



STUDY AND EVALUATION SCHEME (2024-2025)

SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

Program: BTech(MechanicalEngineering)

Semester: 1st

S.No.	Course Code	Course Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	ECL0101[T]	Basic Electronics	60	20	20	0	0	0	100	2	1	0	3
2	HUL0101[T]	Communication Skills & Colloquim	60	20	20	0	0	0	100	3	0	0	3
3	MAL0101[T]	Calculus For Engineers	60	20	20	0	0	0	100	2	1	0	3
4	MEL0101[T]	Engineering Mechanics	60	20	20	0	0	0	100	2	1	0	3
5	MEL0104[T]	Material Science	60	20	20	0	0	0	100	3	1	0	4
6	ECL0101[P]	Basic Electronics	0	0	0	60	20	20	100	0	0	1	1
7	HUL0101[P]	Communication Skills & Colloquim	0	0	0	60	20	20	100	0	0	1	1
8	MAL0101[P]	Calculus For Engineers	0	0	0	60	20	20	100	0	0	1	1
9	MEL0101[P]	Engineering Mechanics	0	0	0	60	20	20	100	0	0	1	1
10	MEP0101[P]	Mechanical Workshop Practice	0	0	0	60	20	20	100	0	0	2	2
Total Credits													22

*Newly Added Courses

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STUDY AND EVALUATION SCHEME (2024-2025)

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rogramme:BTech(MechanicalEngineering)

Semester:2nd

S.No.	Course Code	Course Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	CSL0201[T]	Essentials of Information Technology	60	20	20	0	0	0	100	2	0	0	2
2	EEL0201[T]	Principles of Electrical Engineering	60	20	20	0	0	0	100	2	1	0	3
3	MAL0203	Statistics for Engineers	60	20	20	0	0	0	100	2	1	0	3
4	MCL0201[T]	Environmental Pollution and Global Issues	60	20	20	0	0	0	100	3	1	0	4
5	MCL0202[T]	Making of Modern India	60	20	20	0	0	0	100	2	0	0	2
6	MEL0202[T]	Engineering Graphics	60	20	20	0	0	0	100	2	0	0	2
7	MEL0240[T]	Manufacturing Technology-I	60	20	20	0	0	0	100	2	1	0	3
8	CSL0201[P]	Essentials of Information Technology	0	0	0	60	20	20	100	0	0	1	1
9	CST0201[P]	Programming logics	0	0	0	60	20	20	100	0	0	2	2
10	EEL0201[P]	Principles of Electrical Engineering	0	0	0	60	20	20	100	0	0	1	1
11	MAL0203[P]	Statistics for Engineers	0	0	0	60	20	20	100	0	0	1	1
12	MEL0202[P]	Engineering Graphics	0	0	0	60	20	20	100	0	0	1	1
13	MEL0240[P]	Manufacturing Technology-I	0	0	0	60	20	20	100	0	0	1	1
Total Credits													26

*Newly Added Courses

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STUDY AND EVALUATION SCHEME (2024-2025)

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rogramme:BTech(MechanicalEngineering)

Semester:3rd

S.No.	Course Code	Course Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	MAL0308[T]	Engineering Mathematics	60	20	20	0	0	0	100	2	1	0	3
2	MEL0305[T]	Basic Thermodynamics	60	20	20	0	0	0	100	2	1	0	3
3	MEL 0308[T]	Measurement and Metrology	60	20	20	0	0	0	100	2	1	0	3
4	MEL 0310[T]	Mechanics of Solids	60	20	20	0	0	0	100	2	1	0	3
5	MEL 0341[T]	Manufacturing Technology –II	60	20	20	0	0	0	100	2	1	0	3
6	MED0301[P]	Evaluation of Industrial Training-I	0	0	0	60	20	20	100	0	0	2	2
7	MEL0305[P]	Basic Thermodynamics	0	0	0	60	20	20	100	0	0	1	1
8	MEL 0308[P]	Measurement and Metrology	0	0	0	60	20	20	100	0	0	1	1
9	MEL 0310[P]	Mechanics of Solids	0	0	0	60	20	20	100	0	0	1	1
10	MEL 0341[P]	Manufacturing Technology –II	0	0	0	60	20	20	100	0	0	1	1
11	MEP0302[P]	Machine drawing	0	0	0	60	20	20	100	0	0	2	2
Total Credits													23

*Newly Added Courses

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rogramme:BTech(MechanicalEngineering)

Semester:4th

S.No.	Course Code	Course Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	MEL0407[T]	Fluid Mechanics	60	20	20	0	0	0	100	2	1	0	3
2	MEL0409[T]	Industrial Engineering	60	20	20	0	0	0	100	2	1	0	3
3	MEL0411[T]	Energy Conversion Systems	60	20	20	0	0	0	100	2	1	0	3
4	MEL0416[T]	Theory of Machines	60	20	20	0	0	0	100	3	0	0	3
5	MEL0442[T]	Machining processes	60	20	20	0	0	0	100	2	1	0	3
6	CSP0401[P]	Object Oriented Programming Methodology (Python)	0	0	0	60	20	20	100	0	0	2	2
7	MEL0407[P]	Fluid mechanics	0	0	0	60	20	20	100	0	0	1	1
8	MEL0411[P]	Energy Conversion Systems	0	0	0	60	20	20	100	0	0	1	1
9	MEL0416[P]	Theory of Machines	0	0	0	60	20	20	100	0	0	1	1
10	MEL0442[P]	Machining processes	0	0	0	60	20	20	100	0	0	1	1
Total Credits													21

*Newly Added Courses

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STUDY AND EVALUATION SCHEME (2024-2025)

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rogramme:BTech(MechanicalEngineering)

Semester:5th

S.No.	Course Code	Course Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	MEL0515[T]	Machine Design-I	60	20	20	0	0	0	100	2	1	0	3
2	MEL0516[T]	IC Engines	60	20	20	0	0	0	100	2	1	0	3
3	MEL0518[T]	Dynamics of Machines	60	20	20	0	0	0	100	2	1	0	3
4	MEL0521[T]	Fluid Machinery	60	20	20	0	0	0	100	2	1	0	3
5	MEL0522[T]	Advanced Manufacturing	60	20	20	0	0	0	100	2	1	0	3
6	MEL0523[T]	Industrial Automation and Control	60	20	20	0	0	0	100	2	1	0	3
7	MED0502[P]	Evaluation of Industrial Training-II	0	0	0	60	20	20	100	0	0	2	2
8	MEL0515[P]	Machine Design-I	0	0	0	60	20	20	100	0	0	1	1
9	MEL0516[P]	IC Engines	0	0	0	60	20	20	100	0	0	1	1
10	MEL0518[P]	Dynamics of Machines	0	0	0	60	20	20	100	0	0	1	1
11	MEL0521[P]	Fluid Machinery	0	0	0	60	20	20	100	0	0	1	1
Total Credits													24

*Newly Added Courses

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STUDY AND EVALUATION SCHEME (2024-2025)

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rogramme:BTech(MechanicalEngineering)

Semester:6th

S.No.	Course Code	Course Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	MEL0617[T]	Machine Design-II	60	20	20	0	0	0	100	2	1	0	3
2	MEL0619[T]	Heat and Mass Transfer	60	20	20	0	0	0	100	2	1	0	3
3	MEL0626[T]	Operations Research	60	20	20	0	0	0	100	2	1	0	3
4	MEL 0627[T]	Additive Manufacturing	60	20	20	0	0	0	100	2	1	0	3
5	MED0603[P]	Minor Project	0	0	0	60	20	20	100	0	0	2	2
6	MEL0617[P]	Machine Design-II	0	0	0	60	20	20	100	0	0	1	1
7	MEL0619[P]	Heat and Mass Transfer	0	0	0	60	20	20	100	0	0	1	1
8	MEL 0627[P]	Additive Manufacturing	0	0	0	60	20	20	100	0	0	1	1
9		Elective1.	60	20	20	0	0	0	100	2	1	0	3
Total Credits													20

*Newly Added Courses

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STUDY AND EVALUATION SCHEME (2024-2025)

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rogramme:BTech(MechanicalEngineering)

Semester:7th

S.No.	Course Code	Course Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	MEL0722[T]	Computer Aided Design	60	20	20	0	0	0	100	2	1	0	3
2	MEL0723[T]	Refrigeration and Air Conditioning	60	20	20	0	0	0	100	2	1	0	3
3	MEL0727[T]	Total Quality Management	60	20	20	0	0	0	100	2	1	0	3
4	MEC0701[P}	Evaluation of Industrial Training-III	0	0	0	60	20	20	100	0	0	2	2
5	MED0702[P]	Major Project	0	0	0	60	20	20	100	0	0	2	2
6	MEL0722[P]	Computer Aided Design	0	0	0	60	20	20	100	0	0	1	1
7	MEL0723[P]	Refrigeration and Air Conditioning	0	0	0	60	20	20	100	0	0	1	1
8		Elective3.	60	20	20	0	0	0	100	2	1	0	3
9		Elective2.	60	20	20	0	0	0	100	2	1	0	3
Total Credits													21

*Newly Added Courses

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STUDY AND EVALUATION SCHEME (2024-2025)

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rogramme:BTech(MechanicalEngineering)

Semester:8th

S.No.	Course Code	Course Name	Maximum Marks Allotted							Credits Allotted			Total Credits
			Theory			Practical			Total Marks				
			End Sem. Exam	Mid Sem. Exam	Class Participation	End Sem. Exam	Prograssive Evaluation	Internal Viva		L	T	P	
1	MEL0825[T]	Automobile Engineering	60	20	20	0	0	0	100	3	1	0	4
2	MEL0827[T]	CNC & Flexible Manufacturing System	60	20	20	0	0	0	100	3	1	0	4
3		Elective3.	60	20	20	0	0	0	100	3	1	0	4
Total Credits													12

*Newly Added Courses

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List of Elective Subjects

Course Code	Course Name	Subject Type	Sem
0201	Indian Knowledge System	PracticalAdditional credits to be earned by attending Signature events of ITM University Gwalior	2nd
0622	Electric Vehicle Engineering	Elective1	6th
0623	Tribology Engineering	Elective1	6th
0621	Robotic Process Automation	Elective1.	6th
0709[T]	Industrial Robotics	Elective2	7th
0710[T]	Alternative fuels and emission control	Elective2	7th
0717[T]	Theory of Production process	Elective2	7th
0703[T]	Product Design and Development	Elective2.	7th
0706[T]	Optimization Methods	Elective3	7th
0707[T]	Introduction to Computational Fluid Dynamics	Elective3	7th
0711[T]	Sensors, Actuators and Signal Conditioning	Elective3	7th
0705[T]	Non-Conventional Energy resources	Elective3.	7th
0809[T]	Vibration and Noise Measurement and control	Elective3	8th
0810[T]	Foundry Engineering	Elective3	8th
0811[T]	Advanced welding technology	Elective3	8th
0822[T]	Production innovation and Entrepreneurship	Elective3.	8th
0813[T]	Computer Integrated Manufacturing	Elective4	8th
0814[T]	Non Destructive testing	Elective4	8th
0816[T]	Finite Element Method	Elective4	8th
0823[T]	Mechatronics, Robotics and Control	Elective4	8th