DEPARTMENT OF ELECTRICAL ENGINEERING

M.Tech. (Instrumentation & Signal Processing)

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	**Subject Code**	**Course Title**	**Subject Area**	**Credits**	**L**	**T**	**P**	**Theory**	**Practical**	**CWS**	**PRS**	**MTE**	**ETE**	**PRE**
1st YEAR					**Semester- I (Autumn)**									
1.	EEN-520	Advanced Industrial and Electronic Instrumentation	PCC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
2.	EEN-521	Digital Signal and Image Processing	PCC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
3.	EEN-522	Biomedical Instrumentation	PCC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
4.	EEN-523	Instrumentation laboratory	PCC	2	0	0	4	-	-	-	50	-	-	50
5.	EEN-524	Intelligent Sensors and Instrumentation	PCC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
		Total		18				-	-	-	-	-	-	-
Semester-II (Spring)														
1.	EEN-xxx	Program Elective Course-I	PEC	4	-	-	-	-	-	-	-	-	-	-
2.	EEN-xxx	Program Elective Course-II	PEC	4	-	-	-	-	-	-	-	-	-	-
3.	EEN-xxx	Program Elective Course-III	PEC	4	-	-	-	-	-	-	-	-	-	-
4.	EEN-xxx	Program Elective Course-IV	PEC	4	-	-	-	-	-	-	-	-	-	-
5.	EEN-700	Seminar	SEM	2	-	-	-	-	-	-	-	-	100	-
		Total		18				-	-	-	-	-	-	-
2nd YEAR					**Semester- I (Autumn)**									
1.	EEN-701A	Dissertation Stage–I (to be continued next semester)	DIS	12	-	-	-	-	-	-	-	-	100	-
		Total		12										
Note: Students can take 1 or 2 audit courses as advised by the supervisor, if required.														
Semester-II (Spring)														
1.	EEN-701B	Dissertation Stage–II (contd. From III semester)	DIS	18	-	-	-	-	-	-	-	-	100	-
		Total		18										
		Total Credits		**66**										

Program Elective Courses (I&SP)

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
1.	EEN-620	Process Instrumentation and Control	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
2.	EEN-621	Noise and Interference in Instrumentation	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
3.	EEN-622	Power System Instrumentation	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
4.	EEN-623	Measurement Errors and Statistical Analysis	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
5.	EEN-624	Telemetry and SCADA	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
6.	EEN-625	Virtual Instrumentation	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
7.	EEN-626	Advances in Signal and Image Processing	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
8.	EEN-627	Ultrasonic and Laser Instrumentation	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
9.	EEN-628	Medical Imaging	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
10.	EEN-629	Bioelectric Signals and Processing	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
11.	EEN-630	Computer Applications in Medical Engineering	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
12.	EEN-631	Microprocessor Based Medical Instruments	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
13.	EEN-632	Hospital Informatics and safety Measures	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
14.	EEN-633	Clinical Engineering	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
15.	EEN-668	Digital Protection of Power Systems	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
16.	EEN-682	Advanced Digital System Design	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
17.	EEN-690	Advanced Computer Controlled Systems	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
18.	EEN-611	FPGA Implementation of Signal Processing Systems	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
19.	EEN-612	Electrical Transients in Power Systems	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
20.	EEN-613	Sliding Mode Control and Observation	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
21.	EEN-614	Bio-Medical Robotics	PEC	4	3	1	2	3	1	10-25	25	15-25	30-40	-

22.	EEN-674	Machine Learning for Signal Processing	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
23.	EEN-696	Intelligent Control of Robotic Systems	PEC	4	3	0	2/2	3	0	15-30	20	15-25	30-40	-