Medi-Caps University, Indore
Mechanical Engineering Department

CNC Training
CNC Part Programming (80 Hrs.)

The aim of this training is to acquaint the participants with the basic concept of programming of the CNC Machine. This training provides an opportunity to learn Operation of Industrial CNC Machining including safety instruction.

Objectives:

The students are able to get knowledge about
1. The safety and precautions need to be taken during the working on CNC machine
2. The various tools and accessories of the CNC Machine.
3. The different coordinate system of the CNC Machine.
4. The different Operations Performed on the CNC Machine.
5. The part programming for the various products to be manufactured on CNC Machine.

Outcomes:

The students will be able to
1. Understand the importance of CNC Machine in production.
2. Understand the functionality of CNC Machine and Fundamentals of CNC Part Programming
3. Understand the Tools, accessories and Lubrication System of CNC Machine.
4. Apply the knowledge of safety measures taken while working with CNC Machine.
5. Apply the fundamentals of Manual Part Programming and can Work on CNC machines.
6. Create Products by CNC machine through various Part programming methods.

Course Outline

S.no	Date	Day	Time	Topic	Taken By
1	13-06-2022	Monday	8.30 - 12.30	Introduction – CNC and its application, Overview of the CNC Turning Machine, Overview of the CNC Controller(Siemens)	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
2	14-06-2022	Tuesday	8.30 - 12.30	Overview of the CNC Tools, accessories and Lubrication System, Safety Instruction	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
3	15-06-2022	Wednesday	8.30 - 12.30	Method of Tool offset and Usage of Coordinate	Prof. Abhishek Shrotriya/ Mr.

					systems	Pankaj Bhopte
4	16-06-2022	Thursday	8.30 - 12.30	Fundamental of CNC Part Programming	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
5	17-06-2022	Friday	8.30 - 12.30	Different operations through manual part programming and practice	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
6	20-06-2022	Monday	8.30 - 12.30	Different operations through manual part programming and practice	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
7	21-06-2022	Tuesday	8.30 - 12.30	Different operations through manual part programming and practice	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
8	22-06-2022	Wednesday	8.30 - 12.30	Overview of Computer assist part programming	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
9	23-06-2022	Thursday	8.30 - 12.30	Computer assist part programming Practice	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
10	24-06-2022	Friday	8.30 - 12.30	Computer assist part programming Practice	Prof. Abhishek Shrotriya/ Mr. Pankaj Bhopte
11	27-06-2022	Monday	8.30 - 12.30	Introduction – CNC and its application, Overview of the CNC Milling Machine, Overview of the CNC Controller(Fanuc)	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte
12	28-06-2022	Tuesday	8.30 - 12.30	Overview of the CNC Tools, accessories and Lubrication System, Safety Instruction	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte
13	29-06-2022	Wednesday	8.30 - 12.30	Method of Tool offset and Usage of Coordinate systems	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte
14	30-06-2022	Thursday	8.30 - 12.30	Fundamental of CNC Part Programming(Milling Machine)	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte
15	01-07-2022	Friday	8.30 - 12.30	Different operations through manual part programming and practice	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte
16	04-07-2022	Monday	8.30 - 12.30	Different operations through manual part programming and practice	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte
17	05-07-2022	Tuesday	8.30 - 12.30	Different operations through manual part programming and practice	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte
18	06-07-2022	Wednesday	8.30 - 12.30	Part programming through canned cycles	Prof. Lekhraj Patidar/ Mr.

					Pankaj Bhopte
19	07-07-2022	Thursday	8.30 - 12.30	Part programming through canned cycles	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte
20	08-07-2022	Friday	8.30 - 12.30	Q & A session,Training Test and Feedback session	Prof. Lekhraj Patidar/ Mr. Pankaj Bhopte

Course Name: CNC Part Programming (Milling and Turning Machine)
Course Duration: 80 Hours
Days: Monday to Friday
Time: 8:30 AM to 12:30 PM
Proposed Fee: Rs 3000 per participant
Maximum Number of Seats: 30

Following members will be involved in the Summer Internship Program:

  Prof. Abhishek Shrotriya
  Prof. Lekhraj Patidar
  Mr. Pankaj Bhopte