JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

Course structure for B.Tech. (Regular) I year (2009-10) for affiliated Engineering Colleges.

MECHANICAL ENGINEERING (M.E)
(Common for Branches: M.E., C.E, Bio-Tech., Aero.E.)

S.No	Course code	Subject	Th	Tu/Drg./Lab.	Credits
1.	9ABS101	English	2		4
2.	9ABS102	Engineering Physics	2		4
3.	9ABS103	Engineering Chemistry	2		4
4.	9ABS104	Mathematics – I	3	1 - -	6
5.	9A05101	Programming in C and Data Structures	3	1 - -	6
6.	9A03101	Engineering Drawing *		- 6 -	6
7.	9A01101	Engineering Mechanics	3	1 - -	6
8.	9A05102	C Programming & Data Structures Lab		- - 3	4
9.	9A03102	Engineering & I.T. Workshop #		- - 3	4
10.	9ABS106	Engineering Physics and Engineering Chemistry Lab **		- - 3	4
11.	9ABS107	English Language & Communication Skills Lab		- - 3	4
		contact periods/week	15	3 6 12	52
			Total contact periods/week	36	

Th = Theory; Tu = Tutorial; Drg = Drawing & Lab = Laboratory:

* Engineering Drawing will have University External Exam.

** The Students attend the Physics lab and Chemistry lab. in alternate week that is 3/2 per week. The end exam shall be conducted separately and average of the two exams will be recorded by the exam section

\# The Students attend Engineering and IT work shop as a single lab. every week and the end exam is conducted as a single lab. sharing the Maximum marks and time for one task from Engineering workshop and one from IT workshop. The sum of the marks awarded will be recorded

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

MECHANICAL ENGINEERING (M.E.)

B.Tech II - I Semester

S. No	Course code	Subject	Theory		Lab.	Credits
1.	9ABS301	Mathematics -II	4			4
2.	9A01301	Mechanics of Solids	4			4
3.	9A02301	Electrical Engineering and Electronics Engineering	4			4
4.	9A03301	Materials Science and Engineering	4			4
5.	9A03302	Thermodynamics	4			4
6.	9A03303	Machine Drawing		6		4
7.	9A02302	Electrical Engineering Lab / Electronics Engineering Lab			3	2
8.	9A03304	Material Science Lab/ Mechanics of Solids Lab			3	2
		contact periods/week	20	6	6	28
			Total	32		

***NOTE:** In Electrical Engineering and Electronics Engineering two questions from each part should be chosen to answer five questions in the End semester examination.

The Students attend the Electrical Engineering lab and Electronics Engineering lab in alternate week that is 3/2 per week.
The Students attend the Material Science lab and Mechanics of Solids lab in alternate week that is 3/2 per week.
Machine Drawing will be 4 hrs End Exam

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MECHANICAL ENGINEERING (M.E.)

B.Tech II - II Semester

S. No	Course code	Subject	Theory		Lab.	Credits
1.	9ABS304	Probability and Statistics	4			4
2.	9ABS303	Environmental Science	4			4
3.	9A03401	Kinematics of Machinery	4			4
4.	9A03402	Thermal Engineering -I	4			4
5.	9A01404	Fluid Mechanics and Hydraulic Machinery	4			4
6.	9A03403	Manufacturing Technology	4			4
7.	9A01407	Fluid Mechanics and Hydraulic Machinery Lab			3	2
8.	9A03404	Manufacturing Technology Lab			3	2
		contact periods/week	24		6	28
			Total	30		

JAWAHARLAL NEHRU
TECHNOLOGICAL UNIVERSITY ANANTAPUR

MECHANICAL ENGINEERING (ME)
COURSE STRUCTURE

III B. Tech. – I Semester (ME)

S. No	Course code	Subject	Theory		Lab.	Credits
1.	9AHS401	Managerial Economics and Financial Analysis	4			4
2.	9A03501	Thermal Engineering II	4			4
3.	9A03502	Dynamics of Machinery	4			4
4.	9A03503	Machine tools	4			4
5.	9A03504	Design of Machine Elements-I	4			4
6.	9A03505	Heat Transfer	4			4
7.	9A03506	Heat Transfer Lab			3	2
8.	9A03507	Thermal Engineering Lab			3	2
		contact periods/week	24		6	28
			Total	30		

III B. Tech. – II Semester (ME)

S. No	Course code	Subject	Theory		Lab.	Credits
1.	9A03601	Industrial Management	4			4
2.	9A03602	CAD/CAM	4			4
3.	9A03603	Metrology	4			4
4.	9A03604	Refrigeration and Air Conditioning	4			4
5.	9A03605	Design of Machine Elements-II	4			4
6.	9A03606	Automobile Engineering	4			4
7.	9A03607	Metrology Lab & Machine Tools Lab			3/2 (each)	2
8.	9AHS601	Advanced English Communication Skills Lab			3	2
		contact periods/week	24		6	28

IV B. Tech. – I Semester (ME)

S. No	Course code	Subject	Theory		Lab.	Credits
1.	9A03701	Operations Research	4			4
2.	9A03702	Automation & Robotics	4			4
3.	9A03703	Finite Element Methods	4			4
4.	9A03704	Instrumentation and Control Systems	4			4
5.	9A03705 9A03706 9A03707	**ELECTIVE –I** 1. Entrepreneurship 2. Computational Fluid Dynamics 3. Mechatronics	4			4
6.	9A03708 9A03709 9A03710	**ELECTIVE –II** 1. Modern Manufacturing Methods 2. Tool Design 3. Power Plant Engineering	4			4
7.	9A03711	Instrumentation and Control Systems Lab			3	2
8.	9A03712	CAD/CAM Lab			3	2
		TOTAL	24		6	28

IV B. Tech. – II Semester (ME)

S. No	Course code	Subject	Theory		Lab.	Credits
1.	9A03801	Production & Operations Management	4			4
2.	9A03802	Energy Systems	4			4
3.	9A03803 9A03804 9A03805	**ELECTIVE III** 1. Total Quality Management 2. Mechanical Vibrations 3. Gas Turbines and Jet Propulsion	4			4
4.	9A03806 9A03807 9A03808	**ELECTIVE IV** 1. Geometric Modeling 2. Composite Materials 3. Professional Ethics & Intellectual Property Rights	4			4
5.	9A03809	Seminar				2
6.	9A03810	Project Work				10
		TOTAL	24			28