

Department of Mechanical Engineering
Indian Institute of Technology (Indian School of Mines), Dhanbad

Lecture Plan

Session – 2021-22 (Winter Semester)

L T P
3 1 0

Subject: Computer Aided Manufacturing Systems (MCC-18101)

Qz-I 13%

Qz-II 13%

~~Qz-IV 13%~~

~~Qz-V 13%~~

Mid-term exam (offline): 26%

End term exam-48%

Sl. No.	TOPIC	Lecture
1.	Introduction to Automation and mechanization. Basic elements of an automated system, level of automation	8
2.	Numerical Control of machine tools, different types of controls, point to point, continuous path, digital and analog control, absolute and relative, NC system devices,	12
3.	Computer numerical control (CNC), Direct numerical control (DNC), Adaptive control of manufacturing processes, Flexible manufacturing system, computer integrated manufacturing	12
4.	Computer process interface, NC part programming, APT	6
5.	Introduction to FMS, CIM, Robotics, AGV, CMM	6
6.	Computer aided material transport and storage systems including industrial robots, AGV, additive manufacturing process	8
39 lectures and 13 tutorials total 52 contact hrs		

(VIVEK BAJPAI)
Asst. Prof. / Mechanical Engg.