

# Master of Electronics and Tele-Communication Engineering

## FIRST SEMESTER

Theoretical Courses	Subjects		Periods/Week		Marks		Credit Points
	Subject Code	Specialization Subject Name	Lecture	Sessional	Examination	Sessional	
Departmental / Specialization Basket		Communication Engineering (Comm) Computer Engineering (Comp) Control Engineering (Con) Electron Devices (ED) Microwave Engineering(MW)					
Paper-I	PG / ETCE / T / 111A	Statistical Communication Theory (Comm)	3		100		3
	PG / ETCE / T / 111B	Operating Systems (Comp)					
	PG / ETCE / T / 111C	Digital Control System (Con)					
	PG / ETCE / T / 111D	Advanced Logic & Computer Organization (Con)					
	PG / ETCE / T / 111E	Optoelectronic Devices (ED)					
	PG / ETCE / T / 111F	Photonics & Integrated Optics (ED)					
	PG / ETCE / T / 111G	Microwave and Millimeter Wave Circuits (MW)					
Paper-II	PG / ETCE / T / 112A	Advanced Digital Communication (Comm)	3		100		3
	PG / ETCE / T / 112B	Programming Methodology (Comp)					
	PG / ETCE / T / 112C	Programmable Logic Controller (Con)					
	PG / ETCE / T / 112D	Distributed Digital Control (Con)					
	PG / ETCE / T / 112E	Microelectronic Technology (ED)					
	PG / ETCE / T / 112F	Antenna Analysis & Synthesis (MW)					
Paper-III	PG / ETCE / T / 113A	Computer Communication Network (Comm/Comp))	3		100		3
	PG / ETCE / T / 113B	Computer Architecture (Comp)					
	PG / ETCE / T / 113C	Nonlinear Control System (Con)					
	PG / ETCE / T / 113D	Microwave & Millimeter Wave Devices & Applications (ED/MW)					
<p><b>Note: The students have to select 3 subjects from the departmental/ specialization basket, i.e. one subject each from the list given in the baskets of Paper-I, Paper-II and Paper-III</b></p>							

Inter-Disciplinary Basket	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	
Paper-IV	PG / ETCE / T/ 114A	Artificial Intelligence & Soft Computing	3		100		3
	PG / ETCE / T/ 114B	Physical Electronics					
Paper-V	PG / ETCE / T/ 115A	Neuro-Fuzzy & Evolutionary Computation	3		100		3
Paper-VI	PG / ETCE/ T/ 116A	Digital Signal Processing	3		100		3
<p><b>Note: The students have to select 3 subjects from the inter-departmental basket, i.e. one subject each from the list given in the baskets of Paper-IV, Paper-V and Paper-VI</b></p>							
<b>Sessional Courses</b>							
Sessional 1	PG/ETCE/ S/ 111	Laboratory		4		100	3
Sessional 2	PG/ ETCE / S/ 112	Internal assessments		3		100	3
			<b>18</b>	<b>7</b>	<b>600</b>	<b>200</b>	<b>24</b>

**Total Periods/Week = 25**

**Total Marks = 800**

### SECOND SEMESTER

Theoretical Courses	Subjects		Periods/Week		Marks		Credit Points
	Subject Code	Specialization Subject Name	Lecture	Sessional	Examination	Sessional	
Departmental / Specialization Basket		Communication Engineering (Comm) Computer Engineering (Comp) Control Engineering (Con) Electron Devices (ED) Microwave Engineering(MW)					
Paper-VII	PG / ETCE / T/ 127A	Satellite Communication (Comm)	3		100		3
	PG / ETCE / T/ 127B	Distributed Processing & Networking (Comp)					
	PG / ETCE/ T/ 127C	Stochastic Control (Con)					
	PG / ETCE/ T/ 127D	Quantum Well & nano Structured Devices (ED)					
	PG / ETCE/ T/ 127E	Microstrip Components & Circuits (MW)					
Paper-VIII	PG / ETCE/ T/ 128A	Coding Theory (Comm)	3		100		3
	PG / ETCE/ T/ 128B	Digital Image Processing (Comp/Comm/Con))					
	PG / ETCE/ T/ 128C	Robotics & Computer Vision (Comp/Con)					
	PG / ETCE/ T/ 128D	VLSI Design (ED)					
	PG / ETCE/ T/ 128E	EMI & EMC (MW)					
	PG / ETCE/ T/ 128F	Computational Electromagnetics (MW)					

Paper-IX	PG / ETCE / T/ 129A	Optical Communication System (Comm)	3		100		3
	PG / ETCE / T/ 129B	Wireless & Mobile Communication Systems (Comm)					
	PG / ETCE / T/ 129C	Compiler Construction (Comp)					
	PG / ETCE / T/ 129D	Pattern Recognition (Con)					
	PG / ETCE / T/ 129E	Adaptive and Optimal Control (Con)					
	PG / ETCE / T/ 129F	Electronic Design Automation (ED)					
	PG / ETCE / T/ 129G	Adaptive and Smart Antenna (MW)					
	PG / ETCE / T/ 129H	Remote Sensing (MW)					

**Note: The students have to select 3 subjects from the departmental/ specialization basket, i.e. one subject each from the list given in the baskets of Paper-VII, Paper-VIII and Paper-IX**

Inter-Disciplinary Basket	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	
Paper-X	PG / ETCE / T/ 1210A	Broadband Wireless Networks	3		100		3
	PG / ETCE / T/ 1210B	Embedded Systems					
	PG / ETCE / T/ 1210C	Advanced EM Theory					
	PG / ETCE / T/ 1210D	Computational Biology and Bioinformatics					

**Note: The students have the freedom to choose one subject from the list under Paper-X.**

Sessional Courses							
Sessional 1	PG / ETCE / S/ 121	Term Paper Leading to Thesis		3		100	3
Sessional 2	PG / ETCE / S/ 122	Seminar		3		100	3
			<b>12</b>	<b>6</b>	<b>400</b>	<b>200</b>	<b>18</b>

**Total Periods/Week = 18**

**Total Marks = 600**

### THIRD and FOURTH SEMESTER

Courses							
1	PG / ETCE / TH / 21	Thesis Work		16		300	12
2	PG / ETCE / VV/ 22	Viva-Voce on Thesis				100	
				<b>16</b>		<b>400</b>	<b>12</b>

**Total Periods/Week = 16**

**Total Marks = 400**