



Loknayak Jai Prakash Institute of Technology, Chapra - 841302

Department of Science, Technology & Technical Education, Patna

TECHNOLOGY FOR A BETTER TOMORROW

LEARN
PRACTICE
INNOVATE
GROW

लोकनायक जयप्रकाश प्रौद्योगिकी संस्थान, छपरा

Engineering
ideas for a
better tomorrow

Department of Mechanical Engineering

Organizes

FOUR-DAY WORKSHOP ON AUTOCAD TRAINING

For B.Tech 3rd Semester – Mechanical Engineering Students

DESIGN
DRAFT
VISUALIZE
CREATE



16th to 19th
August 2023



02:00 PM
to 05:00 PM



CAD/CAM
Laboratory



Department
of Mechanical Engineering



Hands-on practice session at CAD/CAM Lab



Students working on AutoCAD designs



Glimpse of the workshop session

SKILL
TOOLS
PRACTICE
PROGRESS

About the Workshop

Department of Mechanical Engineering, Loknayak Jai Prakash Institute of Technology, Chapra organized a four-day workshop on **AutoCAD Training** for B.Tech 3rd Semester Mechanical Engineering students. The workshop focused on developing practical computer-aided design skills and introducing students to professional mechanical drawing practices using AutoCAD.



Training By

Mr. Sachindra Kumar
Assistant Professor
Department of Mechanical
Engineering
LNJPIT Chapra



Organized By

Department of
Mechanical Engineering
Loknayak Jai Prakash
Institute of Technology,



HOD

Mr. Ajit Kumar Chauhan
HOD, ME Department
LNJPIT, Chapra

WORKSHOP HIGHLIGHTS



AutoCAD Interface
& Workspace



2D Mechanical
Drawing



Drawing &
Modification Commands



Precision Drawing
& Object Selection



Dimensioning &
Annotation



Hatching & Sectional
Representation



Orthographic
Projection



Isometric
Drawing



Layers, Blocks
& Templates



Advanced 2D
Mechanical Drawing



Mini Project /
Design Assignment



Practical
Assessment

“

From basic drawing commands to complete
mechanical component drawings —
a hands-on journey into AutoCAD.

”



LNJPIT, CHAPRA
Shaping Engineers
Shaping the Future



WORKSHOP SCHEDULE & LEARNING OUTCOMES

AUTOCAD
DESIGN | DRAFT | INNOVATE

FOUR-DAY WORKSHOP SCHEDULE

Day & Date	Time	Topic / Activities	Practical Exercise
Day 1 16 August 2023	02:00 PM – 02:30 PM	Inauguration & Introduction to AutoCAD Applications in Mechanical Engineering, interface and workspace	Familiarization with AutoCAD interface
	02:30 PM – 03:30 PM	Basic Drawing Commands Line, Circle, Arc, Rectangle, Polygon, Polyline	Creation of basic 2D geometries
	03:30 PM – 05:00 PM	Modify Commands Trim, Extend, Offset, Move, Copy, Rotate, Mirror, Fillet, Chamfer	Preparation of basic mechanical profiles
Day 2 17 August 2023	02:00 PM – 03:00 PM	Precision Drawing & Object Selection Object Snap, Grid, Ortho, Polar Tracking, Layers	Accurate geometric construction
	02:00 PM – 04:00 PM	Dimensioning & Annotation Linear, Angular, Radius, Diameter, Text and Leaders	Dimensioning of mechanical components
	04:00 PM – 05:00 PM	Hatching & Sectional Representation	Sectional view of a mechanical component
Day 3 18 August 2023	02:00 PM – 03:00 PM	Mechanical Drawing using AutoCAD Orthographic projection and standard drawing practices	Front, Top and Side views
	03:00 PM – 04:00 PM	Isometric Drawing Isometric planes, circles and isometric objects	Creation of isometric mechanical components
	04:00 PM – 05:00 PM	Blocks, Templates & Layouts Title block, layers and drawing standards	Preparation of a standard engineering drawing sheet
Day 4 19 August 2023	02:00 PM – 03:00 PM	Advanced 2D Mechanical Drawing	Drawing of a machine component
	03:00 PM – 04:00 PM	Mini Project / Design Assignment	Complete CAD drawing of a selected mechanical component
	04:00 PM – 04:30 PM	Practical Assessment	Evaluation of student drawings
	04:30 PM – 05:00 PM	Feedback, Valedictory Session & Certificate Distribution	Student feedback and completion of workshop

EVENT GLIMPSES



Students working on AutoCAD designs in CAD/CAM Lab



Entrance to Computer Lab (Mechanical Engineering)



Interactive learning session during the workshop



EXPECTED LEARNING OUTCOMES

After completion of the workshop, students will be able to:

- 1 Understand the AutoCAD interface and basic drafting environment.
- 2 Create accurate 2D mechanical drawings.
- 3 Apply drawing and modification commands effectively.
- 4 Prepare dimensioned engineering drawings.
- 5 Create sectional and isometric views.
- 6 Use layers, blocks, layouts and title blocks.
- 7 Develop CAD drawings of basic mechanical components.
- 8 Apply AutoCAD skills to academic projects and industrial applications.



WORKSHOP METHODOLOGY

- Interactive classroom sessions
- Live software demonstrations
- Step-by-step hands-on practice
- Mechanical engineering drawing exercises
- Individual assignments
- Mini project
- Practical assessment
- Student feedback



REQUIRED FACILITIES

- CAD/CAM Laboratory
- Computers with AutoCAD
- Projector/display system
- Drawing exercises and training material
- Qualified faculty/resource person



ATTENDANCE & CERTIFICATION

Students attending the workshop will be required to maintain daily attendance. Students successfully completing the training may be awarded a **Certificate of Participation/Completion** by the institute.

