

COURSE STRUCTURE FOR BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

Deptt	Sem ester	Course Code	Course Title	L	T	P	Credit s	Total Credit / Sem
B. TECH. (Mech Engg.) SEMESTER - I								
ME	1	HS 1101	Communicative English	3	0	0	3	
ME	1	PH 1101	Physics	3	0	3	5	
ME	1	MA 1101	Mathematics - I	3	1	0	4	
ME	1	EE 1101	Basic Electrical Engineering	3	0	3	5	
ME	1	IT 1101	Fundamentals of Information Technology	3	0	3	5	
ME	1	ME 1102	Engineering Graphics	2	0	3	4	
ME	1	GE 1101	EAA I - NSS					26.0
B. TECH. (Mech Engg.) SEMESTER - II								
ME	2	HS 1202	Organizational Behaviour and Industrial Psychology	3	0	0	3	
ME	2	CH 1201	Engineering Chemistry	3	0	3	5	
ME	2	MA 1202	Mathematics - II	3	1	0	4	
ME	2	CE 1201	Engineering Mechanics	3	0	3	5	
ME	2	ME 1201	Elements of Mechanical Engineering	3	0	3	5	
ME	2	ME 1203	Workshop	2	0	3	4	
ME	2	GE 1202	EAA- II - NSS					26.0
B. TECH. (Mech Engg.) SEMESTER - III								
ME	3	EC 1302	Basic Electronics	3	0	3	5	
ME	3	GE 1303	EAA III - NSS					
ME	3	CE 1307	Fluid Mechanics	3	1	2	5	
ME	3	ME 1305	Material Science	3	1	0	4	
ME	3	MH 1303	Mathematics – III	3	1	0	4	
ME	3	ME 1306	Strength of Material	3	0	3	5	
ME	3	ME 1307	Thermodynamics	3	1	0	4	
B. TECH. (Mech Engg.) SEMESTER - IV								
ME	4	GE 1404	EAA -IV - NSS					27.0
ME	4	CE 1402	Environmental Science	3	0	3	5	
ME	4	ME 1411	Fluid Machinery	3	0	3	5	
ME	4	ME 1409	Kinematics of Machinery	3	0	0	3	
ME	4	ME 1412	Machine Drawing	1	0	3	3	
ME	4	ME 1410	Manufacturing by Shaping and Joining	3	0	3	5	
ME	4	CS 1401	Object Oriented Programming	3	0	3	5	26.0
B. TECH. (Mech Engg.) SEMESTER - V								
ME	5	ME 1514	Dynamics of Machinery	3	0	3	5	
ME	5	IT 1509	Information Security	3	0	0	3	
ME	5	ME 1515	Machine tools and Machinery	3	1	0	4	
ME	5	MA 1504	Numerical Methods and Computational Technique	3	0	3	5	
ME	5	HS 1504	Personnel Management and Industrial Relation	3	0	0	3	
ME	5	ME 1513	Steam Power System	3	0	3	5	25.0
B. TECH. (Mech Engg.) SEMESTER - VI								
ME	6	ME 1616	Design of Machine Elements	3	0	3	5	
ME	6	ME 1617	Heat and Mass Transfer	3	0	3	5	
ME	6	HS 1603	Industrial Economics and	3	0	0	3	

			Accountancy					
ME	6	ME 1620	Instrumentation and Measurement	3	1	0	4	
ME	6	ME 1618	Non Conventional Manufacturing	3	1	0	4	
ME	6	ME 1619	Renewable Energy Systems	3	1	0	4	
ME	6	ME 1637	Seminar	0	0	2	1	26.0
B. TECH. (Mech Engg.) SEMESTER - VII								
ME	7	ME 17xx	Elective – I	3	1	0	4	
ME	7	ME 17xx	Elective – II	3	1	0	4	
ME	7	ME 1739	Industrial Training				2	
ME	7	ME 1723	Internal Combustion Engine and Gas Turbines	3	0	3	5	
ME	7	ME 1722	Mechanical System Design	3	0	3	5	
ME	7	ME 1738	Minor Project	0	0	5	3	
ME	7	ME 1721	Refrigeration and Air Conditioning	3	0	3	5	28.0
B. TECH. (Mech Engg.) SEMESTER - VIII								
ME	8	ME 1830	Computer Aided Design and Manufacturing	3	0	3	5	
ME	8	ME 18xx	Elective – III	3	1	0	4	
ME	8	IT 1874	Management Information System	3	0	0	3	
ME	8	ME 1840	Project	0	0	15	10	
ME	8	HS 1807	Sustainable Development	3	1	0	4	26.0

Deptt	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit / Sem
B. TECH. (Mech Engg.) Electives I, II and III:								
ME	EL 1	ME 1725	Automobile Engineering	3	1	0	4	
ME	EL 1	ME 1726	Experimental Stress Analysis	3	1	0	4	
ME	EL 1	ME 1724	Operation Research	3	1	0	4	
ME	EL 2	ME 1729	Finite Element Methods and Applications	3	1	0	4	
ME	EL 2	ME 1728	Heat Exchanger Design	3	1	0	4	
ME	EL 2	ME 1727	Total Productivity Maintenance and Value Engineering	3	1	0	4	
ME	EL 3	ME 1832	Industrial Pollution	3	1	0	4	
ME	EL 3	ME 1831	Quality Assurance and Reliability	3	1	0	4	
ME	EL 3	ME 1833	Robotics and Robot Applications	3	1	0	4	

COURSE STRUCTURE UNDER TRANSITORY REGULATION FOR B. TECH. (ME)

B. Tech. in Mechanical Engineering Program for 2006-07 batch:

For students admitted in session 2006 – 07, have passed 1st year of B. Sc. Engineering in annual system from Patna University and will be registered in 3rd & 4th semester in subsequent sessions

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit/ Sem
B. TECH. (Mech Engg.) SEMESTER – III(2006-07 Batch)								
ME T6	3	MA 1303	Mathematics – III	3	1	0	4	
ME T6	3	CE 1307	Fluid Mechanics	3	1	2	5	

ME T6	3	IT 1301	Fundamentals of Information Technology	3	0	3	5	
ME T6	3	ME 1305	Material Science	3	1	0	4	
ME T6	3	ME 1307	Thermodynamics	3	1	0	4	
ME T6	3	ME 1306	Strength of Material	3	0	3	5	
ME T6	3	GE 1303	EAA – III – NSS					27.0
B. TECH. (Mech Engg.) SEMESTER – IV (2006-07 Batch)								
ME T6	4	ME 1411	Fluid Machinery	3	0	3	5	
ME T6	4	ME 1409	Kinematics of Machinery	3	1	0	4	
ME T6	4	ME 1412	Machine Drawing	1	0	3	3	
ME T6	4	ME 1410	Manufacturing by Shaping and Joining	3	0	3	5	
ME T6	4	IT 1409	Information Security	3	0	0	3	
ME T6	4	CS 1401	Object Oriented Programming	3	0	3	5	
ME T6	4	ME 1404	Workshop Practice II	0	0	3	2	
ME T6	4	GE 1404	EAA – IV – NSS					27.0

Note: Regular Semester Course Structure will be followed from 5th semester onwards.

B. Tech. in Mechanical Engineering Program for 2005-06 batch:

For students admitted in session 2005 – 06, have passed 1st and 2nd year of B. Sc. Engineering in annual system from Patna University and will be registered in 5th, 6th, 7th and 8th semester in subsequent sessions, the course structure under transitory regulation is detailed below. They will be awarded B. Tech. Degree under semester system.

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit/ Sem
B. TECH. (Mech Engg.) SEMESTER – V (2005-06 Batch)								
ME T5	5	ME 1516	Design of Machine Elements	3	0	3	5	
ME T5	5	ME 1514	Dynamics of Machinery	3	0	3	5	
ME T5	5	HS 1506	Engineering Economics and Management	3	0	0	3	
ME T5	5	CE 1502	Environmental Science	3	0	3	5	
ME T5	5	ME 1517	Heat and Mass Transfer	3	0	3	5	
ME T5	5	ME 1535	Manufacturing Process – I	3	0	0	3	26.0
B. TECH. (Mech Engg.) SEMESTER – VI (2005-06 Batch)								
ME T5	6	ME 1620	Instrumentation and Measurement	3	1	0	4	
ME T5	6	ME 1636	Manufacturing Process – II	3	0	3	5	
ME T5	6	CS 1601	Object Oriented Programming	3	0	3	5	
ME T5	6	ME 1619	Renewable Energy Systems	3	1	0	4	
ME T5	6	ME 1613	Steam Power System	3	0	3	5	
ME T5	6	ME 1611	Fluid Machinery	3	0	3	5	
ME T5	6	ME 1641	Comprehensive Viva – Voce				2	30.0
B. TECH. (Mech Engg.) SEMESTER – VII (2005-06 Batch)								
ME T5	7	ME 17xx	Elective – I	3	1	0	4	
ME T5	7	ME 17xx	Elective – II	3	1	0	4	
ME T5	7	ME 1723	Internal Combustion Engine and Gas Turbines	3	0	3	5	
ME T5	7	ME 1722	Mechanical System Design	3	0	3	5	
ME T5	7	ME 1738	Minor Project	0	0	5	3	
ME T5	7	HS 1702	Organizational Behaviour and industrial Psychology	3	0	0	3	24.0
B. TECH. (Mech Engg.) SEMESTER – VIII (2005-06 Batch)								
ME T5	8	ME 1830	Computer Aided Design and Manufacturing	3	0	3	5	
ME T5	8	ME 18xx	Elective – III	3	1	0	4	
ME T5	8	IT 1874	Management Information System	3	0	0	3	
ME T5	8	ME 1840	Project	0	0	15	10	
ME T5	8	HS 1807	Sustainable Development	3	1	0	4	26.0

Note: Elective subjects are same as for the regular semester course structure.

B. Tech. in Mechanical Engineering Program for 2004-05 batch:

For students admitted in session 2004-03 having passed 1st, 2nd and 3rd year of B. Sc. Engineering in annual system from Patna University and will be registered in 7th and 8th semester in subsequent sessions, the course structure under transitory regulation is detailed below. They will be awarded B. Tech. Degree under semester system.

Deptt.	Semester	Course Code	Course Title	L	T	P	Credits	Total Credit/Sem
B. TECH. (Mech Engg.) SEMESTER – VII (2004-05 Batch)								
ME T4	7	ME 1744	Industrial Engineering and Management	3	0	3	5	
ME T4	7	ME 1723	Internal Combustion Engine and Gas Turbines	3	0	3	5	
ME T4	7	ME 1736	Manufacturing process – II	3	0	3	5	
ME T4	7	ME 1722	Mechanical System Design	3	0	3	5	
ME T4	7	CS 1701	Object Oriented Programming	3	0	3	5	
ME T4	7	ME 1738	Minor Project	0	0	3	2	27.0
B. TECH. (Mech Engg.) SEMESTER – VIII (2004-05 Batch)								
ME T4	8	ME 1830	Computer Aided Design and Manufacturing	3	0	3	5	
ME T4	8	ME 1842	Control and Measurement	3	0	3	5	
ME T4	8	ME 18xx	Elective – I	3	0	3	5	
ME T4	8	ME 18xx	Elective – II	3	1	0	4	
ME T4	8	ME 1840	Project	0	0	15	10	29.0

Note: Elective subjects are same as for the regular semester course structure.