

# JHARKHAND UNIVERSITY OF TECHNOLOGY, RANCHI

## M. Tech. (CAD/CAM) Semester-I

Sr. No.	Course Type	Code	Course Name	Credits
1	Core-I	CAD1101	Computer Aided Design	3
2	Core-II	CAD1102	Computer Aided Manufacturing	3
3	Program Elective-I	CAD1103 CAD1104 CAD1105	1. Mechatronics 2. Computer Aided Inspection and Testing 3. Data Base Management Systems	3
4	Program Elective-II	CAD1106 CAD1107 CAD1108	1. Advanced Machining Processes 2. Modelling and Simulation 3. Advanced Mechanisms	3
5	Program Elective-III	CAD1109 CAD1110 CAD1111	1. Rapid Prototyping and Manufacturing 2. Product Design & Development 3. Machine Condition Monitoring	3
6	Core	CAD1201	Lab-I Computer Aided Design Lab	2
7	Core	CAD1202	Lab-II Computer Aided Manufacturing Lab	2
8	Core	RMC1101	Research Methodology and IPR	2
9	Audit Course - 1	A10001	1.English for research Paper writing 2. Sanskrit for technical knowledge 3. value Education 4. Constitution of India	-
			Total Credit	21

## M. Tech. (CAD/CAM) Semester-II

Sr. No.	Course Type	Code	Course Name	Credits
1	Core-III	CAD2101	Computer Integrated Manufacturing	3
2	Core-IV	CAD2102	Finite Element Method	3

3	Program Elective-IV	CAD2103 CAD2104 CAD2105	1. Robotics 2. Data Communication and Networking 3. Modelling and Simulation	3
4	Program Elective-V	CAD2106 CAD2107 CAD2108	1. Mechanical Vibrations 2. Fracture Mechanics and Non Destructive Testing 3. Design for Manufacturing & Assembly	3
5	Open Elective-I	CAD2109 CAD2110 CAD2111 CAD2112 CAD2113 CAD2114	1. Business Analytics 2. Industrial Safety 3. Operations Research 4. Cost Management of Engineering Projects 5. Composite Materials 6. Waste to Energy	3
6	Core	CAD2201	Lab-III Computer Integrated Manufacturing / FMS Lab	2
7	Core	CAD2202	Lab-IV Finite Element Method	2
8	Core	CAD2203	Mini-Project	2
8	Audit Course - II	A20001	1. Disaster Management 2. Value Education 3. Pedagogy Studies 4. Personality Development through Life Enlightenment Skills.	-
			Total Credit	21

### M. Tech. (CAD/CAM) Semester-III

Sr. No.	Course Type	Code	Course Name	Credits
1	Dissertation	CAD3201	Dissertation Phase – I	10
			Total Credit	10

### 1. Tech. (CAD/CAM) Semester-IV

Sr. No.	Course Type	Code	Course Name	Credits
1	Dissertation	CAD4201	Dissertation Phase – II	16
			Total Credit	16