

AUTOCAD AT A GLANCE

COMPONENTS

- What is AutoCAD?
- Key Features
- Essential to Tools
- Ex: Universal Coupling
- Applications of AutoCAD
- Conclusion

WHAT IS AUTOCAD?

- AutoCAD is a leading CAD software by Autodesk.
- Used for 2D and 3D design, drafting, and modeling.
- Widely adopted in industries like architecture, engineering, and manufacturing.

What is **Autocad?**

Learn AutoCAD to boost your career
in Architecture



KEY FEATURES

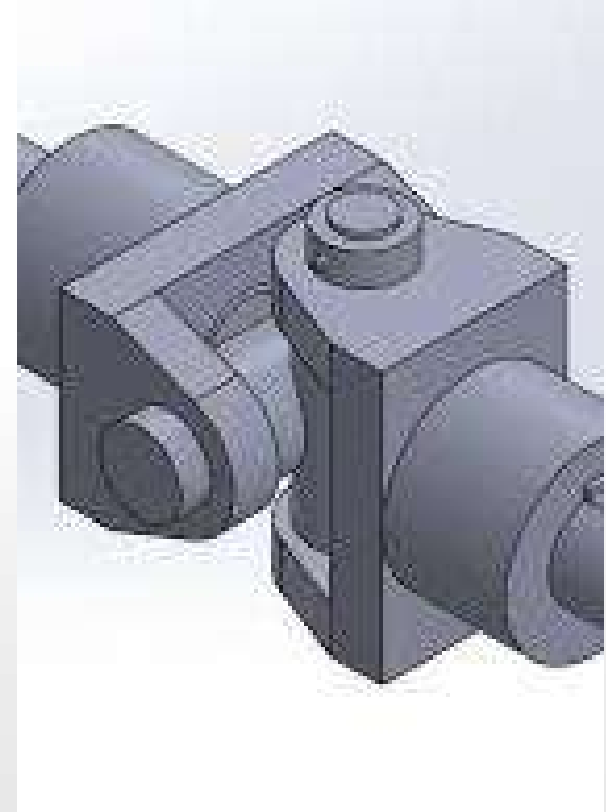
- **2D Drafting:** Precise creation and editing of 2D designs.
- **3D Modeling:** Advanced tools for creating and visualizing 3D models.
- **Customization:** Tailor commands, tool palettes, and workspaces to your needs.
- **Collaboration:** Share and collaborate on designs via the cloud.

ESSENTIAL TOOLS

- Trim, Extend, Fillet
- Dimensioning and Annotation
- Line, Polyline, Circle, and Arc Tools
- Hatch and Gradient
- Blocks and Xrefs (External References)

EX: UNIVERSAL COUPLING

A universal coupling transmits torque between misaligned shafts using a yoke, cross (spider), and bearings. In AutoCAD, model the yokes with circles and rectangles, extrude them, then create and position the cross. Align the yokes with the cross and add bearings between them. This design is crucial in applications like automotive systems and industrial machinery for effective torque transmission despite angular misalignment.



PRACTICAL APPLICATIONS

- Architecture: Floor plans, elevations, sections.
- Mechanical Engineering: Machine components, assemblies.
- Civil Engineering: Site plans, road designs.
- Interior Design: Space planning, furniture layouts

CONCLUSION

- AutoCAD is a versatile tool essential for 2D and 3D design across various industries
- **Key Points:**
 - **Powerful Features:** Streamlines drafting, modeling, and visualization.
 - **Customization:** Adaptable to specific project needs.
 - **Final Thought:** Mastering AutoCAD enhances design precision and efficiency.

THANK YOU