

M.E. ETC(ELECTRONIC COMMUNICATION & INSTRUMENTATION)

Course Structure and Scheme of Evaluation (Semester-wise)

Semester 1

Subject Code	Name of the Subjects	No. of Hrs / Week				Scheme of Examination				
		L	T	P	Theory hours	Credits				
						Theory	IA	Practical	orals	Total
MEECI 1.1	Solid-State Devices & Semiconductor Physics	4	-	0	3	4	2	--	--	6
MEECI 1.2	Control System Analysis and Design	4	-	0	3	4	2	--	--	6
MEECI 1.3	Introduction to MEMS	4	-	0	3	4	2	--	--	6
MEECI 1.4	Fiber Optic Communication	4	-	0	3	4	2	--	--	6
MEECI 1.5	Advance Engineering Mathematics	4	-	0	3	4	2	--	--	6
MEECI 1.6	Fiber Optic lab	0	-	7	--	--	2	2	--	4
MEECI 1.7	Process Control And Instrumentation Lab	0	-	7	--	--	2	2	--	4
	Total	20	-	14	--	20	14	4		38

Semester 2

Subject Code	Name of the Subjects	No. of Hrs / Week				Scheme of Examination				
		L	T	P	Theory hours	Credits				
						Theory	IA	Practical	orals	Total
MEECI 2.1	Biomedical Instrumentation	4	-	0	3	4	2	--	--	6
MEECI 2.2	Digital Signal Processors & Embedded Systems	4	-	0	3	4	2	--	--	6
MEECI 2.3	Information Theory & Coding	4	-	0	3	4	2	--	--	6
MEECI 2.4	Microwave Integrated circuits	4	-	0	3	4	2	--	--	6
MEECI 2.5	Adaptive Signal Processing	4	-	0	3	4	2	--	--	6
MEECI 2.6	Microwave Lab	0	-	7	--	--	2	2	--	4
MEECI 2.7	Biomedical Lab	0	-	7	--	--	2	2	--	4
	Total	20	-	14	--	20	14	4		38

Semester 3

Subject Code	Name of the Subjects	No. of Hrs / Week				Scheme of Examination				
		L	T	P	Theory hours	Credits				
						Theory	IA	Practical	orals	Total
MEECI 3.1	Elective – I	4	-	0	3	4	2	--	--	6
MEECI 3.2	Elective – II	4	-	0	3	4	2	--	--	6
MEECI 3.3	Project	-	-	20	-	-	4	--	8	12
	Total	8	-	20	--	8	8	-	8	24

Electives I:

- a) Image processing
- b) Error correcting codes
- c) Optical computing
- d) Radio Frequency Microelectronic chip design
- e) Power electronics
- f) Industrial design of electronic equipments
- g) Electronic system design
- h) Wireless Communication

Electives II:

- i) Sensors in instrumentation
- j) Simulation of circuits and devices
- k) Analog VLSI design
- l) Virtual instrumentation
- m) Wavelet transform & Multi-rate Digital Signal Processing
- n) Radio Frequency Design
- o) Advance Digital Communication
- p) Radar Systems Engineering
- q) Electromagnetic Interference And Electromagnetic Compatibility

Semester 4

Subject Code	Name of the Subjects	No. of Hrs / Week				Scheme of Examination				
		L	T	P	Theory hours	Credits				
						Theory	IA	Practical	Orals	Total
MEECI 4.1	Dissertation	-	-	28	-	-	6	-	14	20
	Total	-	-	28	-	-	6	-	14	20