Curriculum Structure

Highlights

- Last board of studies was conducted in 7th December 2018.
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- UGC guidelines on choice based credit system are followed.

Credit Requirement

- Core and Foundation Courses: 139 Credits
- Project Work: 14 Credits
- Industrial Training: 2 Credits.
- Open Electives: 8 Credits (min).
- Generic Electives: 6 Credits (min).

Ist Semester

S.No.	Course Code	Course Title	Credits
01	ENG101F	Communication Skills	3
02	PHY101C	Physics	4
03	CHM101C	Chemistry	4
04	MTH103C	Mathematics-I	3
05	BIO101F	Environmental Science	3
06	MEC101C	Engineering Graphics and Design	3

2nd Semester

S.No.	Course Code	Course Title	Credits
01	CIV150C	Engineering Mechanics	3
02	MTH153C	Mathematics-II	4
03	CSE150F	Programming for Problem Solving	3
04	MEC150C	Workshop Practice	3
05	ELE150C	Basic Electrical Engineering	3
06	CSE151F	Programming Lab	1
07	PHY150C	Physics Lab	1
08	CHM150C	Chemistry Lab	1

3rd Semester

S. No.	Course Code	Course Title	Credits
01	ECE201C	Electronic Devices	3
02	ECE202C	Digital Electronics & Logic Design	3
03	ECE203C	Signals and Systems	3
04	ECE204C	Network Theory	3
05	MTH203C	Applied Mathematics for Engineers	3
06	ECE205C	Electromagnetic Waves	3
07	ELE210C	Electronic Devices Lab	1
08	ELE211C	Digital Electronics & Logic Design Lab	1
09	ECE212C	Basic Electrical and Electronics Lab	1
10	-	Open Elective	-

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4th Semester

S.No.	Course Code	Course Title	Credits
01	ECE250C	Analog Circuits-I	3
02	ECE251C	Analog Communication	4
03	ECE252C	Electronic Instrumentation &Measurements	3
04	ELE250C	Control Systems	4
05	STA253C	Probability and Statistics	3
06	ECE253C	Microprocessors and Microcontrollers	3
07	ECE260C	Analog Circuit-I Lab	1
08	ECE261C	Analog Communication Lab	1
09	ELE260C	Control System Lab	1
10	ECE262C	Microprocessors and Microcontrollers	1
11	-	Open Elective	-

5th Semester

S. No.	Course Code	Course Title	Credits
01	ECE301C	Analog Circuits-II	4
02	ECE302C	Data Communication	3
03	ECE303C	Antenna and Wave Propagation	3
04	ELE301C	Electrical Machines	3
05	ECEXXXE	Elective-I(Discipline Centric)	3
06	ECE310C	Analog Circuit-II Lab	1
07	ECE311C	Data Communication Lab	1
08	ECE312C	Antenna and Wave Propagation Lab	1
09	ELE310C	Electrical Machines Lab	1
10	-	Open Elective	-

6th Semester

S.No.	Course Code	Course Title	Credits
01	ECE350C	Power Electronics	3
02	ECE351C	Digital Signal Processing	3
03	ELE350C	Power Systems	3
04	-	Elective-II(Generic)	-
05	ECEXXXC	Elective-III(Discipline Centric)	3
06	ECE360C	Power Electronics Lab	1
07	ECE361C	Digital Signal Processing Lab	1
08	ECE362C	Seminar	1
09	ECE3563C	Mini Project/Electronic Design Workshop	2
10	-	Open Elective	-

7th Semester

S. No.	Course Code	Course Title	Credits
01	ECE401C	VLSI Design	3
02	ECE402C	Microwave Engineering	3
03	MTH403C	Numerical Methods in Engineering	3
04	-	Elective-IV(Generic)	-
05	ECE410C	VLSI Design Lab	1
06	ECE411C	Microwave Engineering Lab	1
07	ECE412C	Major Project(Stage-I)	5
08	-	Open Elective	-

8th Semester

S. No.	Course Code	Course Title	Credits
01	ECE450C	Wireless Communication	3
02	ECEXXXC	Elective-V(Discipline Centric)	3
03	-	Elective-VI(Generic)	-
04	ECE460C	Wireless Communication Lab	1
05	ECE461C	Major Project(Stage-II)	9
06	-	Open Elective	-

Electives (Discipline Centric)

S.No.	Course Code	Course Title	Credits
01	ECE301E	EDA Tools	3
02	ECE302E	VLSI Technology	3
03	ECE303E	Computer Organization & Architecture	3
04	ECE350E	Op Amp and LICs	3
05	ECE351E	Optical Fiber Communication	3
06	ECE352E	CMOS Analog Design	3
07	ECE450E	Information Theory & Coding	3
08	ECE451E	System Design	3
09	ECE452E	Radar Systems	3

Electives(Generic)

S.No.	Course Code	Course Title	Credits
01	ECE350G	Electronic Devices*	3
02	ECE351G	Optimization Techniques	3
03	ECE352G	Process Control Instrumentation	3
04	ECE353G	Advanced Microcontroller Programming	3
05	ECE354G	Computer Networks	3
06	ECE401G	Advanced Computer Architecture	3
07	ECE402G	IoT and Multimedia Technology	3
08	ECE403G	Image Processing	3
09	ECE404G	Photovoltaic System Design	3
10	ECE405G	Machine Learning	3
11	ECE450G	Artificial Neural Networks	3
12	ECE451G	Mobile Adhoc Networks	3
13	ECE452G	Wireless Sensor Networks	3
14	ECE453G	Cyber Forensics	3
15	ECE454G	Network Security	3

Open Electives

S.No.	Course Code	Course Title	Credits
01	ECE001	Emerging Technologies in ICT	3
02	ECE002	e-Waste Management	3
03	ECE003	Introduction to Computer Networking	3
04	ECE004	Introduction to Electronic Devices	3
05	ECE005	Introduction to Digital Logic	3
06	ECE006	Special Topics in Electronics and CommunicationEngineering	3
07	ECE007	Cyber Laws	2
08	ECE008	Wireless Home Solutions	3

Note:

1. *Open electives are offered to the students of all Departments of the university other than the Department of Electronics and Communication Engineering.*
2. *The students of the Department of Electronics and Communication Engineering have to choose Open Electives offered by the departments other than the Department of Electronics and Communication Engineering.*

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Note:

1. *Generic electives are offered to the students of the School of Engineering and Technology including the students of the Department of Electronics and Communication Engineering.*
2. *The students of the Department of Electronics and Communication Engineering have to choose Generic Electives from the list of courses offered by all the Departments of School of Engineering and Technology.*
3. *The courses marked with a * cannot be offered to the students of Electronics and Communication Engineering as they are a part of the professional core courses of their B.Tech curriculum.*

Note:

1. *Discipline Centric electives are offered to the students of the Department of Electronics andCommunication Engineering only.*
2. *The students of the Department of Electronics and Communication Engineering have to chooseDiscipline Centric Electives from the above list.*

PhD Courses

S.No.	Course Code	Course Title	Credits
01	ECE001D	Research Methodology	2
02	ECE002D	Information Security	2
03	ECE003D	Internet of Things-IOT	2
04	ECE004D	Optical Fiber Communication	2
05	ECE005D	Microwave Engineering	2
06	ECE006D	PhotoVoltaic Based Systems	2
07	ECE007D	Artificial Neural Networks and Fuzzy Logic	2
08	ECE008D	Digital Image Processing-Paper-II	2
09	ECE009D	Speech Recognition	2