Short Term Courses - NIELIT

Certificate Course in MasterCAM

Objective of the Course:

The course is aimed at giving exposure to and enhancing the knowledge and skills of engineers involved in the operation use of CNC machines, CAD/CAM packages and for those who want to provide training to others in this area. It gives exposure and on hand experience in the field of CAD/CAM and CNC machines

Learning Outcomes:

The participants will be able to:

- Design and drafting 2D and 3D models,
- Design and machine using CAD/CAM packages like MasterCAM
- > Toolpaths Creations
- > Toolpath Verifications
- NC partprogram generation
- Surface Design and machining using MasterCAM
- Advaced Surface generation and Machining using MasterCAM
- Understand advanced features of CAD/CAM

Expected Job Roles:

MasterCAM Programmer

Duration of the Course (in hours) 120 hrs

Appr. Fees (INR): Rs. 14,000/- (Service Tax Extra)

Minimum eligibility criteria and prerequisites if any

- a. BE /B.Tech or Diploma in Mechanical/Production Engineering or equivalent
- b. Candidates who have appeared in the qualifying examination and awaiting results may also apply

Outline of the Course

S. No	Topic	Minimum No. of Hours
1.	Lathe: 2D Geometric Modeling, File conversions (Data conversions), tool paths for Turning, Facining, Grove cutting, drilling, taping and toolpaths verification and CNC Part Program generation. Mill: 2D and 3D Geometric Modeling, Toolpaths for 2D machining like countering, pocketing, Island pocketing, Drilling, Plan milling, Surface Modeling, 3D surfaces (Coons, Rooled, Revolved, Tabulated etc), Toolpaths for 3D machining, Surface machining, Verification and CNC part program generationss.	120
Theory/ Lecture Hours:		30
Practical/ Tutorial Lecture Hours:		90
Total Hours:		120

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Books recommended for reference and reading:

REFERENCES

- Automation, Production Systems, and Computer –Integrated Manufacturing by Mikell P. Groover
- 2. CADCAM Principles, Practice and Manufacturing Management by Chris McMahon and Jimmie Browne.
- 3. Computer Control of Manufacturing Systems Yoram Koren.
- 4. Manuals of CNC Machines (Denford), , Manuals of MasterCAM

In addition manufacturer's device data sheets and application notes are to be referred to get practical application oriented information.

Group Code: CADD Group Name: AutoCad / Instrumentation

Course Code: CP03 Course Name: Certificate Course in MasterCAM