

CURRICULAM & SCHEME OF EXAMINATIONS

MECHANICAL ENGINEERING

Curricula & Scheme of Examinations for B.Tech

Combined I & II Semesters (Common for all branches)

Code	Subject	Hrs / Week			Sessional Marks	University Exam	
		L	T	P/D		Hrs	Marks

THEORY

2K6EN101	Engineering Mathematics I	2	1		50	3	100
2K6EN102	Engineering Physics	2			50	3	100
2K6EN103	Engineering Chemistry	2			50	3	100
2K6EN104	Engineering Mechanics	2	1		50	3	100
2K6EN105	Engineering Graphics	1		3	50	3	100
2K6EN106	Basic Civil Engineering	2	1		50	3	100
2K6EN107	Basic Mechanical Engineering	2	1		50	3	100
2K6EN108	Basic Electrical Engineering	2	1		50	3	100
2K6EN109	Basic Electronics and Computer Engineering	2	1		50	3	100

PRACTICAL

2K6EN110 P	Basic Engineering Laboratory (Surveying, Fitting, Carpentry, Foundry, Smithy, Welding & Sheet metal)			2	50	-	-
2K6EN111 P	Basic Electrical & Electronics Workshop (Wiring, Soldering & Study of Basic Computer Hardware)			2	50	-	-
TOTAL		17	6	7	550		900

THIRD SEMESTER

Code	Subject	Hrs / Week			Sessional Marks	University Exam	
		L	T	P/D		Hrs	Marks
THEORY							
2K6ME 301	Engineering Mathematics II	3	1	-	50	3	100
2K6ME 302	Computer Programming	3	1	-	50	3	100
2K6ME 303	Mechanics of Solids	3	1	-	50	3	100
2K6ME 304	Electrical Machines	3	1	-	50	3	100
2K6ME 305	Fluid Mechanics	3	1	-	50	3	100
2K6ME 306	Metallurgy and Material Science	3	1	-	50	3	100
PRACTICAL							
2K6ME 307 P	Fluid Mechanics and Machinery Lab	-	-	3	50	3	100
2K6ME 308 P	Strength of Materials Lab	-	-	3	50	3	100
TOTAL		18	6	6	400	-	800

FOURTH SEMESTER

Code	Subject	Hrs / Week			Sessional Marks	University Exam	
		L	T	P/D		Hrs	Marks
THEORY							
2K6ME 401	Engineering Mathematics III	3	1	-	50	3	100
2K6ME 402	Humanities	3	1	-	50	3	100
2K6ME 403	Thermodynamics	3	1	-	50	3	100
2K6ME 404	Manufacturing Processes	3	1	-	50	3	100
2K6ME 405	Fluid Machinery	3	1	-	50	3	100
2K6ME 406	Machine Drawing	1	-	3	50	3	100
PRACTICAL							
2K6ME 407 P	Production Engg Lab I	-	-	3	50	3	100
2K6ME 408 P	Electrical Engineering Lab	-	-	3	50	3	100
TOTAL		16	5	9	400	-	800

FIFTH SEMESTER

Code	Subject	Hrs / Week			Sessional Marks	University Exam	
		L	T	P/D		Hrs	Marks
THEORY							
2K6ME 501	Engineering Mathematics IV	3	1	-	50	3	100
2K6ME 502	Environmental Engg. and Disaster Mngnt	3	1	-	50	3	100
2K6ME 503	Mechanics of Machinery	3	1	-	50	3	100
2K6ME 504	Thermal Engineering	3	1	-	50	3	100
2K6ME 505	CAD/CAM/CAE	3	1	-	50	3	100
2K6ME 506	Machine Tools	3	1	-	50	3	100
PRACTICAL							
2K6ME 507 P	Production Engg Lab II	-	-	3	50	3	100
2K6ME 508 P	Thermal Engineering Lab	-	-	3	50	3	100
TOTAL		18	6	6	400	-	800

SIXTH SEMESTER

Code	Subject	Hrs / Week			Sessional Marks	University Exam	
		L	T	P/D		Hrs	Marks
THEORY							
2K6ME 601	Economics and Business Management	3	1	-	50	3	100
2K6ME 602	Dynamics of Machinery	3	1	-	50	3	100
2K6ME 603	Heat and Mass Transfer	3	1	-	50	3	100
2K6ME 604	Advances in Manufacturing Engg.	3	1	-	50	3	100
2K6ME 605	Operations Research	3	1	-	50	3	100
2K6ME 606	Elective I	3	1	-	50	3	100
PRACTICAL							
2K6ME607P	Heat Transfer Lab	-	-	3	50	3	100
2K6ME608P	CAD/CAM/CAE Lab	-	-	3	50	3	100
TOTAL		18	6	6	400	-	800

Elective I

- 2K6 ME 606(A): Numerical Methods
- 2K6 ME 606(B): Mechatronics
- 2K6 ME 606(C): CNC Programming
- 2K6 ME 606(D): Tool Engineering and Design
- 2K6 ME 606(E): Vibration and Noise Control

SEVENTH SEMESTER

Code	Subject	Hrs / Week			Sessional	University	
		L	T	P/D		Hrs	Marks
THEORY							
2K6ME 701	Metrology and Instrumentation	3	1	-	50	3	100
2K6ME 702	Industrial Management	3	1	-	50	3	100
2K6ME 703	Machine Design I	3	1	-	50	3	100
2K6ME 704	Power plant Engineering	3	1	-	50	3	100
2K6ME 705	Elective II	3	1	-	50	3	100
PRACTICAL							
2K6ME706P	Instrumentation Lab	-	-	3	50	3	100
2K6ME707P	Computational Lab	-	-	3	50	3	100
2K6ME708P	Mini Project	-	-	4	50	-	-
2K6ME709P	Physical Edn., Health & Fitness	-	-	-	50	-	-
TOTAL		15	5	10	450	-	700

Elective II	2K6ME 705 (A) MARKETING MANAGEMENT 2K6ME 705 (B) OPTIMIZATION TECHNIQUES 2K6ME 705 (C) FLEXIBLE MANUFACTURING SYSTEMS 2K6ME 705 (D) ADVANCED FLUID MECHANICS	2K6ME 705 (E) MULTIPHASE FLOW
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EIGHTH SEMESTER

Code	Subject	Hrs / Week			Sessional	University	
		L	T	P/D		Hrs	Marks
THEORY							
2K6ME 801	Gas Dynamics	3	1	-	50	3	100
2K6ME 802	Refrigeration and Air conditioning	3	1	-	50	3	100
2K6ME 803	Machine Design II	3	1	-	50	3	100
2K6ME 804	Inventory and Supply Chain Mngt.	3	1	-	50	3	100
2K6ME 805	Elective III	3	1	-	50	3	100
PRACTICAL							
2K6ME806P	Seminar	-	-	4	50	-	-
2K6ME807P	Project and Industrial Training*	-	-	6	100	-	-
2K6ME808P	Viva Voce	-	-	-	-	-	100
TOTAL		15	5	10	400	-	600
Aggregate marks for 8 semesters - 8400					3000		5400

Elective III	2K6ME 805(A) : FINITE ELEMENT ANALYSIS 2K6ME 805(B) : NEURAL NETWORKS AND FUZZY LOGIC 2K6ME 805(C) : COMPUTATIONAL FLUID MECHANICS AND HEAT TRANSFER 2K6ME 805(D) : SYSTEM SIMULATION AND MODELING 2K6ME 805(E) : QUALITY ENGINEERING AND MANAGEMENT
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*25 Marks is allocated for Industrial Training