

**SECOND YEAR: ELECTRONICS AND  
TELECOMMUNICATION ENGINEERING**

**SCHEME OF INSTRUCTION AND EXAMINATION**

(RC 2016-17)

**SEMESTER – III**

Subject Code	Name of the Subject	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P#	Th Dur (Hrs)	Marks					
						Th	S	TW	P	O	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
	<b>TOTAL</b>	<b>20</b>	<b>4</b>	<b>8</b>		<b>600</b>	<b>150</b>	<b>25</b>	<b>50</b>	<b>25</b>	<b>850</b>

# 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 Code	Name of the Subject	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P#	Th Dur (Hrs)	Marks					
						Th	S	TW	P	O	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
	<b>TOTAL</b>	<b>20</b>	<b>4</b>	<b>8</b>		<b>600</b>	<b>150</b>	<b>25</b>	<b>50</b>	<b>25</b>	<b>850</b>

# 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.

**THIRD YEAR: ELECTRONICS AND  
TELECOMMUNICATION ENGINEERING**

**SCHEME OF INSTRUCTION AND EXAMINATION**

(RC 2016-17)

**SEMESTER – V**

Subject Code	Name of the Subject	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P#	Th Dur (Hrs)	Marks					
						Th	S	TW	P	O	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
	<b>TOTAL</b>	<b>20</b>	<b>4</b>	<b>8</b>		<b>600</b>	<b>150</b>	<b>25</b>	<b>50</b>	<b>25</b>	<b>850</b>

# 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.

**THIRD YEAR: ELECTRONICS AND  
TELECOMMUNICATION ENGINEERING**

**SCHEME OF INSTRUCTION AND EXAMINATION**

**(RC 2016-17)**

**SEMESTER – VI**

Subject Code	Name of the Subject	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P#	Th Dur (Hrs)	Marks					
						Th	S	TW	P	O	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
	<b>TOTAL</b>	<b>20</b>	<b>4</b>	<b>8</b>		<b>600</b>	<b>150</b>	<b>25</b>	<b>50</b>	<b>25</b>	<b>850</b>

# 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.

**FINAL YEAR: ELECTRONICS AND  
TELECOMMUNICATION ENGINEERING**

**SCHEME OF INSTRUCTION AND EXAMINATION**

(RC 2016-17)

**SEMESTER – VII**

Subject Code	Name of the Subject	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P#	Th Dur (Hrs)	Marks					
						Th	S	TW	P	O	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
	<b>TOTAL</b>	<b>16</b>	<b>4</b>	<b>12</b>		<b>500</b>	<b>125</b>	<b>--</b>	<b>25</b>	<b>75</b>	<b>725</b>

# 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.

**FINAL YEAR: ELECTRONICS AND  
TELECOMMUNICATION ENGINEERING**

**SCHEME OF INSTRUCTION AND EXAMINATION**

(RC 2016-17)

**SEMESTER – VIII**

Subject Code	Name of the Subject	Scheme of Instruction Hrs/Week			Scheme of Examination						
		L	T	P#	Th Dur (Hrs)	Marks					
						Th	S	TW	P	O	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
	<b>TOTAL</b>	<b>12</b>	<b>4</b>	<b>16</b>		<b>400</b>	<b>100</b>	<b>75</b>	<b>25</b>	<b>125</b>	<b>725</b>

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

# 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**

<b>ELECTIVE 1</b>		<b>ELECTIVE 2</b>	
<b>Subject Code</b>	<b>Name of the Subject</b>	<b>Subject Code</b>	<b>Name of the Subject</b>
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 GPU Computing	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	Wavelets and Multirate Digital Signal Processing	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 Databases
ETC 7.4.13	Introduction to Java	ETC/ECE 7.5.13	Power Electronics

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

<b>ELECTIVE 3</b>		<b>ELECTIVE 4</b>	
<b>Subject Code</b>	<b>Name of the Subject</b>	<b>Subject Code</b>	<b>Name of the Subject</b>
ETC/ECE 8.3.1	Testing and Fault Tolerance	ETC/ECE 8.4.1	System on Chip
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	Optical Computing
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 8.3.12	Biomedical Electronics and Instrumentation	ETC/ECE 8.4.12	Medical Imaging
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		