

PROGRAMME STRUCTURE

for

MASTER OF TECHNOLOGY

in

MECHANICAL ENGINEERING

(Applicable from the academic session 2024-2025)



Approved by BOS(ME) dt 5.11.2024 &
Academic Council, Agenda-01.02, dt
21.11.2024

Dr. B. C. Roy Engineering College

An Autonomous Institution



Approved by: All India Council for Technical Education (AICTE)

*Affiliated to: Maulana Abul Kalam Azad University of Technology, West Bengal
(Formerly Known as -WBUT)*

Jemua Road, Durgapur, West Bengal, India, 713206

Semester Wise Break Up of Credit (New Autonomous Structure)

Sem1	Sem2	Sem3	Sem4	Total
25	25	25	25	100

S. No.	Category	Breakup of Credits (Actual) As per Proposed Autonomous Structure
1.	Basic Science Courses	4
2.	Professional core course	22
3.	Professional Elective specialization/branch courses relevant to chosen	20
4.	Project work, seminar in industry or appropriate work place/ academic and research institutions in India/abroad	54
Total Credits		100

CURRICULUM FOR FOUR-SEMESTER FULL-TIME M.TECH PROGRAMME

Programme Code: 624

Programme: M.Tech in Mechanical Engineering

Year (Semester): 1st Year (1st Semester)

Sl. No.	Course Category	Course Code	Course Name	L	T	P	Type	Credit
1	BS	ME-501	Advanced Engineering Mathematics	4	0	0	T	4
2	PC	ME-502	Advanced Dynamics of Machinery	4	0	0	T	4
3	PC	ME-503	Advanced Production Methods	4	0	0	T	4
4	PE	ME-504	Advanced Metal Cutting Theory	4	0	0	T	4
5	PE	ME-505	Production Tooling & Equipment	4	0	0	T	4
6	PE	ME-506	Advanced Machining Process	4	0	0	T	4
7	PE	ME-507	Numerical Method & Optimization Technique	4	0	0	T	4
8	PE	ME-508	Advanced CAD/CAM	4	0	0	T	4
9	PE	ME-509	Production Planning & Control	4	0	0	T	4
10	PE	ME-510	Conduction and Radiation Heat Transfer	4	0	0	T	4
11	PC	ME-511	Advanced Manufacturing Laboratory	0	0	4	P	2
12	PC	ME-512	Material Testing Laboratory	0	0	4	P	2
13	PW	ME-513	Seminar-I	0	0	2	S	1

Elective-I

Elective-II

Total (1st Semester)

25

Year (Semester): 1st Year (2nd Semester)

Sl. No.	Course Category	Course Code	Course Name	L	T	P	Type	Credit
1	PC	ME-514	Advanced Machine Design	4	0	0	T	4
2	PC	ME-515	Production & Operation Management	4	0	0	T	4
3	PE	ME-516	Design of Material Handling Equipment	4	0	0	T	4
4	PE	ME-517	Theory of Elasticity & Plasticity	4	0	0	T	4
5	PE	ME-518	Design & Performance of Machine tool	4	0	0	T	4
6	PE	ME-519	Advanced Welding Technology	4	0	0	T	4
7	PE	ME-520	Advanced Robotics	4	0	0	T	4
8	PE	ME-521	Engineering Fracture Mechanics	4	0	0	T	4
9	PE	ME-522	Finite Element Method in Engineering	4	0	0	T	4
10	PE	ME-523	Composite Material & Structure	4	0	0	T	4
11	PE	ME-524	Advanced Metrology	4	0	0	T	4
12	PE	ME-525	Value & Ethics in Industrial management	4	0	0	T	4
13	PE	ME-526	Statistical Process Control	4	0	0	T	4
14	PE	ME-527	Engineering System & Control	4	0	0	T	4
15	PC	ME-528	Advanced Machine Design Laboratory.	0	0	4	P	2
16	SEM	ME-529	Seminar-II	0	0	2	S	1
17	VIV	ME-530	Comprehensive Viva Voce	0	0	0	S	2
Total (2nd Semester)								25

Year (Semester): 2nd Year (3rd Semester)

Sl. No.	Course Category	Course Code	Course Name	L	T	P	Type	Credit
1	PW	ME-601	Project & Thesis (Phase-I)	0	0	12	S	20
2	SEM	ME-602	Seminar & Viva-Voce	0	0	0	S	5
Total (3rd Semester)								25

Year (Semester): 2nd Year (4th Semester)

Sl. No.	Course Category	Course Code	Course Name	L	T	P	Type	Credit
1	PW	ME-603	Project & Thesis (Phase-II)	0	0	12	S	20
2	SEM	ME-604	Seminar & Viva-Voce	0	0	0	S	5
Total (4th Semester)								25

TOTAL CREDIT POINTS: 100