

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.TECH. MECHANICAL ENGINEERING (2009-10)

I YEAR

COURSE STRUCTURE

Code	Subject	L	T/P/D	C
	English	2	-	4
	Mathematics – I	3	1	6
	Engineering Mechanics	3	1	6
	Engineering Physics	2	1	4
	Engineering Chemistry	2	-	4
	Computer Programming & Data Structures	3	-	6
	Engineering Drawing	2	3	4
	Computer Programming Lab.	-	3	4
	Engineering Physics & Engineering Chemistry Lab	-	3	4
	English Language Communication Skills Lab.	-	3	4
	Engineering Workshop / IT Workshop	-	3	4
	Total	17	18	50

II YEAR I SEMESTER

COURSE STRUCTURE

Code	Subject	L	P/D	C
	Environmental Studies	3	0	3
	Probability and Statistics	3	1	3
	Electrical and Electronics Engineering	4	1	4
	Mechanics of Solids	3	1	3
	Thermodynamics	4	1	4
	Metallurgy and Materials Science	4	1	4
	Electrical and Electronics Engineering Lab	0	3	2
	Metallurgy & Mechanics of Solids Lab	0	3	2
	Total	23	11	25

II YEAR II SEMESTER

COURSE STRUCTURE

Code	Subject	L	T/P/D	C
	Production Technology	4	0	4
	Kinematics of Machinery	3	1	3
	Applied Thermodynamics -I	3	1	3
	Mechanics of Fluids and Hydraulic Machines	4	0	4
	Machine Drawing	0	6	4
	Numerical Methods	3	1	3
	Production Technology Lab	0	3	2
	Mechanics of Fluids & Hydraulic Machines Lab	0	3	2
	Total	17	15	25

III YEAR I SEMESTER

COURSE STRUCTURE

Code	Subject	L	T/P/D	C
	Managerial Economics and Financial Analysis	4	0	4
	Metrology & Surface Engineering	3	1	3
	Dynamics of Machinery	4	1	4
	Machine Tools	3	1	3
	Design of Machine Members – I	4	1	4
	Applied Thermodynamics -II	3	1	3
	Machine Tools & Metrology Lab	0	3	2
	Thermal Engineering Lab	0	3	2
	Total	21	11	25

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III YEAR II SEMESTER

COURSE STRUCTURE

Code	Subject	L	T/P/D	C
	Industrial Management	4	0	4
	Finite Element Method	3	1	3
	Refrigeration and Air Conditioning	4	1	4
	Design of Machine Members – II	3	1	3
	Heat Transfer	4	1	4
	Open Elective Engineering Optimization Nanotechnology Automobile Engineering	3	1	3
	Heat Transfer Lab	0	3	2
	Advanced English Communication Skills Lab	0	3	2
	Total	21	11	25

IV YEAR I SEMESTER

COURSE STRUCTURE

Code	Subject	L	T/P/D	C
	Operations Research	4	1	4
	Power Plant Engineering	3	1	3
	CAD/CAM	4	1	4
	Instrumentation and Control Systems	4	-	4
	ELECTIVE – I Robotics Mechanical Vibrations Mechatronics Composite Materials	3	1	3
	ELECTIVE – II Unconventional Machining Processes CNC Technology Automation in Manufacturing Design for Manufacturing	3	1	3
	Computer Aided Design & Manufacturing Lab	0	3	2
	Production Drawing Practice and Instrumentation Lab	0	3	2
	Total	21	11	25

IVI YEAR II SEMESTER

COURSE STRUCTURE

Code	Subject	L	T/P/D	C
	Production Planning and Control	3	1	3
	ELECTIVE – III Artificial Neural Networks Reliability Engineering Maintenance and Safety Engineering Plant Layout & Material Handling	3	1	3
	ELECTIVE – IV Renewable Energy Sources Jet Propulsion & Rocket Engineering Computational Fluid Dynamics Gas Dynamics	3	0	3
	Industry Oriented Mini Project	0	0	2
	Seminar	0	6	2
	Project Work	0	10	10
	Comprehensive Viva	0	0	2
	Total	9	23	25

Note : All End Examinations (Theory and Practical) are of three hours duration.

T-Tutorial L – Theory P – Practical/Drawing C – Credits