STRUCTURE OF CURRICULUM / COURSE DISTRIBUTION

COMPULSORY COURSES

YEAR / SEMESTER	COURSES	CREDITS	HOURS	PREREREQUISITES
1/1	Seminar(I)	**2**	**2**	
1/2	Seminar(II)	**2**	**2**	
2/1	Seminar (III)	**2**	**2**	
2/2	Seminar (IV)	**2**	**2**	

GENERAL ELECTIVE COURSES

YEAR / SEMESTER	COURSES	CREDITS	HOURS	PREREREQUISITES
1/1	Guided Reading on English Technical Reports	**3**	**3**	
	Theory of Elasticity	**3**	**3**	
	Vibration Analysis	**3**	**3**	
	Special Topics in Electronic/Optoelectronic Packaging	**3**	**3**	
	Numerical Analysis	**3**	**3**	
	Intelligent Control Systems	**3**	**3**	
	Neural Networks and Deep Learning	**3**	**3**	
	Refrigeration & Air-conditioning	**3**	**3**	
	Combustion	**3**	**3**	
	Intermediate Fluid Mechanics	**3**	**3**	
	Intermediate Heat Transfer	**3**	**3**	

YEAR / SEMESTER	COURSES	CREDITS	HOURS	PREREREQUISITES
1/1	Mechanical Metallurgy	**3**	**3**	
	Plastic Processing Mold Engineering	**3**	**3**	
	Corrosion Engineering	**3**	**3**	
	Welding Metallurgy	**3**	**3**	
	Computer Aided Manufacturing	**3**	**3**	
	Materials and Manufactures of Solar Cells	**3**	**3**	
	Special Issue of Electrode Mechining	**3**	**3**	
	Analysis and Prevention of Materials Failures	**3**	**3**	
	Modeling and Analysis in Materials Processing and Advanced Injection Molding	**3**	**3**	
	Biosensor Technology	**3**	**3**	
	Surface Analysis Technology	**3**	**3**	
	Medical MEMS	**3**	**3**	
	Medical Imaging Processing	**3**	**3**	
	Experimental Mechanics for Orthopaedics	**3**	**3**	
1/2	Introduction to Solid Mechanics	**3**	**3**	
	Mechanics of Composite Material	**3**	**3**	
	Finite Element Method	**3**	**3**	
	Electrodynamics	**3**	**3**	

YEAR / SEMESTER	COURSES	CREDITS	HOURS	PREREREQUISITES
1/2	Theory and Practice of Modal Analysis	**3**	**3**	
	Lubrication Theory and Its Applications	**3**	**3**	
	Computational Fluid Dynamic	**3**	**3**	
	Fluid Machinery	**3**	**3**	
	Polymer Rheology	**3**	**3**	
	Computer Aided Design	**3**	**3**	
	Optimum Design and Principle	**3**	**3**	
	Mechanism Design and Applications	**3**	**3**	
	Mechanical Materials Engineering(II)	**3**	**3**	
	Welding Process and System Design	**4**	**4**	
	Electron Microscopy Analysis	**3**	**3**	
	Heat Treatment	**3**	**3**	
	Principles and Practices of Nondestructive Testing	**3**	**3**	
	Biomechanics	**3**	**3**	
	Design of Medical Device	**3**	**3**	
	Biomaterials Engineering	**3**	**3**	
	Principle and Applications of Surface Plasmon	**3**	**3**	
	Biomedical Signal Analysis	**3**	**3**	