A Report on Two-Days Workshop on "Computer Aided Machining (CAM) using NX" Organized by Department of Mechanical Engineering in association with ISTE Student chapter on 19th & 20th October 2024

Report Submitted by: Dr. Prithivirajan R. & Mr. Rizwan Ali, Assistant Professor, Department of Mechanical Engineering.
Resource Person Details: Mr. Rami Reddy Akhil & Mr. Karthick, Center for Engineering & Maritime Sciences (CEMS), Visakhapatnam.
Participants: IV Year Mechanical Engineering Students.
Venue: Scale up Classroom.
Report Received on 30.10.2024.
Mode of Conduct: Offline.

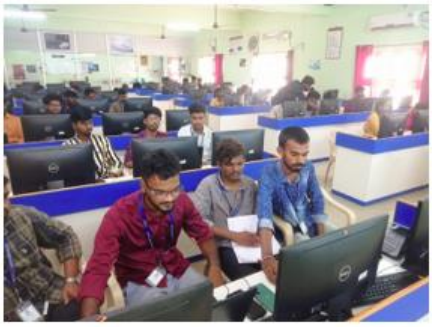
Day 1: Inauguration and Workshop Sessions (18th October 2024)
The workshop commenced with an inaugural ceremony held in the Scale-up Room (East Block) at 10:15 AM. Distinguished guests, including the Principal, the Head of the Department, resource persons, faculty members, and students, graced the occasion. Dr. Prithivirajan R. began with a welcoming address, followed by Dr. Baskaran S, the Head of the Department, who provided a warm welcome to all participants and guests.

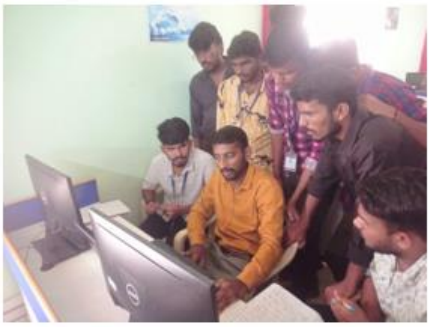
Dr. Yuvaraj, the Principal of MITS, delivered the presidential address, setting a positive tone for the workshop. Mr. Rami Reddy Akhil concluded the ceremony with an insightful speech that outlined the workshop's objectives and the importance of CAM using NX software.
Morning Session (10:45 AM)
The morning workshop session kicked off with a detailed presentation by Mr. Rami Reddy Akhil. His presentation covered foundational topics such as:

- Machining Process Fundamentals – An overview of key machining principles.
- Steps in Machining – A breakdown of essential machining steps.
- CNC Program Sequence – Explanation of the standard sequence in CNC programming.
- CNC Operations – Insights into different CNC operations and their applications in modern manufacturing.

Afternoon Session (1:30 PM)
Participants convened in the CAD/CAM lab (West Block) for the afternoon session. Here, Mr. Rami Reddy Akhil provided a hands-on overview of the NX platform, introducing its core functionalities. His session focused on modelling parts using NX software, helping students gain practical exposure to various NX features essential for creating precise, effective models.

Day 2: Advanced Workshop Sessions and Practice (19th October 2024)
Morning Session (9:30 AM)
The second day of the workshop resumed with an in-depth exploration of NX software, led by Mr. Rami Reddy Akhil. He introduced advanced features, various options, and command functionalities within NX. The session was designed to familiarize students with modelling and simulation techniques crucial for machining parts effectively, further solidifying their understanding of CAM.





Afternoon Session:
In the afternoon, students engaged in practical exercises on the NX platform. They worked with various engineering drawings, enhancing their hands-on experience. Resource persons were available throughout the session to address questions, assist with technical challenges, and guide students in utilizing NX's tools efficiently. As the session concluded, Mr. Rami Reddy Akhil discussed potential job opportunities in the field, sharing his experiences in the industry to inspire students to pursue careers in CNC and CAM fields.

Valedictory Ceremony (5:00 PM):
The workshop concluded with a valedictory ceremony in the CAD/CAM lab (West Block). Dr. Anantharaman, along with the coordinators, resource persons, and participants, attended the closing event. Dr. Prithivirajan highlighted the vast opportunities in CNC machining and projects that students can pursue, emphasizing the significance of mastering CNC technologies. Dr. Anantharaman provided an overview of additional CNC software options and their features, expanding the students' understanding of industry tools. The event closed with a felicitation ceremony for the resource persons, followed by a heartfelt vote of thanks from Mr. Rizwan Ali, recognizing the efforts of all who contributed to the workshop’s success.