



RKDF UNIVERSITY, BHOPAL

New Scheme of Examination as per AICTE Flexible Curricula

W.E.F. JULY 2025

Subject wise distribution of marks

B.Tech. III Semester (Mechanical Engineering)

S. No.	Subject Code	Category	Subject Name	Theory Slot						Practical Slot						Total Marks	Contact Hours per Week			
				Theory		Mid Sem		Quiz Assignment		Practical		Lab Work		Lab Quiz			L	T	P	Total Credits
				Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks					
1	ME-3011	ESC-7	Environmental Engineering	70	25	20	10	10	5	-	-	-	-	-	-	100	4	-	-	4
2	ME-3021	PCC-1	Strength of Materials	70	25	20	10	10	5	30	15	10	5	10	5	150	3	1	2	6
3	ME-3031	PCC-2	Manufacturing Processes	70	25	20	10	10	5	-	-	-	-	-	-	100	3	1	-	4
4	ME-3041	PCC-3	Thermodynamics	70	25	20	10	10	5	30	15	10	5	10	5	150	3	1	2	6
5	ME-3051	HSMC-3	Value Education	70	25	20	10	10	5	30	15	10	5	10	5	150	4	-	2	6
6	ME-3061	LC-1	Computer Aided Design	-	-	-	-	-	-	30	15	10	5	10	5	50	-	-	2	2
7	BE-2071	IN-2	Evaluation of Internship-1 completed at I year level	-	-	-	-	-	-	30	15	10	5	10	5	50	-	-	2	2
			Total	350	-	100	-	50	-	150	-	50	-	50	-	750	17	3	10	30

1 Hour Lecture = 1 Credit
1 Hour Tutorial = 1 Credit
1 Hour Practical = 1 Credit



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B.Tech. IV Semester (Mechanical Engineering)

S. No.	Subject Code	Category	Subject Name	Theory Slot						Practical Slot						Total Marks	Contact Hours per Week			
				Theory		Mid Sem		Quiz Assignment		Practical		Lab Work		Lab Quiz			L	T	P	Total Credits
				Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks					
1	ME-4011	BSC-5	Engineering Mathematics-III	70	25	20	10	10	5	-	-	-	-	-	-	100	3	1	-	4
2	ME-4021	PCC-4	Kinematics and Theory of Machines	70	25	20	10	10	5	30	15	10	5	10	5	150	3	1	2	6
3	ME-4031	PCC-5	Power Plant Engineering	70	25	20	10	10	5	30	15	10	5	10	5	150	4	-	2	6
4	ME-4041	PCC-6	Material Science and Metallurgy	70	25	20	10	10	5	30	15	10	5	10	5	150	4	-	2	6
5	ME-4051	PCC-7	Machine Drawing	70	25	20	10	10	5	30	15	10	5	10	5	150	3	1	2	6
6	ME-4061	LC-2	Java Programming	-	-	-	-	-	-	30	15	10	5	10	5	50	-	-	2	2
7	BE-4071	IN-3	Internship-2 (90 Hrs Duration) at the Institute Level	To be completed during IV semester. Its evaluation/ credit will be added in V semester																
			Total	350	-	100	-	50	-	150	-	50	-	50	-	750	17	3	10	30

1 Hour Lecture = 1 Credit
 1 Hour Tutorial = 1 Credit
 1 Hour Practical = 1 Credit



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B.Tech. V Semester (Mechanical Engineering)

S. No.	Subject Code	Category	Subject Name	Theory Slot						Practical Slot						Total Marks	Contact Hours per Week			
				Theory		Mid Sem		Quiz Assignment		Practical		Lab Work		Lab Quiz			L	T	P	Total Credits
				Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks					
1	ME-5011	PCC-08	Dynamics of Machinery	70	25	20	10	10	05	30	15	10	05	10	05	150	3	1	2	6
2	ME-5021	PCC-09	Fluid Mechanics	70	25	20	10	10	05	30	15	10	05	10	05	150	3	1	2	6
3	ME-5031	PEC-1	Departmental Elective – I	70	25	20	10	10	05	30	15	10	05	10	05	150	4	-	2	6
4	ME-5041	OEC-1	Open Elective - I	70	25	20	10	10	05	30	15	10	05	10	05	150	4	-	2	6
5	BE-4071	IN-3	Evaluation of Internship-II	-	-	-	-	-	-	-	-	100	50	-	-	100	-	-	4	4
6	ME-5051	PROJ-1	Field Visit, Case Study and Seminar	-	-	-	-	-	-	-	-	50	25	-	-	50	-	-	2	2
			Total	350	-	100	-	50	-	150	-	50	-	50	-	750	14	2	14	30

1 Hour Lecture = 1 Credit
1 Hour Tutorial = 1 Credit
1 Hour Practical = 1 Credit

Departmental Electives	Open Electives
ME 5031 (A) Artificial Intelligence Neural Network	ME 5041 (A) Mechatronics
ME 5031 (B) Simulation and Modeling-I	ME 5041 (B) QM and SQC
ME 5031 (C) Alternate Automotive Fuels & Emissions	ME 5041 (C) Finite Element Method
ME 5031 (D) Hybrid electric Vehicle Design-I	ME 5041 (D) CFD(Computational Fluid Dynamics)
ME-5031 (E)Code as per Swayam/NPTL-Mooc-1	ME-5041 (E)Code as per Swayam/NPTL-Mooc-2



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B.Tech. VI Semester (Mechanical Engineering)

S. No.	Subject Code	Category	Subject Name	Theory Slot						Practical Slot						Total Marks	Contact Hours per Week			
				Theory		Mid Sem		Quiz Assignment		Practical		Lab Work		Lab Quiz			L	T	P	Total Credits
				Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks					
1	ME-6011	PCC-10	I.C. Engine	70	25	20	10	10	5	30	15	10	5	10	5	150	4	-	2	6
2	ME-6021	PCC-11	Machine Component Design	70	25	20	10	10	5	30	15	10	5	10	5	150	3	1	2	6
3	ME-6031	PEC-2	Departmental Elective – II	70	25	20	10	10	5	-	-	-	-	-	-	100	4	-	-	4
4	ME-6041	OEC-2	Open Elective – II	70	25	20	10	10	5	-	-	-	-	-	-	100	4	-	-	4
5	ME-6051	LC-5	CAD Lab	-	-	-	-	-	-	30	15	10	5	10	5	50	-	-	2	2
6	ME-6061	LC-6	Advanced Workshop Practices Lab	-	-	-	-	-	-	30	15	10	5	10	5	50	-	-	2	2
7	BE-6071	IN-4	Internship – III	To be completed anytime during Fifth/Sixth semester. Its evaluation/credit to be added in Seventh Semester.																
8	ME-6081	PROJ-2	Minor Project – I	-	-	-	-	-	-	-	-	50	25	-	-	50	-	-	2	2
			Total	280	-	80	-	40	-	120	-	90	-	40	-	650	15	1	10	26

1 Hour Lecture = 1 Credit
1 Hour Tutorial = 1 Credit
1 Hour Practical = 1 Credit

Departmental Electives	Open Electives
ME 6031 (A) Gas Dynamics	ME 6041 (A) Mechanical Measurement Control
ME 6031 (B) Solar Thermal Engineering	ME 6041 (B) Optimization Techniques
ME 6031 © Rapid Prototyping	ME 6041 © Renewable Energy Technology
ME 6031 (D) Hybrid electric Vehicle Design-II	ME 6041(D) Additive Manufacturing (3D Printing)
ME-6031 (E)Code as per Swayam/NPTL-Mooc-3	ME-6041 (E) Code as per Swayam/NPTL-Mooc-4



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B.Tech. VII Semester (Mechanical Engineering)

S. No.	Subject Code	Category	Subject Name	Theory Slot						Practical Slot						Total Marks	Contact Hours per Week			
				Theory		Mid Sem		Quiz Assignment		Practical		Lab Work		Lab Quiz			L	T	P	Total Credits
				Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks					
1	ME-7011	PCC -12	Heat and Mass Transfer	70	25	20	10	10	5	30	15	10	5	10	5	150	3	1	2	6
2	ME-7021	PEC-3	Departmental Elective-III	70	25	20	10	10	5	-	-	-	-	-	-	100	3	1	-	4
3	ME-7031	OEC-3	Open Elective-III	70	25	20	10	10	5	-	-	-	-	-	-	100	4	-	-	4
4	ME-7041	LC-7	Departmental Elective Lab	-	-	-	-	-	-	30	15	10	5	10	5	50		-	2	2
5	ME-7051	LC-8	Open Elective Lab	-	-	-	-	-	-	30	15	10	5	10	5	50	-	-	2	2
6	ME-7061	PROJ-3	Major Project – I	-	-	-	-	-	-	80	40	10	5	10	5	100	-	-	4	4
7	ME-6071	IN-4	Evaluation of Internship-III	-	-	-	-	-	-	-	-	50	25	50	25	100	-	-	4	4
			Total	210	-	60	-	30	-	170	-	90	-	90	-	650	10	2	14	26

1 Hour Lecture = 1 Credit
1 Hour Tutorial = 1 Credit
1 Hour Practical = 1 Credit

Departmental Electives	Open Electives
ME-7021 (A) Automobile Engineering	ME-7031 (A) Reliability Engineering
ME-7021 (B) Mechanical System Design	ME-7031 (B) Tribology
ME-7021 (C) Material Handling Equipment	ME-7031 (C) Mechanical Vibration
ME-7021 (D) HVAC SYSTEM DESIGN	ME-7031 (D) Cryogenic Engineering
ME-7021 (E) Code as per Swayam/NPTL-Mooc-5	ME-7031 (E) Code as per Swayam/NPTL-Mooc-6



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Subject wise distribution of marks

B.Tech. VIII Semester (Mechanical Engineering)

S. No.	Subject Code	Category	Subject Name	Theory Slot						Practical Slot						Total Marks	Contact Hours per Week			
				Theory		Mid Sem		Quiz Assignment		Practical		Lab Work		Lab Quiz			L	T	P	Total Credits
				Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks					
1	ME-8011	PCC-13	Refrigeration & Air Conditioning	70	25	20	10	10	5	30	15	10	5	10	5	150	3	1	2	6
2	ME-8021	PEC-4	Departmental Elective-IV	70	25	20	10	10	5	-	-	-	-	-	-	100	3	1	-	4
3	ME-8031	OEC-4	Open Elective-IV	70	25	20	10	10	5	-	-	-	-	-	-	100	4	-	-	4
4	ME-8041	LC-9	Departmental Elective Lab	-	-	-	-	-	-	30	15	10	5	10	5	50		-	2	2
5	ME-8051	PROJ-2	Major Project - II	-	-	-	-	-	-	120	60	40	20	40	20	200	-	-	8	8
			Total	210	-	60	-	30	-	180	-	60	-	60	-	600	10	2	12	24

1 Hour Lecture = 1 Credit
1 Hour Tutorial = 1 Credit
1 Hour Practical = 1 Credit

Departmental Electives	Open Electives
ME-8021 (A) Industrial Engineering & Operation Research	ME-8031 (A) Robotics
ME-8021 (B) Solar Energy Utilization	ME-8031(B) Quality Management & Control
ME-8021 (C) Simulation & Modeling-II	ME-8031 (C) Rapid Product Development
ME 8021 (D) Design of Thermal Systems	ME-8031 (D) Advanced Refrigeration
ME-8021 (E) Code as per Swayam/NPTL-Mooc-7	ME-8031 (E) Code as per Swayam/NPTL-Mooc-8