



**CENTURION
UNIVERSITY**
*Shaping Lives...
Empowering Communities...*

SPECTRAL IMAGE PROCESSING

Year: 2019

This Spectral Image Processing using Python webinar was organized on the year of 2019. Gives Brief idea about CNC programming and more.

**Spectral Image
Processing using
Python**

Date : 08/05/2019

Year : 2019

**Centurion University of Technology and
Management**



Pre-requisites: Nil
 Course Type : Audit (Workshop)
 Duration : 30 Hours

Learning Outcomes:

- Ability to analyze the drawing to get the stages of product development from the raw material as per the availability of tools and fixtures.
- Ability to optimize the machining time for getting the component / part ready by machining
- Ability to make/ generate part-program from the drawing. Program execution in CNC & Testing its validation

Course Objectives:

- Carry out Preparations for Programming CNC machine for production
- Test and prove the program on the CNC Machine
- Maintain 5S at the work premises & programming the machine for specific tool operations
- Preparation of process plan & optimize the cycle time

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> • Safety Practice • Practice Demonstration of Personal safety, Professional safety and machine safety. • Practice Demonstration of uses of Personal Protective Equipment. • Introduction to CNC technology & programming. • Practice: Demonstration on CNC machine tools ,CNC controller and Types of CNC control • Practice: Demonstration of different parts of different CNC machines. 	10 hours
Module2	<ul style="list-style-type: none"> • Measuring and Quality control. • Practice Demonstration and practice of using different measuring tools while working on machine. • Practice Demonstration and practice of different quality checking processes like flatness, angle, go-no go. • Coordinate System & Types of Codes. 	10 hours
Module3	<ul style="list-style-type: none"> • CNC Lathe Part programming. • Practice Demonstration and practice of different part programming of CNC lathe machining processes like facing, turning, taper turning, thread cutting and knurling. • CNC Milling Part programming . • Practice Demonstration and practice of different milling machine operations like face milling, end milling, profile milling & pocket milling. 	10 hours
TOTAL		30 hours

Anita Patra



Dr. Anita Patra, Registrar, CUTM

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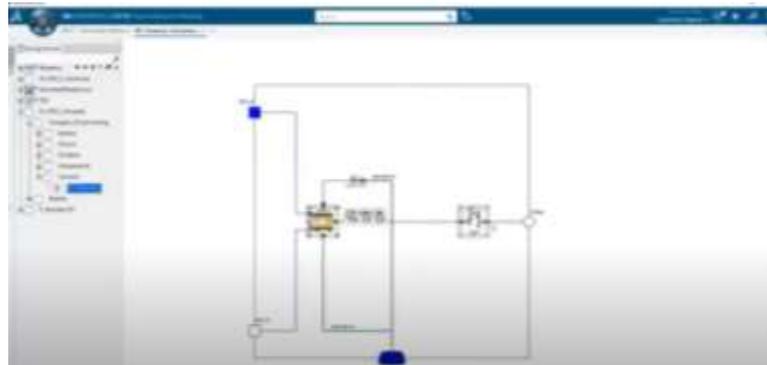
Convener



A REPORT ON
NAME OF THE EVENT:
SPECTRAL IMAGE PROCESSING
TOTAL NUMBER OF PARTICIPANTS: 28
ACADEMIC YEAR: 2018-19
DATE: 08.05.2019

The participants of the programme were to carry out Preparations for Programming CNC machine for production and to test and prove the program on the CNC Machine. Further, maintaining 5S at the work premises & programming the machine for specific tool operations was also discussed. Preparation of process plan & optimize the cycle time was discussed through practical examples.

The tasks CNC operator is expected to perform include: - Setting up base level operations of different machine tools, supporting the machine operator in all pre-machining activities, machining of the actual part, performing repair work, gauging, de-burring and inspecting activities. CNC machine operators, manage computer numeric controlled equipment from setup to operation, producing parts and tools from different resources including metal and plastic.



The participants of the programme were to analyse the drawing to get the stages of product development from the raw material as per the availability of tools and fixtures. The participants were able to optimize the machining time for getting the component / part ready by machining. Furthermore, the ability to make/ generate part- programs from the drawing.

Program execution in CNC & testing its validation and the ability to test and validate the Program execution in CNC were discussed in the programme. Finally, the participants were made aware about different pre-machining & post machining activities. Ability to use proper inspection tools & cutting tools.

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List of Participants:

Name of Event: SPECTRAL IMAGE PROCESSING

Organized by: Centurion University of Technology and Management

Date: 8 May 2019

This Spectral Image Processing using Python webinar was organized in the year of 2019. Gives Brief idea about CNC programming and more.

List of Participants:

S.No.	Name	Reg. No.	Presence/Absent
1	MUPPANENI KRISHNA SRIKAR	213001170002	P
2	HRUSHIKESH ROUT	213001170003	P
3	SUBHA RANJAN GADANAYAK	213001170004	P
4	SARTHAK MISHRA	213001170005	P
5	SWEETY RANI BHUYAN	213001170006	P
6	ABHISHEK ANAND	213001170007	P
7	LIPUN SAHU	213001170008	P
8	SATYANARAYAN DAS	213001170009	P
9	AMPOLU DEEPTARUN	213001170010	P
10	SANTOSH KUMAR	213001170011	P
11	J.RUDRA PRASAD PATRA	213001170012	P
12	BASUDEV SAHU	213001170013	P
13	MD.SAQIB ALAM	213001170014	P
14	N SUMIT.KUMAR	213001170015	P
15	ANKITA MOHAPATRA	213001170016	P
16	SHAKSHI KUMARI	213001170017	P
17	ABHISHEK KUMAR	213001170018	P
18	PRINCE KUMAR	213001170019	P
19	VEGI ABHINAV KARTHIK	213001170020	P
20	PRANAV KUMAR GARG	213001170021	P
21	RAGHU NANDAN KUMAR	213001170022	P
22	RAVURI SAI KIRAN	213001170023	P
23	SURANDIP NAYAK	213001170024	P
24	ARYA SHIT	213001170025	P
25	ABHIJIT BISWAS	213001170026	P
26	SUBODH KUMAR	213001170027	P
27	ADITYA RAJ	213001170028	P
28	SHRUTI KUMARI	213001170029	P

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