Specialization offered by Mechanical Engg. dept. with ECE dept. (for ECE and MEC students):

Industrial Automation

S. No.	Course Code	Dept.	Title of Course	Contact Hours				Credits	Sem.
				L	T	P	Total		
1	EC334	ECE	Transducers Engineering	3	0	0	3	3	IV
2	EC401	ECE	Transducers Engineering Lab	0	0	2	2	1	IV
3	MEC350	MEC	Robotics	3	0	0	3	3	V
4	EC335/ EC340	ECE	Digital Control System (for ECE students) /Microprocessors based Control System (For MEC students)	3	0	0	3	3	V
5	ME401	MEC	Robotics/CIM Lab	0	0	2	2	1	V
6	ME351	MEC	Industrial Automation	3	0	0	3	3	VI
7	ME352	MEC	Control of Industrial Automation	3	0	0	3	3	VI
8	ME353	MEC	Special Purpose Vehicle	3	0	0	3	3	VII
			Total				**22**	**20**	

Specialization offered by Mechanical Engg. Dept. with ECE dept. (for ECE and MEC students):

Mechatronics

S. No.	Course Code	Dept.	Title of Course	Contact Hours				Credits	Sem.
				L	T	P	Total		
1	EC334	ECE	Transducers Engineering	3	0	0	3	3	IV
2	EC401	ECE	Transducers Engineering Lab	0	0	2	2	1	IV
3	ME354	MEC	Vehicle Dynamics	3	0	0	3	3	V
4	ME355	MEC	Computer Integrated Manufacturing	3	0	0	3	3	V
5	ME402	MEC	CIM Lab	0	0	2	2	1	V
6	ME356	MEC	Control of Mechanical System	3	0	0	3	3	VI
7	EC335	ECE	Micro-controller and Embedded System	3	0	0	3	3	VI
8	ME357	MEC	Automated Guided Vehicles	3	0	0	3	3	VII
			Total				**22**	**20**	

Department of Mechanical Engineering

Micro-Specializations

S. No.	Name of Micro Specialization	Head Course (s)			Elective Courses		
		Course Name	Semester	Credit	Course Name	Semester	Credits
1	Intelligent Manufacturing	Manufacturing Technology-2 and Manufacturing Technology Lab-2	IV	3+1 = 4	Advanced Manufacturing Processes	V	3
					Advanced Engineering Materials	VI	3
					Smart Manufacturing	VII	3
					Micro Manufacturing	VIII	3
2	3D Printing	Manufacturing Technology-1 and Manufacturing Technology Lab-1	III	3+1 = 4	Additive Manufacturing	V	3
					Advanced Engineering Materials	VI	3
					CAD for Additive Manufacturing	VII	3
					Industrial Applications of Additive Manufacturing	VIII	3
3	Renewable Energy	Basic Thermodynamics and Basic Thermodynamics Lab	III	3+1 = 4	Power Plant Engineering	V	3
					Unconventional Energy Resources	VI	3
					Energy Management and Audit	VII	3
					Hybrid Energy Applications	VIII	3