Short Term Course
On
Application of Advance CAD-CAM in CNC Machining
( March 16 – 20, 2017)
Venue: CNC Room, CWISS
Organized by
Central Workshop & Instruments Service Section
Indian Institute Technology, Kharagpur 721302
OBJECTIVES OF THE COURSE

The primary objectives of the course are as follows:

i) Exposing participants to the fundamentals of different types of CAD and CAM software.

ii) Building up confidence and capability in the participants to handle CAD-CAM software.

iii) Exposing the participants to different types of CNC machines and their uses in the manufacturing field.

iv) Providing exposure to CNC machining problems and their solutions.

v) Enhancing the capability of the participants to make models using CAD-CAM application and their supporting software.

vi) To make them up to date in the latest developments in the field of CAD-CAM application

COURSE SCHEDULE AND METHODS

9 am to 6 pm with 1-hour lunch break in each day.
The course would consist of lecture sessions, instruction sessions, discussions on problems and practical sessions.

ELIGIBILITY

Category -1 (Teaching Faculty from TEQIP-II Colleges etc):

Teaching Faculty from TEQIP-II funded Colleges / Institutions / Universities.

Category – 2 (Non-TEQIP Faculty/Student / Industry / others):

- B. E. / B. Tech. (Final year-eligible) / AMIE/Diploma in Engineering/M. Sc. or any higher qualification in relevant field.
- Persons from Industries & Govt. Organizations related in this field are also eligible.
- Teachers, Technical staff, Students (final year) of Non-TEQIP-II college.
- Technical staff and students (Final year) of TEQIP-II college
<table>
<thead>
<tr>
<th>Sl. No</th>
<th>DESIGN COURSE</th>
<th>TOOL ROOM COURSE Related the design course</th>
<th>Days Wise</th>
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| 1     | **AUTOCAD 2D 2013**  
*Key Points of AutoCAD:* AutoCAD application for 2D, drafting and Modeling.  
- The course explores the application of latest tools & techniques of AutoCAD software package with all available features.  
- The progressive step by step solution of various example of 2D & 3D Modeling, making an ideal solution for both the novice & the advanced user.  
**AUTOCAD 2013 3D**  
[ Introduction to creation of 3D Solid CAD model & rendering with CAD features by step by step process. Sample modeling & generation of 3D extension file supported by CAM software] | | 16th March, 2017 |
| 2.    | **Solid Works 2012**  
[Introduction to Solid Works solid & surface modeling ]  
Lesson 1. Parts / Lesson 2: Assembly / Lesson 3: Drawings. 3D sketching & 3D sketching with plane.  
Mould design, Assembly & Assembly Mates. Toolbox basic knowledge. Photo view 360- Rendering.  
Exercise of 3D CAD modeling- Step by step guide process.  
How to import & export the different CAD extension file to different areas and devices. | | 17-18th March, 2017 |
| 5.    | Creating NC Program for various complex shape 3D Solid Model in different planes using DelcamPowerMILL Software. | 5-Axis CNC Milling m/c. | 20th March, 2017 |
| 6.    | CNC Turning Programming & pre-process simulation checking with (i) FANUC-G&M Code. | CNC Turning (Lathe) M/c Operation | 20th March, 2017 |

*Note: The course material will helps in advancing the frontiers of the software.*
**Course Co-Ordinators**

**Professor A. Roy Choudhury**  
Principal Co-ordinator  
Chairman, CWISS  
IIT Kharagpur 721 302, West Bengal, India  
Tel: +91 3222 282970 (O)  
+91 9434036694  
Email: archie@mech.iitkgp.ernet.in

**Dr. Suprakash Patra**  
Co-ordinator  
AWS, CWISS  
IIT Kharagpur 721 302, West Bengal, India  
Tel.: +91 3222 282506 (O)  
+91 9474897835  
Email: spatraiitkgp@yahoo.in

**Mr. Santanu Das**  
Co-ordinator  
Jr. Tech. Supdt., CWISS  
IIT Kharagpur 721 302, West Bengal, India  
Tel.: +91 3222 282513 (O)  
+91 9433889595  
Email: santdas@rediffmail.com
All queries regarding the course may be addressed to the Principal Coordinator or the Coordinator.

**Application and Fee**

**Category-1:**
Candidates will have to submit Demand Draft drawn in favour of ‘CEP-STC, IIT Kharagpur’ payable at Kharagpur of Rs. 2000.00. This will be refunded after completion of Short Term Course to the candidate.

**Category-2:**

Course fees for Others : Rs. 15000.00

The course is designed to be offered for duration of 5 days. Number of participants for the course will be limited to Thirty [20 Seats for TEQIP participants and 10 Seats for Non-TEQIP College only]. The participants will be selected on ‘First-Come-First-Served’ basis out of the eligible applicants. First preference will be given to Faculty of TEQIP - II.

**Mode of Payment:**

**Type – I:** Payment is to be made through bank draft drawn in favour of ‘CEP-STC, IIT Kharagpur’ payable at Kharagpur. The application should be sent to the mailing address latest by 10th March, 2017.

**Type - II:** Payment should be made by electronic fund transfer. For this, the bank details are as follows:

- Account Name : CEP-STC, IIT Kharagpur
- Account Number : 95562200002955
- Bank Name : SYNDICATE BANK
- Bank Branch Name : SRIC, IIT KHARAGPUR
- Branch Code : 9556
- IFSC Code : SYNB0009556
- Swift Code : SYN BIN BB 120
- Bank Address : IIT Kharagpur-721302

Note: In case of electronic money transfer, please submit a copy of money transfer record with details of bank, amount, transaction number and date. The bank proof must be attached with registration form.

The course fee includes course materials, tea/coffee and snacks during lecture schedules only.
To confirm participation please send the scanned copy of the Demand Draft with participant colour photo for identity card to spatraiitkgp@yahoo.in & sumit4s_iit@yahoo.com; by March 10, 2017 positively.

A certificate of participants will be issued to all the participants from the Office of “Dean, Continuing Education, IIT Kharagpur” after completion of course.

Outstation participants will be provided Sharing accommodation for male and Single accommodation for female participants in the Technology Guest House of IIT Kharagpur as per availability on prior request.

Category- 1: Rs. NIL [ No charges for Food and Accommodation ]
Category- 2: Rs. Candidates have to bear their own expenses for food and Accommodation.

Tentative schedule of Valedictory function is on 20th March, 2017 at 3:30 pm followed by a grand Lunch at 1:00pm on 20th March, 2017.

How to reach campus at IIT Kharagpur

Situated about 120 km west of Kolkata, Kharagpur can be reached in about 2 hrs. by train from the Howrah railway station of Kolkata or 3 hrs. by car from Kolkata airport. Kharagpur is also connected by direct train services to most major cities of the country. The institute is about 10 minutes drive( 5 km) from the Kharagpur railway station. Private taxi, auto rickshaw or cycle rickshaw can be hired to reach the Institute.
Important Dates

Last date for receiving application: 10th March, 2017

Intimation to the applicants: 13th March, 2017

Course duration: March 16 to 20, 2017

Note:

1. Only selected participants would be informed by E-mail.
2. You may bring Laptop on your own responsibility for practice study session.
REGISTRATION FORM

SHORT-TERM COURSE
On
Application of Advance CAD-CAM in CNC Machining
( March 16 – 20, 2017 )

• Name:__________________________________________________
  [Block Letters; Provide as appearing on your Institute or Official ]
• Category [ Student/ Academic/Industry ]: _________________
• If Academic
  • Designation:
  • Institute Name:
  • AICTE approved Institute [Yes/ No] : ______________________
  • TEQIP-II Fund Institute [Yes / No] (compulsory) :
• Gender ( M/F ):______________________________________________
• Date of Birth    :______________________________________________
• Organisation:_______________________________________________
• Highest academic Qualification:______________________________
• Address for Correspondence:________________________________
  ___________________________________________________________
• Mobile:____________________________________________________
• E-Mail (Compulsory):________________________________________
• Accommodation required (Yes/No)_____________________________
• Bank Draft/Fund transfer Details:
  • Draft No./Reference No.:Date:
  • Amount Rs._______________________________________________
  • Issuing Bank with Branch code:

___________________________________________________________

Signature of the participant

Approval for TEQIP-II Sponsorship participant

We approve the above applicant is a faculty/ Student/staff of our organization. He/She is recommended for the course during March 16-20, 2017 at IIT Kharagpur.

___________________________________________________________

Signature with seal of the Head of the organisation

Date: