

**M. Tech. in
Mechanical Engineering (Weekend) for Working
Professionals**

M. Tech. (Mechanical Engineering) Weekend – I Semester						
S. No.	Course Code	Name of Course	L-T-P	Credits	Course Type	
Theory Courses					UGC	AICTE
1	ME 501	Research Methods and Techniques	3-1-0	4	FC1	PCC
2	*ME 583	Advanced Thermal Engineering	3-1-0	4		
3		Department Elective I	3-1-0	4	DSE1	PEC
Practical/Seminar/Dissertation Courses						
4	ME 579	Advanced Thermal Engineering Lab	0-0-2	2	FC3	PCC
Total				14		
Total Contact Hours			9-3-2			

M. Tech. (Mechanical Engineering) Weekend- II Semester						
S. No.	Course Code	Name of Course	L-T-P	Credits	Course Type	
Theory Courses					UGC	AICTE
1	ME 503/ ME 564	Finite Element Methods/ Computational Fluid Dynamics	3-1-0	4		
2	ME 532	Metal Cutting and Tool Design	3-1-0	4	CC2	PCC
3		Department Elective II	3-1-0	4	DSE3	PEC
Practical/Seminar/Dissertation Courses						
4	ME 523/ ME 582	Advance Finite Element Methods lab/ Computational Fluid Dynamics Lab	0-0-2	2		
Total				14		
Total Contact Hours			9-3-2			

M. Tech. (Mechanical Engineering) Weekend- III Semester						
S. No.	Course Code	Name of Course	L-T-P	Credits	Course Type	
	Theory Courses				UGC	AICTE
1	ME 505	Product Design and Development	3-1-0	4		
2	ME 531	Automation, Machine Vision and Robotics	3-1-0	4	CC1	PCC
Practical/Seminar/Dissertation Courses						
4	*ME 585	Advanced Manufacturing Engineering Lab	0-0-2	2		
5	ME 587	Seminar on Research Topics	0-0-4	2	SEC2	PCC
6	GP	General Proficiency	-	NC		
		Total		12		
		Total Contact Hours	6-2-6			

M. Tech. (Mechanical Engineering) Weekend- IV Semester						
S. No.	Course Code	Name of Course	L-T-P	Credits	Course Type	
	Theory Courses				UGC	AICTE
1	ME 534	Smart Manufacturing and Industry 4.0	3-1-0	4	CC3	PCC
2		Open Elective I	3-1-0	4	OE1	OEC
Practical/Seminar/Dissertation Courses						
3	ME 552	Smart Manufacturing Lab	0-0-2	2	CC4	PCC
4	ME 588	Preliminary Research Plan	0-0-6	4	CC5	PCC
5	GP	General Proficiency	-	NC		
		Total		14		
		Total Contact Hours	6-2-8			

M. Tech. (Mechanical Engineering) Weekend- V Semester						
S. No.	Course Code	Name of Course	L-T-P	Credits	Course Type	
	Theory Courses				UGC	AICTE
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Practical/Seminar/Dissertation Courses						
2	ME 633	Dissertation I	0-0-16	18	E-DP 1	PCC
3	GP	General Proficiency		NC		
		Total		18		
		Total Contact Hours	0-0-16			

Open Elective: Course from other Schools

M. Tech. (Mechanical Engineering) Weekend- VI Semester						
S. No.	Course Code	Name of Subject	L-T-P	Credits	Course Type	
	Theory Courses				UGC	AICTE
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Practical/Seminar/Dissertation Courses						
1	ME 634	Dissertation II	0-0-16	18	E-DP 2	PCC
2	GP	General Proficiency		NC		
		Total		18		
		Total Contact Hours	0-0-16			

**Total Credit from Semester I to VI of M. Tech. Mechanical Engineering
for Working Professionals: 90**

List of Electives for M. Tech. Mechanical Engineering

S. No.	Course Code	Name of Course	L-T-P	Credits
M. Tech. (Mechanical Engineering) Weekend- I Semester				
Department Elective -I				
1	ME 533	CNC Machines and Programming	3-1-0	4
2	ME 507	Advance Mechanical Design	3-1-0	4
3	ME 569	Advanced Fluid Mechanics	3-1-0	4
4	ME 517	Design of Hydraulic and Pneumatic Systems	3-1-0	4
5	ME 541	Flexible and Computer Integrated Manufacturing	3-1-0	4
6	ME 575	Cryogenic Technology	3-1-0	4
7	ME 545	Design of Manufacturing Systems	3-1-0	4
M. Tech. (Mechanical Engineering) Weekend- II Semester				
Department Elective -II				
1	ME 536	Composite Materials and Analysis	3-1-0	4
2	ME 566	Experimental Methods in Thermal Engineering	3-1-0	4
3	ME 540	Design for Manufacturing and Assembly	3-1-0	4
4	ME 542	Fundamentals of Mechatronics	3-1-0	4
5	ME 544	Machine Tool Design	3-1-0	4
6	ME 546	Manufacturing Systems Management	3-1-0	4
7	ME 548	Rapid Prototyping and Manufacturing	3-1-0	4
8	ME 574	Heat Exchanger Analysis and Design	3-1-0	4

S. No.	Course Code	Name of Course	L-T-P	Credits
M. Tech. (Mechanical Engineering) Weekend- IV Semester				
Open Elective -I				
1	ES 509	Environment Impact Assessment and Sustainable Development	3-1-0	4
2	MA 028	Mathematical Modeling with MATLAB	3-1-0	4
3	CS621	Artificial Intelligence Methods for Software Engineering	3-1-0	4

Semester	Credits
I	14
II	14
III	12
IV	14
V	18
VI	18
Total Credits	- 90

- **Total Credit from Semester I to VI of M. Tech. 03 years (Mech. Engg.) Weekend course: 90**
- **There is no change in the syllabus of the subjects which are common in M. Tech. 02 years course and M. Tech. 03 years (Mech. Engg.) Weekend course.**
- *** Courses added for M. Tech. 03 years (Mech. Engg.) Weekend course.**

Details of Faculty members for Mechanical Engineering Programmes:

S.no.	Name and Designation of Faculty	Major Thrust areas of Research	E-mail
01.	Dr. Dharamvir Mangal Assistant Professor	Supply Chain, Inventory Management, Manufacturing (Casting, Welding), Composites	dharamvir@gbu.ac.in
02.	Dr. Satpal Sharma Assistant Professor	Thermal Sprayed Coatings, Welding, Tribological Properties, Welding and Casting	satpal@gbu.ac.in
03.	Dr. H C Thakur Assistant Professor	Computational Fluid Dynamics, Heat Transfer Enhancement, Mesh-free Methods, Solar Energy	harish@gbu.ac.in
04.	Dr Manish Dev (Assistant Professor on Contract for Fixed Duration)	Ergonomics, Occupational Health and Safety	manishdev.ocfd@gbu.ac.in
05.	Dr Parvesh Ali (Assistant Professor on Contract for Fixed Duration)	Manufacturing Processes (Advance Machining, Composites)	parvesh.ocfd@gbu.ac.in
06.	Dr Vikas Srivastava (Assistant Professor on Contract for Fixed Duration)	Composites, Corrosion, Mechanical and Materials Characterizations	vikassri.ocfd.gbu.ac.in
07.	Dr Nand Kumar (Assistant Professor on Contract for Fixed Duration)	Plasma Processing, Tribological Properties Evaluation	nandkr.7400@gmail.com
08.	Dr Sultan Singh (Assistant Professor on Contract for Fixed Duration)	Mechanical Vibrations and Control, Metamaterials in Vibration Mitigation, Energy Harvesting	sultan.ocfd@gbu.ac.in
09.	Dr Suraj Kumar Singh (Assistant Professor on Contract for Fixed Duration)	Composites and Design Engineering	surajk.ocfd@gbu.ac.in

For open Elective subjects:

1. Dr Arun Solanki

(Assistant Professor, Department of Computer Engg., School of ICT)

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2. Dr M. A. Ansari

(Assistant Professor, Electrical Engg. Dept., School of Engineering)

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3. Dr Amit Ujlayan

(Assistant Prof, Dept. of Mathematics, School of VS&AS)

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4. Dr Shobha Ram

(Assistant Professor, Civil Engg. Dept., School of Engineering)

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Overall coordinator

(M. Tech. Mechanical Engineering, 03 Years Weekend Prog. for Working Professionals only)

Dr Dharamvir Mangal

(Assistant Professor in Mechanical Engineering Department)

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