

13. Courses of Study and Scheme of Assessment
BE ELECTRONICS AND COMMUNICATION ENGINEERING

(2019 Regulations)

Course Code	Course Title	Periods / week			Maximum Marks					
		Lecture	Tutorial	Practical	Credits	CA	FE	Total	CAT	
SEMESTER VII										
19L701	Microwave Engineering	3	0	0	3	50	50	100	PC	
19L702	Wireless Communication	3	0	0	3	50	50	100	PC	
19L711	Microwave Engineering Laboratory	0	0	2	1	50	50	100	PC	
19L712	Digital Communication Engineering Laboratory	0	0	2	1	50	50	100	PC	
19L720	Project Work I	0	0	4	2	50	50	100	EEC	
19L____	Professional Elective IV	3	0	0	3	50	50	100	PE	
19L____	Professional Elective III	3	0	0	3	50	50	100	PE	
19____	Open Elective II	3	0	0	3	50	50	100	OE	
Total 23 periods		15	0	8	19	400	400	800		

SEMESTER VIII										
19L____	Professional Elective V	3	0	0	3	50	50	100	PE	
19L____	Professional Elective VI	3	0	0	3	50	50	100	PE	
19L820	Project Work II	0	0	8	4	50	50	100	EEC	
Total 14 periods		6	0	8	10	150	150	300		

CA Continuous Assessment
 FE Final Examination

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PROFESSIONAL ELECTIVES

ADVANCED COMMUNICATION SYSTEMS

- 19L001 Satellite Communication
- 19L003 Fiber Optic Communication
- 19L004 Radar Communication
- 19L036 Digital Communication receivers

COMPUTER SCIENCE ELECTIVES

- 19L002 Digital Switching Systems
- 19L029 Advanced Computer Architecture and Parallel Processing
- 19L030 Embedded Linux
- 19L031 Operating Systems
- 19L032 Relational Database Management Systems
- 19L033 Soft Computing Techniques
- 19L035 Computer and Machine Vision
- 19L038 Deep Learning

RADIO FREQUENCY SYSTEMS

- 19L005 Radio Frequency Integrated Circuits
- 19L006 Computational Electromagnetics
- 19L007 Advanced Radiating System
- 19L008 Smart Antennas
- 19L037 EMC Test and Measurements

SIGNAL PROCESSING

- 19L009 Speech Signal Processing
- 19L010 Multimedia Compression Techniques
- 19L011 Wavelets and its Applications
- 19L012 Advanced Digital Signal Processing
- 19L013 Pattern Recognition and Machine Learning
- 19L025 Digital Signal Processing System Design

NETWORKS

- 19L014 Wireless Systems and Standards
- 19L015 Wireless Sensor Networks
- 19L016 Wireless Networking
- 19L018 Network Security
- 19L034 Software Defined Networking
- 19L017 Long Term Evolution Technologies

SYSTEM DESIGN

- 19L019 FPGA Based System Design
- 19L026 Vehicular Systems and Networks
- 19L027 Advanced Processor Architectures
- 19L028 Real time systems

VLSI DESIGN

- 19L020 Analog VLSI Circuits
- 19L021 Low Power VLSI Design
- 19L022 Nano Electronics
- 19L023 Device Modeling

19L024 System-on-Chip Design

LANGUAGE ELECTIVES

19G001 Communication Skills for Engineers

19G002 German- Level A1.1

19G003 French Language Level 1

19G004 Basic Japanese

ONE-CREDIT COURSES

ELECTRONICS AND COMMUNICATION ENGINEERING

19LF01 Linux and Scripting Languages

19LF02 Avionics

19LF03 System Level Verification Techniques and Methodologies

19LF04 Advanced Avionics

19LF05 E-Commerce Security

19LF06 Nano Technology

19LF07 Machine Vision Algorithms and System Design

19LF08 Routing Architecture and Design

19LF09 Automotive Controller Area Network and Security

19LF10 Underwater Tactical and Communication Engineering

19LF11 Embedded Processing With FPGAs

19LF12 ASIC Flow for Mixed Signal VLSI Design

19LF13 Design of satellite sub-systems and telemetry

19LF14 LoRa Gateway Design & Application

19LF15 5G Technology

HUMANITIES

19OFA1 Export – Import Practices

19OFA2 Insurance - Concepts and Practices

19OFA3 Public Finance

19OFA4 Security Analysis and Portfolio Management

ENGLISH

19GF01 Interpersonal and Organizational Communication

19GF02 Human Values Through Literature

Summary of Credit Distribution

BE ELECTRONICS AND COMMUNICATION ENGINEERING										
S. No	Course Category	Credits Per Semester								Total Credits
		1	2	3	4	5	6	7	8	
1	HS	3	2	3	0	0	0	0	0	8
2	BS	12	8	4	4	0	0	0	0	28
3	ES	5	11	4	0	0	0	0	0	20
4	PC	0	0	12	19	15	18	8	0	72
5	PE	0	0	0	0	3	3	6	6	18
6	OE	0	0	0	0	3	0	3	0	6
7	EEC	0	0+2	0	1	1	3	2	4	13
8	MC	-	-	-	-	-	-	-	-	-
	TOTAL	20	21+2	23	24	22	24	19	10	165

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