

# Raj Global Technical Institute

Accredited by National Institute of Electronics & Information Technology (NIELIT),  
formerly known as the DOEACC Society, ACCR No. O-2427, CCC-9908490

ADDRESS:- BARHAI TOLA MUKERIGANJ, AZAMGARH(U.P.) 276001

Website :- [www.rgti.in](http://www.rgti.in), Email :- [rajglobalazm@gmail.com](mailto:rajglobalazm@gmail.com)

## Information Booklet cum Syllabus

# AutoCAD Course Syllabus

Course Duration

6 – 12 Months



January 2026

## Course Overview

The **AutoCAD Course** is designed to provide students with practical knowledge of computer-aided design (CAD) used in engineering, architecture, and construction industries.

Students will learn to create **2D drawings, 3D models, and technical designs** using AutoCAD software, preparing them for careers in drafting, designing, and engineering support roles.

---

## Eligibility

- Minimum Qualification: **10th / 12th Pass**
  - Basic computer knowledge
  - Interest in design or engineering
- 

## Course Objectives

- To understand AutoCAD tools and interface
  - To create 2D drawings and layouts
  - To develop 3D modeling skills
  - To prepare technical drawings for industry use
  - To build professional drafting skills
- 

## Certification

After successful completion of the course, students will receive a **Cyber Security Certificate** from **Raj Global Technical Institute**.

---

## Career Opportunities

After completing this course, students can work as:

- Cyber Security Assistant
- IT Security Support
- Network Security Technician
- Cyber Security Analyst (Entry Level)
- Security Awareness Trainer

## **AutoCAD Course Syllabus**

### **Module 1: Introduction to AutoCAD**

- Introduction to CAD
  - Overview of AutoCAD Software
  - AutoCAD Interface
  - Drawing Area & Navigation Tools
  - Units and Coordinates
- 

### **Module 2: Basic Drawing Commands**

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

### **Module 3: Modify Commands**

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

### **Module 4: Drawing Aids**

- Grid and Snap
  - Ortho Mode
  - Object Snap (OSNAP)
  - Polar Tracking
-

### **Module 5: Layers and Properties**

- Creating and Managing Layers
  - Line Types and Colors
  - Line Weight
  - Object Properties
- 

### **Module 6: Text and Dimensions**

- Single Line Text
  - Multiline Text
  - Dimension Styles
  - Linear, Angular, Radius Dimensions
- 

### **Module 7: Blocks and Groups**

- Creating Blocks
  - Inserting Blocks
  - Editing Blocks
  - Grouping Objects
- 

### **Module 8: Hatching and Filling**

- Hatch Patterns
  - Gradient Fill
  - Editing Hatch
- 

### **Module 9: Layout and Printing**

- Model Space vs Paper Space
  - Creating Layouts
  - Viewports
  - Plotting and Printing Drawings
-

## **Module 10: 3D Modeling (Advanced)**

- Introduction to 3D
  - 3D Coordinates
  - Solid Modeling
  - Extrude, Revolve, Sweep
  - 3D View and Rendering
- 

## **Practical Training**

Students will receive **hands-on training** in:

- 2D drafting
  - Floor plan design
  - Mechanical drawing
  - 3D object modeling
  - Technical drawing projects
- 

## **Project Work**

Students will complete **real-world projects**, such as:

- House plan design
  - Mechanical part drawing
  - Interior layout design
  - 3D model creation
- 

## **Software Covered**

- **AutoCAD (Latest Version)**

## **Certification**

After successful completion, students will receive an **AutoCAD Certificate** from **Raj Global Technical Institute**.

---

## **Career Opportunities**

After completing this course, students can work as:

- AutoCAD Designer
  - Draftsman
  - Civil Draftsman
  - Mechanical Draftsman
  - Interior Designer Assistant
- 

## **Why Choose Raj Global Technical Institute**

- Industry-oriented training
- Practical project-based learning
- Experienced trainers
- Modern computer lab
- Placement assistance