



COMPUTER NUMERICAL CONTROL CNC OF MACHINE TOOLS AND PROCESSES

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TYPE OF COURSE : Rerun | Core/Elective | UG/PG

COURSE DURATION : 4 weeks (26 Aug'19 - 20 Sep'19)

EXAM DATE : 17 Nov 2019

PRE-REQUISITES : Basic Knowledge of Machine tools, Workshop practice Desirable but not necessary : binary logic, logic gates, curved surface geometry

INDUSTRY SUPPORT : Manufacturing companies employing CNC machining technology

COURSE OUTLINE

These lectures would introduce the idea of Computer Numerical Control (CNC) of machine tools and processes to the students. It will cover classification of such machine tools, technology and devices employed in CNC machines, 2D and 3D programming and interpolation. With every part, there will be MCQ, tutorial, problem solving and discussions.

ABOUT INSTRUCTOR

Prof. Asimava Roy Choudhury Department of Mechanical Engineering Indian Institute of Technology Kharagpur received his B.E, (Mechanical) Degree from Jadavpur University in 1983, M.Tech. (Machine Tools Engg) from IIT Kharagpur in 1984 and Ph.D. (Engg) from IIT Kharagpur in 1999. Asimava Roy Choudhury is at present a Professor in the Mechanical Engineering Department of IIT Kharagpur. His interests include: Computer numerical control, Direct slicing in Rapid Prototyping, Non-traditional manufacturing processes and Laser coating of surfaces.

COURSE PLAN

Week 1 : Computer Numerical Control Machines : Introduction and Classification

Week 2 : Technologies and devices employed in CNC machines

Week 3 : 2-D Programming and Interpolation

Week 4 : 3-D programming and related topics