# SECOND YEAR: ELECTRONICS AND TELECOMMUNICATION ENGINEERING

## SCHEME OF INSTRUCTION AND EXAMINATION (RC 2016-17)

#### **SEMESTER - III**

Subject	Name of the	Scheme of Instruction Hrs/Week		Scheme of Examination							
Code	Subject				Th			Mai	rks		
		L	T	P#	Dur (Hrs)	Th	S	TW	P	0	Total
ETC/ECE 3.1	Applied Mathematics-III	4			3	100	25				125
ETC/ECE 3.2	Economics and Management	4			3	100	25				125
ETC/ECE 3.3	Algorithms for Data Structures	3	1	2	3	100	25	25			150
ETC/ECE 3.4	Electronic Devices and Circuits –I	3	1	2	3	100	25		25		150
ETC/ECE 3.5	Digital System Design	3	1	2	3	100	25		25		150
ETC/ECE 3.6	Electrical Circuits and Systems	3	1	2	3	100	25			25	150
	TOTAL	20	4	8		600	150	25	50	25	850

<sup>#</sup> A candidate is considered to have successfully fulfilled the requirement of a semester, provided he/ she submits to the department a certified journal reporting the experiments conducted during the semester.

# SECOND YEAR: ELECTRONICS AND TELECOMMUNICATION ENGINEERING

## SCHEME OF INSTRUCTION AND EXAMINATION (RC 2016-17)

#### **SEMESTER - IV**

Subject	Name of the	Scheme of Instruction Hrs/Week		Scheme of Examination							
Code	Subject	_			Th		Γ	Ma	arks	I	
		L	T	P#	Dur (Hrs)	Th	S	TW	P	0	Total
ETC/ECE 4.1	Probability Theory and Random Processes	4			3	100	25				125
ETC/ECE 4.2	Signals and Systems	3	1		3	100	25				125
ETC/ECE 4.3	Electromagnetic Fields and Waves	4		2	3	100	25	25			150
ETC/ECE 4.4	Electronic Devices and Circuits –II	3	1	2	3	100	25		25		150
ETC/ECE 4.5	Linear Integrated Circuits	3	1	2	3	100	25		25		150
ETC/ECE 4.6	Microprocessors and Interfacing	3	1	2	3	100	25			25	150
	TOTAL	20	4	8		600	150	25	50	25	850

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# THIRD YEAR: ELECTRONICS AND TELECOMMUNICATION ENGINEERING

## SCHEME OF INSTRUCTION AND EXAMINATION (RC 2016-17)

#### **SEMESTER - V**

Subject	Name of the	Scheme of Instruction Hrs/Week			Scheme of Examination						
Code	Subject				Th			Ma	arks		
		L	Т	P#	Dur (Hrs)	Th	S	TW	P	0	Total
ETC/ECE 5.1	Digital Signal Processing	3	1	2	3	100	25	25			150
ETC/ECE 5.2	Transmission Lines and Antennas	3	1		3	100	25				125
ETC/ECE 5.3	Control Systems Engineering	3	1		3	100	25				125
ETC/ECE 5.4	Embedded Systems	3	1	2	3	100	25		25		150
ETC/ECE 5.5	VLSI Design and Technology	4		2	3	100	25		25		150
ETC/ECE 5.6	Analog Communication	4		2	3	100	25			25	150
	TOTAL	20	4	8		600	150	25	50	25	850

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# THIRD YEAR: ELECTRONICS AND TELECOMMUNICATION ENGINEERING

### SCHEME OF INSTRUCTION AND EXAMINATION (RC 2016-17)

#### **SEMESTER - VI**

Subject Name of the		Scheme of Instruction Hrs/Week			Scheme of Examination						
Code	Subject			Р#	Th Dur (Hrs)			Ma	arks		
		L	Т			Th	S	TW	P	0	Total
ETC/ECE 6.1	Electronic System Design and Manufacturing	4		2	3	100	25	25			150
ETC/ECE 6.2	High Performance Computing Architectures	4		2	3	100	25				125
ETC 6.3	Digital Communication	3	1		3	100	25			25	150
ETC/ECE 6.4	Industrial Automation and Instrumentation	3	1	2	3	100	25		25		150
ETC/ECE 6.5	Operating Systems	3	1		3	100	25				125
ETC/ECE 6.6	Communication Networks	3	1	2	3	100	25		25		150
	TOTAL	20	4	8		600	150	25	50	25	850

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# FINAL YEAR: ELECTRONICS AND TELECOMMUNICATION ENGINEERING

## SCHEME OF INSTRUCTION AND EXAMINATION (RC 2016-17)

#### **SEMESTER - VII**

Subject	Name of the	Ins	nemo truct s/W	tion	Scheme of Examination						
Code	Subject	L	т	T P#	Th Dur			Mai	rks		
		L	I		(Hrs)	Th	S	TW	P	0	Total
ETC/ECE 7.1	Microwave Engineering	4		2	3	100	25				125
ETC/ECE 7.2	Introduction to Soft Computing	3	1	2	3	100	25		25		150
ETC/ECE 7.3	Mobile Communication	3	1	-	3	100	25				125
ETC/ECE 7.4	Elective – I	3	1	2	3	100	25			25	150
ETC/ECE 7.5	Elective – II	3	1	2	3	100	25			25	150
ETC/ECE 7.6	Project			4						25	25
	TOTAL	16	4	12		500	125		25	75	725

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# FINAL YEAR: ELECTRONICS AND TELECOMMUNICATION ENGINEERING

### SCHEME OF INSTRUCTION AND EXAMINATION (RC 2016-17)

#### **SEMESTER - VIII**

Subject	Name of the	Scheme of Instruction Hrs/Week			Scheme of Examination							
Code	Subject	L	Т	P#	Th Dur (Hrs)	Th	S	Ma TW	rks P	0	Total	
ETC 8.1	Information Theory and Coding	3	1	2	3	100	25		25		150	
ETC/ECE 8.2	Advanced Communication	3	1	2	3	100	25				125	
ETC/ECE 8.3	Elective – III	3	1	2	3	100	25			25	150	
ETC/ECE 8.4	Elective – IV	3	1	2	3	100	25			25	150	
ETC/ECE 8.5	Project *			8				75		75	150	
	TOTAL	12	4	16		400	100	75	25	125	725	

#### \* Term Work in Project is a separate Head of Passing

<sup>#</sup> A candidate is considered to have successfully fulfilled the requirement of a semester, provided he/ she submits to the department a certified journal reporting the experiments conducted during the semester.

### **LIST OF ELECTIVES FOR SEMESTER - VII**

	ELECTIVE 1	ELECTIVE 2						
Subject Code	Name of the Subject	Subject Code	Name of the Subject					
ETC/ECE 7.4.1	Digital VLSI	ETC/ECE 7.5.1	Analog VLSI					
ETC/ECE 7.4.2	Image Processing	ETC/ECE 7.5.2	Adaptive Signal Processing					
ETC/ECE 7.4.3	Technical Writing and Professional Ethics	ETC/ECE 7.5.3	Numerical Methods and Approximation					
ETC/ECE 7.4.4	Introduction to Robotics	ETC/ECE 7.5.4	Advanced Control Systems					
ETC/ECE 7.4.5	Introduction to Databases	ETC/ECE 7.5.5	Introduction to MEMS					
ETC/ECE 7.4.6	Computer Networks	ETC/ECE 7.5.6	Process Control Instrumentation					
ETC/ECE 7.4.7	Introduction to Device Drivers	ETC/ECE 7.5.7	Secure Communications					
ETC/ECE 7.4.8	Virtual Instrumentation	ETC/ECE 7.5.8	Introduction to ARM architecture					
ETC/ECE 7.4.9	Optical Computing	ETC/ECE 7.5.9	Electronic Circuits: Design, Simulation and Testing					
ETC/ECE 7.4.10	Electronic Material Science	ETC/ECE 7.5.10	Artificial Neural Network					
ETC/ECE 7.4.11	Microwave Networks and Applications	ETC/ECE 7.5.11	Introduction to RF Design					
ETC/ECE 7.4.12	Distributed Operating Systems	ETC/ECE 7.5.12	Introduction to GPU Computing					
ETC 7.4.13	Introduction to Java	ETC/ECE 7.5.13	Power Electronics					

### **LIST OF ELECTIVES FOR SEMESTER - VIII**

	ELECTIVE 3	ELECTIVE 4						
Subject Code	Name of the Subject	Subject Code	Name of the Subject					
ETC/ECE	Testing and Fault	ETC/ECE	System on Chip					
8.3.1	Tolerance	8.4.1						
ETC/ECE 8.3.2	E-Commerce	ETC/ECE 8.4.2	Mobile Phone Programming					
ETC/ECE 8.3.3	Speech Processing	ETC/ECE 8.4.3	Wavelets and Multirate Digital Signal Processing					
ETC/ECE 8.3.4	Entrepreneurship	ETC/ECE 8.4.4	Advanced Mobile Networks					
ETC/ECE 8.3.5	Mobile Robotics	ETC/ECE 8.4.5	Underwater Robotics					
ETC/ECE 8.3.6	Advanced Computer Networks	ETC/ECE 8.4.6	Radar System Engineering					
ETC/ECE 8.3.7	Motors and Drives	ETC/ECE 8.4.7	Optical Networking					
ETC/ECE 8.3.8	Wireless Communication	ETC/ECE 8.4.8	Wireless Sensor Networks					
ETC/ECE 8.3.9	Audio and Video Engineering	ETC/ECE 8.4.9	Consumer Electronics					
ETC/ECE 8.3.10	Mobile Computing	ETC/ECE 8.4.10	Electromagnetic Interference/Electromagnetic Compatibility					
ETC/ECE 8.3.11	Nanoelectronics	ETC/ECE 8.4.11	Introduction to Deep Neural Networks					
ETC/ECE	Biomedical Electronics	ETC/ECE	Medical Imaging					
8.3.12	and Instrumentation	8.4.12	Medical illiagilig					
ETC/ECE 8.3.13	Introduction to Artificial Intelligence	ETC/ECE 8.4.13	Statistical Theory of Communication					
ETC 8.3.14	Error Control Coding							