

**Modified E3 (R12) Curriculum for Dept. of Electronics and
Communication Engineering (RKV Campus)**

E1 Sem1

Name of the Course	Credits
Mathematics I	4
Physics (Chemistry)	4
English for Communication (Mechanics)	3
Electrical Technology (Programming and Data Structures)	4
Introduction to Manufacturing process & WSP (Engineering Drawing and Graphics)	3
Physics Lab (Chemistry Lab)	2
Electrical Technology Lab (Programming and Data Structures Lab)	2
Total Credits	22

E1 Sem2

Name of the Course	Credits
Mathematics II	4
Physics (Chemistry)	4
Engineering Mechanics (English)	3
Programming & Data Structures (Electrical Technology)	4
Engineering Drawing and Graphics (Introduction to Manufacturing process & WSP)	3
Physics Lab (Chemistry Lab)	2
Programming & Data Structures Lab (Electrical Technology Lab)	2
Total Credits	22

E2 Sem1

Name of the Course	Credits
Probability and stochastic process	4
Network Analysis	4
Electronic Devices and Circuits	4
Signals and systems	4
Linear Control Systems	4
Network Analysis Lab	2
Electronic Devices and Circuits Lab	2
Total Credits	24

E2 Sem2

Name of the Course	Credits
Analog Electronic Circuits-I	4
Analog Communications	4
Switching Circuits and Logic Design	4
Electro Magnetic Theory	4
Analog Electronic Circuits-I Lab	2

Analog Communications Lab	2
Switching Circuits and Logic Design Lab	2
Total Credits	22
E2 Summer Sem	
Name of the Course	Credits
Foundation of Management	2
Skill Development	2
Total Credits	4
E3 Sem 1	
Name of the Course	Credits
Digital System Design	4
Analog Electronic Circuits-II	4
Java and Data OOP	4
Digital Signal Processing	4
Digital System Design Lab	2
Analog Electronic Circuits-II Lab	2
Digital Signal Processing Lab	2
Total Credits	22
E3 Sem 2	
Name of the course	Credits
Elective + Lab	6
Elective + Lab	6
Elective + Lab	6
Elective	2
Mini Project	4
Total Credits	24
E3 Summer Sem	
Name of the course	Credits
Summer Internship	4
Total Credits	4
E4 Sem 1	
Name of the course	Credits
Elective	4
Elective	4
Free Elective	4
Project	6
Total Credits	18
E4 Sem 2	
Name of the course	Credits
Elective	4
Elective	4
Elective	4
Project	6
Comprehensive Viva	2

Total Credits	20
Grand Total Credits	182

RF and Microwave Engineering (Compulsory in E3S2)	4
Microprocessors and Microcontrollers (Compulsory in E3S2)	4
Digital Communications (Compulsory in E3S2)	4
MAT Lab (Compulsory in E3S2)	2
RF and Microwave Engineering Lab (Compulsory in E3S2)	2
Microprocessors and Microcontrollers Lab (Compulsory in E3S2)	2
Digital Communications Lab (Compulsory in E3S2)	2

List of Electives	
Communication systems stream	
Error control and coding	4
Mobile communications	4
Optical communications	4
Radar communication	4
TV Engineering	4
Satellite communication systems	4
Telecommunication Switching and Networks	4
Advanced wireless (mobile) communication	4
Electronics	
1. Digital Electronics	
VLSI design verification and test	4
VLSI design for DSP	4
VLSI design for Communication systems	4
VLSI for Neural Networks	4
VLSI for FPGA design	4
Digital IC Design	4
VLSI Data conversion circuits	4
Active filter design	4
Broadband circuits	4
2. Analog Electronics	
Analog ic design	4
Micro Electronics and Mechanical Systems	4
Nano electronic devices	4
RF & Microwave	
Antenna engineering	4
Microwave and RF Integrated Circuits	4
Signal Processing	
Adaptive signal processing	4
Detection and Estimation theory	4
Digital signal processors and architectures	4

Digital Image Processing	4
Pattern Recognition and Machine Intelligence	4
RANDOM PROCESSES AND TIME SERIES ANALYSIS	4
Speech technology	4
Biomedical Signal Processing	4
Stastical Signal processing	4
Embedded systems	
Embedded systems	4
Multimedia technology	4
Internet of Things (IoT)	4