



Department of Mechanical Engineering

Courses identified for Additional Minor Engineering Degree

MED offering Additional Minor Engineering Degree In

- I. Manufacturing & Robotics
- II. Mechatronics & Nano technology
- III. 3D Printing and design

The list of subjects approved by Mechanical Engineering Department (July-Dec 2022)

1. Manufacturing and Robotics

S. No	Course Id	Course Name	Institute	Duration	Start date	End date	Exam date	Enrolment End Date	Link to join the course	Credits
1	noc22-me71	Fundamentals of manufacturing processes	IITR	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_me71/preview	3
2	noc22-me108	Mechanism And Robot Kinematics	IITKGP	8 Weeks	Aug 22, 2022	Oct 14, 2022	Oct 30, 2022	Aug 22, 2022	https://onlinecourses.nptel.ac.in/noc22_me108/preview	2
3	noc22-me74	Rapid Manufacturing	IITK	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_me74/preview	3
4	noc22-me80	Manufacturing Systems Technology	IITK	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_me80/preview	3
5	noc22-de11	Introduction to robotics	IITM	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_de11/preview	3
6	noc22-mm29	Fundamentals of electronic device fabrication	IITM	4 Weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_mm29/preview	1
7	noc22-me136	Principles of Metal Forming Technology	IITR	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_me136/preview	2
8	noc22-ge29	Fundamentals Of Artificial Intelligence	IITG	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_ge29/preview	3
9	noc22-me124	Advances in welding and joining technologies	IITG	8 weeks	Aug 22, 2022	Oct 14, 2022	Oct 29, 2022	Aug 22, 2022	https://onlinecourses.nptel.ac.in/noc22_me124/preview	2



2. Mechatronics & Nano technology

Sno	Course Id	Course Name	Institute	Duration	Start date	End date	Exam date	Enrolment End Date	Link to join the course	Credits
1	noc22-me74	Rapid Manufacturing	IITK	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_me74/preview	3
2	noc22-de11	Introduction to robotics	IITM	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_de11/preview	3
3	noc22-mm29	Fundamentals of electronic device fabrication	IITM	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_mm29/preview	1
4	noc22-me75	Engineering Metrology	IITK/NIT Jalandhar	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_me75/preview	3
5	noc22-bt46	Biomedical nanotechnology	IITR	4 weeks	Aug 22, 2022	Sep 16, 2022	Oct 29, 2022	Aug 22, 2022	https://onlinecourses.nptel.ac.in/noc22_bt46/preview	1
6	noc22-me123	Automation in Manufacturing	IITG	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_me123/preview	3
7	noc22-mm40	Advanced Materials And Processes	IITKGP	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_mm40/preview	3
8	noc22-me77	Foundations of Cognitive Robotics	IITK	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022	https://onlinecourses.nptel.ac.in/noc22_me77/preview	1



3. 3D Printing and design

Sno	Course Id	Course Name	Institute	Duration	Start date	End date	Exam date	Enrolment End Date	Link to join the course	Credits
1	noc22-me74	Rapid Manufacturing	IITK	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_me74/preview	3
2	noc22-me80	Manufacturing Systems Technology	IITK	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_me80/preview	3
3	noc22-de11	Introduction to robotics	IITM	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_de11/preview	3
4	noc22-me122	Fundamentals of Additive Manufacturing Technologies	IITG	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_me122/preview	3
5	noc22-me134	Product Design and Development	IITR	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_me134/preview	1
6	noc22-me86	Basics Of Finite Element Analysis - I	IITK	8 Weeks	Jul 25, 2022	Sep 16, 2022	Sep 25, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_me86/preview	2
7	noc22-me90	Basics of Materials Engineering	IITM	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_me90/preview	3
8	noc22-me123	Automation in Manufacturing	IITG	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 30, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_me123/preview	3
9	noc22-mg97	Industrial Safety Engineering	IITKGP	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_mg97/preview	3
10	noc22-de10	Functional and Conceptual Design	IITM	12 Weeks	Jul 25, 2022	Oct 14, 2022	Oct 29, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_de10/preview	3
11	noc22-mg75	Design Thinking - A Primer	IITM	4 Weeks	Aug 22, 2022	Sep 16, 2022	Oct 29, 2022	Aug 22, 2022	https://onlinecourse.s.nptel.ac.in/noc22_mg75/preview	1
12	noc22-de14	Innovation by Design	IITB	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_de14/preview	1
13	noc22-me77	Foundations of Cognitive Robotics	IITK	4 weeks	Jul 25, 2022	Aug 19, 2022	Sep 25, 2022	Aug 1, 2022	https://onlinecourse.s.nptel.ac.in/noc22_me77/preview	1

Head of the Department