

ADITYA COLLEGE OF ENGINEERING

(Approved by AICTE & Affiliated to JNTUK, Kakinada)

Aditya Nagar, ADB Road, Surampalem – 533437

Department of Mechanical Engineering

Title of the Workshop	: CNC MACHINES AND ITS OPERATIONS
Resource Persons	: Prof LSV Prasad, Andhra University
Date(s) of Workshop	: 10-10-2017 to 12-10-2017
Aim of Workshop	: To learn the fundamentals Learning various tools in CNC Machines Learn to guide learners on Manufacturing Learn the relevance of applications in real time

CNC is the short form for Computer Numerical control. The NC machine works as per the program of instructions fed into the controller unit of the machine. The CNC machine comprises of the mini computer or the microcomputer that acts as the controller unit of the machine. While in the NC machine the program is fed into the punch cards, in CNC machines the program of instructions is fed directly into the computer via a small board similar to the traditional keyboard.

In CNC machine the program is stored in the memory of the computer. The programmer can easily write the codes, and edit the programs as per the requirements. These programs can be used for different parts, and they don't have to be repeated again and again.

Compared to the NC machine the CNC machine offers greater additional flexibility and computational capability. New systems can be incorporated into the CNC controller simply by reprogramming the unit. Because of its capacity and the flexibility, the CNC machines are called as "soft-wired" NC.

The CNC machine comprises of the computer in which the program is fed for cutting of the metal of the job as per the requirements. All the cutting processes that are to be carried out and all the final dimensions are fed into the computer via the program. The computer thus knows what exactly is to be done and carries out all the cutting processes. CNC machine works like the Robot, which has to be fed with the program and it follows all our instructions.

Program Schedule:

Date	10-10-2017
10:00-10:20	Intro to Workshop
10:20-11:10	Getting started with CNC Machines
11:10-11:30	Tea break
11:30 -1:10	Basics of CNC Machines
1:10-2:00	Lunch

2:00-4:40 Hands-On and review

Date 11-10-2017

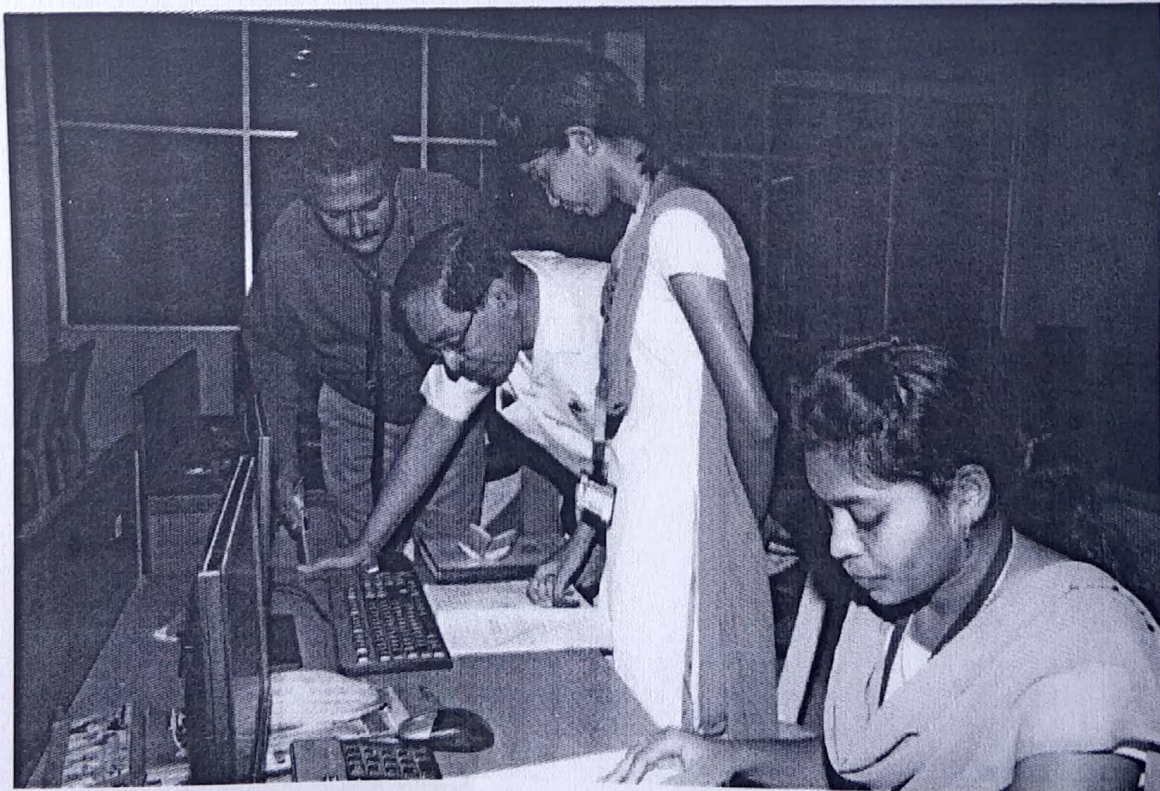
9:30-10:30	Electronics basics
10:20-11:10	present situation
11:10-11:30	Tea break
11:30-12:20	Video demonstration
12:20-1:00	Applications
1:00-2:00	Lunch
2:00-4:40	Hands-On and review

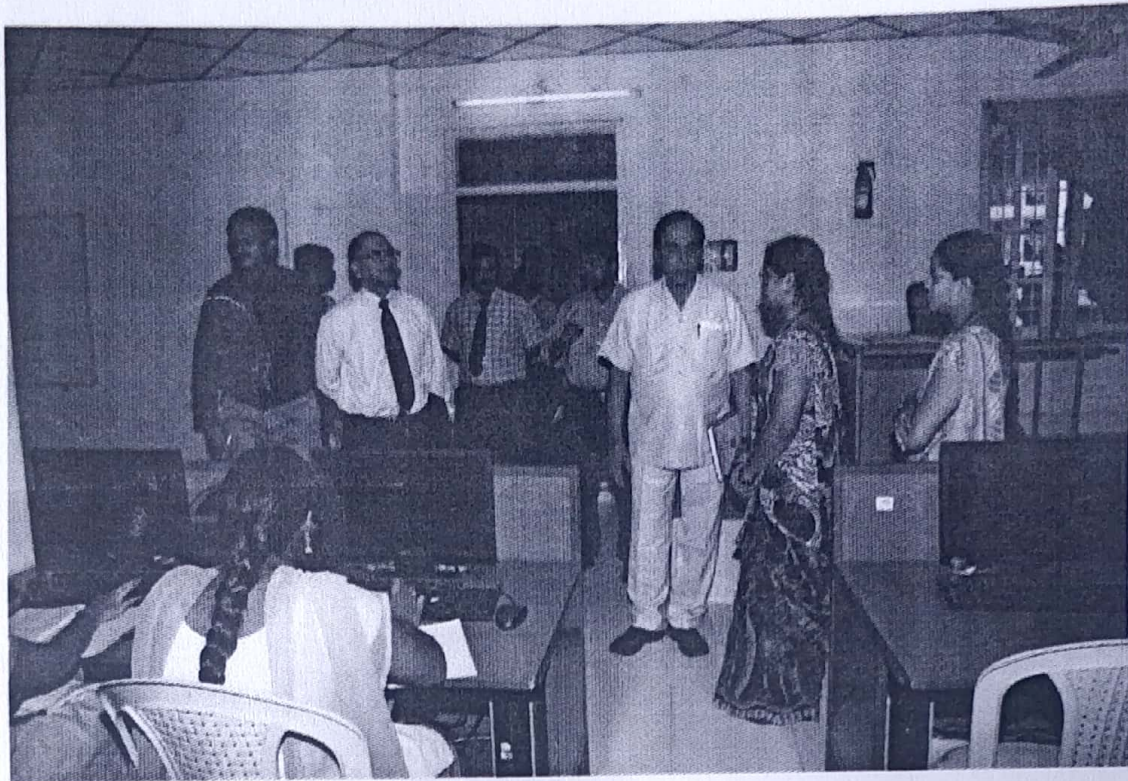
Date 12-10-2017

9:30-10:30	Role of CNC in industries
10:20-11:10	Technology developments
10:20-11:10	Role of Mechanical Engineers
11:10-11:30	Tea break
11:30-12:20	Video demonstration
12:20-1:00	Future Scope
1:00-2:00	Lunch
2:00-4:40	Overview

No. of Participants : 81

PROGRAM PHOTOS





Overall Assessment : Good

Event Coordinators :

1. Mr. G.A.V. SWAMY

Assistant Professor, Dept. of ME

2. Mr. P.V.S.S. KRISHNA

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