE416T	Medical Electronics	H	-	-	-	H	-	-	L	L	-	-	H	M	L
18EEE417T	Advanced Semiconductor Devices	H	L	L	L	-	-	-	-	-	-	-	M	H	-
18EEE418T	Mobile Communication	H	M	-	-	-	-	-	M	-	-	-	H	M	M
18EEE419T	Satellite Communication	H	H	-	-	-	-	-	-	-	-	-	H	H	-
18EEE420T	Embedded System	H	M	H	H	H	-	-	M	-	-	-	H	M	M
18EEE421T	VLSI Design	H	H	H	H	H	-	-	-	-	-	-	H	M	-
18EEE422T	Modern Optimization Technique	H	H	H	H	-	-	-	-	-	-	-	H	H	-
18EEE423T	Neuro Fuzzy and Genetics Programming	H	H	M	L	H	-	-	-	L	L	-	M	M	-
18EEE424T	Artificial Intelligence	H	H	-	-	-	-	-	-	-	-	-	H	M	-
18EEE425T	Fundamentals of Big Data Analytics	H	H	M	M	M	-	-	M	-	-	-	H	M	M
18EEE426T	Fundamentals of Cloud Computing	H	H	M	M	M	-	-	M	-	-	-	H	M	M
18EEC350T	Comprehension	H	H	M	M	-	L	L	L	L	-	-	L	H	L
18EEQ301T	Sustainable Energy	H	M	M	-	-	-	L	-	-	-	-	H	M	-
18EEQ302T	Analog Electronics	H	M	H	H	H	-	-	-	-	-	-	M	L	-
18EEQ303T	Electrical Materials	H	L	L	-	-	-	M	-	-	-	-	M	M	-
18EEQ304T	Power Plant Engineering	H	M	-	-	-	-	M	M	-	-	-	H	M	M
18EEQ305T	Electrical Drives	H	M	M	M	M	-	-	-	-	-	-	M	M	-
18EEQ306T	Energy Conservation	H	-	-	-	-	-	M	H	M	M	-	M	M	H
18EEQ307T	Electrical Power Utilization and Illumination	H	H	M	M	M	-	M	M	-	-	-	M	M	M
18EEQ308T	Electrical Power System	H	H	-	-	-	-	M	-	-	-	-	M	-	-
18EEP101L	Massive Open Online Course - I	H	M	M	H	H	H	-	H	H	H	-	H	H	H
18EEP102L	Industrial Training – I	H	M	M	H	H	H	L	H	H	H	H	H	H	H
18EEP103L	Seminar – I	H	M	M	H	H	H	L	H	H	H	-	H	H	H
18EEP104L	Massive Open Online Course - II	H	M	M	H	H	H	-	H	H	H	-	H	H	H
18EEP105L	Industrial Training – II	H	M	M	H	H	H	L	H	H	H	H	H	H	H
18EEP106L	Seminar – II	H	M	M	H	H	H	L	H	H	H	-	H	H	H
18EEP107L	Minor Project	H	M	M	H	H	H	L	H	H	H	H	H	H	H
18EEP108L	Internship	H	M	M	H	H	H	L	H	H	H	H	H	H	H
18EEP109L	Project	H	M	M	H	H	H	L	H	H	H	H	H	H	H
18EEP110L	Semester Internship	H	M	M	H	H	H	L	H	H	H	H	H	H	H
	Program Average	H	H	M	M	H	M	M	M	H	H	M	M	H	M

21. (g) Implementation Plan: B.Tech. in Electrical and Electronics Engineering

Semester - I						Semester - II					
Code	Course Title	Hours/ Week			C	Code	Course Title	Hours/ Week			C
		L	T	P				L	T	P	
18LEH10XJ	Chinese / French / German / Japanese/ Korean	2	0	2	3	18LEH101J	English	2	0	2	3
18MAB101T	Calculus and Linear Algebra	3	1	0	4	18MAB102T	Advanced Calculus and Complex Analysis	3	1	0	4
18CYB101J	Chemistry	3	1	2	5	18PYB101J	Physics: Electromagnetic Theory, Quantum Mechanics, Waves and Optics	3	1	2	5
18CSS101J	Programming for Problem Solving	3	0	4	5	18MES101L	Engineering Graphics and Design	1	0	4	3
18MES103L	Civil and Mechanical Engineering Workshop	1	0	4	3	18EES101J	Basic Electrical and Electronics Engineering	3	1	2	5
18PDM101L	Professional Skills and Practices	0	0	2	0	18PDH101T	General Aptitude	0	0	2	1
18LEM102J	Value Education	1	0	1	0	18LEM101T	Constitution of India	1	0	0	0
18GNM102L	NSS					18GNM101L	Physical and Mental Health using Yoga	0	0	2	0
18GNM103L	NCC	0	0	2	0	Total Learning Credits					21
18GNM104L	NSO										
Total Learning Credits					20						
Semester - III						Semester - IV					
Code	Course Title	Hours/ Week			C	Code	Course Title	Hours/ Week			C
		L	T	P				L	T	P	
18MAB201T	Transforms and Boundary Value Problems	3	1	0	4	18MAB202T	Numerical Methods for Engineers	3	1	0	4
18EEC201J	Analysis of Electric Circuits	3	0	2	4	18BTB101T	Biology	2	0	0	2
18EEC202T	Electromagnetic Theory	3	1	0	4	18EEC205J	Electrical Machines II	3	0	2	4
18EEC203J	Digital System Design	3	0	2	4	18EEC206J	Analog Electronics	3	0	2	4
18EEC204J	Electrical Machines I	3	0	2	4	18EEC207J	Electrical and Electronics Measurements and Instrumentation	3	0	2	4
18PDH103T	Social Engineering	2	0	0	2	18EEC208T	Generation, Transmission and Distribution	3	0	0	3
18PDM201L	Competencies in Social Skills	0	0	2	0	18PDH102T	Management Principles for Engineers	2	0	0	2
18PDM203L	Entrepreneurial Skill Development					18PDM202L	Critical and Creative Thinking Skills	0	0	2	0
18CYM101T	Environmental Science	1	0	0	0	18PDM204L	Business Basics for Entrepreneurs				
Total Learning Credits					22	Total Learning Credits					23
Semester - V						Semester - VI					
Code	Course Title	Hours/ Week			C	Code	Course Title	Hours/ Week			C
		L	T	P				L	T	P	
18MAB301T	Probability and Statistics	3	1	0	4	18MAB302T	Discrete Mathematics for Engineers	3	1	0	4
18EEC301J	Control Systems	3	0	2	4	18EEC304J	Microcontrollers	3	0	2	4
18EEC302J	Power Electronics	3	0	2	4	18EEC305T	Power System Protection	3	0	0	3
18EEC303T	Power System Analysis	3	0	0	3	18EEC350T	Comprehension	0	1	0	1
	Professional Elective – 1	3	0	0	3		Professional Elective – 3	3	0	0	3
	Professional Elective – 2	3	0	0	3		Professional Elective – 4	3	0	0	3
	Open Elective – 1	3	0	0	3		Open Elective – 2	3	0	0	3
18EEP101L	Massive Open Online Course - I					18EEP104L	Massive Open Online Course - II				
18EEP102L	Industrial Training-I	0	0	2	1	18EEP105L	Industrial Training-II	0	0	2	1
18EEP103L	Seminar - I					18EEP106L	Seminar - II				
18PDM301L	Analytical and Logical Thinking Skills	0	0	2	0	18PDH201T	Employability Skills and Practices	0	0	2	1
18PDM302L	Entrepreneurship Management					18LEM110L	Indian Art Form	0	0	2	0
18LEM109T	Indian Traditional Knowledge	1	0	0	0	Total Learning Credits					23
Total Learning Credits					25						
Semester - VII						Semester - VIII					
Code	Course Title	Hours/ Week			C	Code	Course Title	Hours/ Week			C
		L	T	P				L	T	P	
18EEC401J	Power System Operation and Control	3	0	2	4	18EEP109L	Project	0	0	20	10
	Professional Elective – 5	3	0	0	3	18EEP110L	Semester Internship				
	Professional Elective – 6	3	0	0	3						
	Open Elective – 3	3	0	0	3						
18EEP107L	Minor Project	0	0	6	3						
18EEP108L	Internship (4-6 weeks)										
Total Learning Credits					16	Total Learning Credits					10