

Mahatma Gandhi University Revised Scheme For
B Tech Syllabus Revision 2010 (Mechanical Engineering)
Common for All Branches
SCHEME SIS2

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Internal	End-sem		
EN010 101	Engineering Mathematics I	2	1	-	50	100	3	5
EN010 102	Engineering Physics	1	1	-	50	100	3	4
EN010 103	Engineering. Chemistry & Environmental Studies	1	1	-	50	100	3	4
EN010 104	Engineering Mechanics	3	1	-	50	100	3	6
EN010 105	Engineering Graphics	1	3	-	50	100	3	6
EN010 106	Basic Civil Engineering	1	1	-	50	100	3	4
EN010 107	Basic Mechanical Engineering	1	1	-	50	100	3	4
EN010 108	Basic Electrical Engineering	1	1	-	50	100	3	4
EN010 109	Basic Electronics Engineering. & Information Technology	2	1	-	50	100	3	5
EN010 110	<i>Mechanical Workshop</i>	-	-	3	50	-	3	1
EN110 111	<i>Electrical and Civil Workshops</i>	-	-	3	100	-	3	1
	Total	13	11	6			30	44

3rd Semester

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Internal	End-sem		
EN010 301A	Engineering Mathematics II	2	2	-	50	100	3	4
EN010 302	Economics and Communication Skills	2	2	-	50	100	3	4 (3+1)
ME010 303	Fluid Mechanics	2	2	-	50	100	3	4
ME 010 304	Metallurgy & Material Science	3	1	-	50	100	3	4
ME 010 305	Programming in C	3	1	-	50	100	3	4
ME 010 306(CE)	Strength of Materials & Structural Engineering	3	1	-	50	100	3	4
ME 010 307	<i>Computer Programming Lab</i>	-	-	3	50	100	3	2
ME 010 308	<i>Fluid Mechanics Lab</i>	-	-	3	50	100	3	2
	Total	15	9	6				28

4th Semester

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Internal	End-sem		
EN010 401	Engineering Mathematics III	2	2	-	50	100	3	4
EN010 402(ME)	Principles of Management	3	1	-	50	100	3	4
ME 010 403	Hydraulic Machines	2	2	-	50	100	3	4
ME 010 404	Manufacturing Process	3	1	-	50	100	3	4
ME 010 405	Machine Drawing			4	50	100	3	4
ME 010 406(EE)	Electrical Technology	3	1	-	50	100	3	4
ME 010 407	<i>Hydraulic Machines Lab</i>	-	-	3	50	100	3	2
ME 010 408(CE)	<i>Strength of Materials Lab</i>	-	-	3	50	100	3	2
	Total	16	8	6				28

5th Semester

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Internal	End-sem		
EN010 501A	Engineering Mathematics IV	2	2	-	50	100	3	4
ME 010 502	Computer Aided Design & Manufacturing	3	1		50	100	3	4
ME 010 503	Advanced Mechanics of Materials	2	2	-	50	100	3	4
ME 010 504	Kinematics of Machinery	3	1	-	50	100	3	4
ME 010 505	I.C.Engines & Combustion	3	1	-	50	100	3	4
ME 010 506	Thermodynamics	3	1	-	50	100	3	4
ME 010 507	<i>CAD/CAM Lab</i>	-	-	3	50	100	3	2
ME 010 508	<i>Electrical & Electronics Lab</i>	-	-	3	50	100	3	2
	Total	16	8	6				28

6th Semester

Code	Subject	Hours/week			Marks		End- sem duration -hours	Credits
		L	T	P/D	Inte- rnal	End- sem		
ME 010 601	Mechanics of Machines	2	2	-	50	100	3	4
ME 010 602	Heat & Mass transfer	2	2	-	50	100	3	4
ME 010 603	Thermal Systems & Applications	3	1	-	50	100	3	4
ME 010 604	Metrology & Machine Tools	3	1	-	50	100	3	4
ME 010 605	Mechatronics & Control System	3	1	-	50	100	3	4
ME 010 606Lxx	Elective I	2	2	-	50	100	3	4
ME 010 607	Heat Engines Lab	-	-	3	50	100	3	2
ME 010 608	<i>Machine Tools Lab</i>	-	-	3	50	100	3	2
	Total	15	9	6				28

Elective I

- ME 010 606L01 Computational Fluid Dynamics
- ME 010 606L02 Composite MatériaIs Technology
- ME 010 606L03 Automobile engineering
- ME 010 606L04 Advanced strength of materials
- ME 010 606L05 Industrial Hydraulics
- ME 010 606L06 Project management

7th Semester

Code	Subject	Hours/week			Marks		End- sem duration -hours	Credits
		L	T	P/D	Inte- rnal	End- sem		
ME 010 701	Design of Machine Elements	2	2	-	50	100	3	4
ME 010 702	Dynamics of Machines	2	2	-	50	100	3	4
ME 010 703	Gas Dynamics & Jet Propulsion	2	1	-	50	100	3	3
ME 010 704	Refrigeration & Air Conditioning	2	1	-	50	100	3	3
ME 010 705	Industrial Engineering	2	1	-	50	100	3	3
ME 010 706Lxx	Elective II	2	2	-	50	100	3	4
ME 010 707	Mechanical Measurements Lab	-	-	3	50	100	3	2
ME 010 708	<i>Advanced Machine Tools Lab</i>	-	-	3	50	100	3	2
ME 010 709	Seminar	-	-	2	50	-	-	2
ME 010 710	<i>Project</i>	-	-	1	50	-	-	1
	Total	12	9	9				28

Elective II

- ME010 706L01 Plant Engineering & Maintanance
- ME010 706L02 Turbomachines
- ME010 706L03 Theory of vibration
- ME010 706L04 Sales & Marketing Management
- ME010 706L05 Failure analysis & design
- ME010 706L06 Foundary & Welding Technology

8th Semester

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Internal	End-sem		
ME010 801	Design of Transmission Elements	3	2	-	50	100	3	4
ME010 802	Operations Management	2	2	-	50	100	3	4
ME010 803	Production Engineering	2	2	-	50	100	3	4
ME010 804Lxx	Elective III	2	2	-	50	100	3	4
ME010 805Gxx	Elective IV	2	2	-	50	100	3	4
ME010 806	Mechanical Systems Lab	-	-	3	50	100	3	2
ME010 807	Project	-	-	6	100	-	-	4
ME010 808	Viva Voce	-	-	-	-	50	-	2
	Total	11	10	9				28

Electives III

ME010 804L01 Aerospace Engineering
ME010 804L02 Advanced Machining Process
ME010 804L03 Cryogenics
ME010 804L04 Acoustics & noise control
ME010 804L05 Non Destructive Testing
ME010 804L06 Advance operations research

Electives IV

ME010 805G01 Industrial Safety
ME010 805G02 Disaster Management
ME010 805G03 Nano Technology
ME010 805G04 Finite element analysis
ME010 805G05 Optimization methods in design
ME010 805G06 Petrochemical Engineering