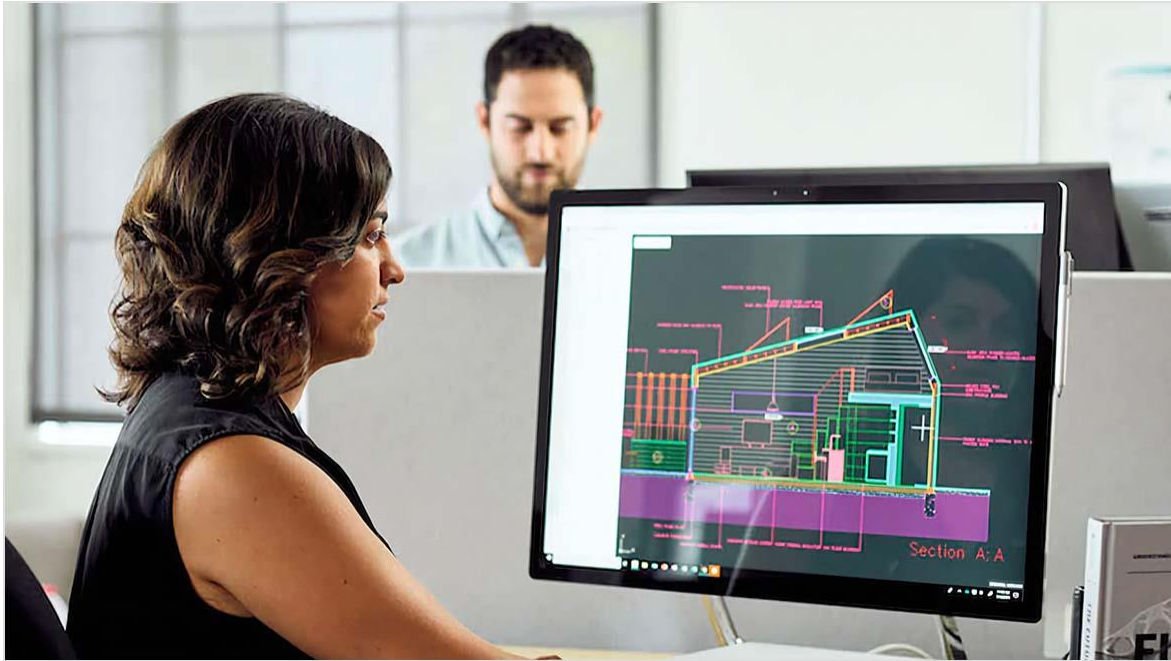


# Course Subjects – Certificate in AutoCAD (Mechanical)



4

## 1. Introduction to CAD and AutoCAD

- Introduction to CAD (Computer Aided Design)
  - Applications of AutoCAD in Mechanical Engineering
  - AutoCAD Interface and Workspace
  - Drawing Setup and Units
- 

## 2. Basic Drawing Commands

- Line, Circle, Arc
  - Rectangle, Polygon, Ellipse
  - Polyline and Construction Lines
- 

## 3. Editing Commands

- Move, Copy, Rotate
  - Mirror and Scale
  - Trim and Extend
  - Offset Command
  - Fillet and Chamfer
-

## **4. Drawing Tools and Utilities**

- Layers and Layer Management
  - Object Snap (OSNAP)
  - Grid and Snap Settings
  - Selection Tools
- 

## **5. Dimensioning and Annotation**

- Linear Dimension
  - Angular Dimension
  - Radius and Diameter Dimension
  - Text and Annotation Tools
- 

## **6. Mechanical Drawing Practice**

- Machine Components Drawing
  - Nuts, Bolts, and Threads
  - Sectional Views
  - Assembly Drawing Basics
- 

## **7. Blocks and Design Library**

- Creating Blocks
  - Inserting Blocks
  - Reusable Mechanical Components
- 

## **8. Introduction to 3D Modeling**

- 3D Workspace
  - Extrude, Revolve, Sweep
  - 3D Viewing and Visualization
- 

## **Skills Gained**

- ✓Mechanical 2D Drafting
- ✓Basic 3D Modeling

✓Engineering Drawing Standards

✓AutoCAD Design Skills

