



Architectural Drafting with AutoCAD and Revit Training Course

Ref: #CAD2552



Course Introduction / Overview:

This training course is designed to equip architectural professionals, designers, and project managers with the strategic and technical skills needed to master architectural drafting using AutoCAD and Revit. The ability to create detailed, precise drawings is a critical factor for ensuring accuracy and clear communication on a project. This program, offered by BIG BEN Training Center, provides a comprehensive framework for understanding the core principles of both 2D drafting and Building Information Modeling (BIM), from various drawing tools and drafting techniques to 3D modeling and data management. We will explore key concepts such as schematic design, blueprint reading, and the use of BIM collaboration tools. The curriculum is informed by the academic work of authors like William V. Kennedy, whose book, *Architectural Graphics*, provides a foundational and detailed understanding of the principles behind effective visual communication in architecture. This course goes beyond a simple overview of software to provide a deep understanding of how to implement real-world solutions that ensure design accuracy, operational efficiency, and project profitability. We prepare participants to be leaders who can build more efficient and innovative design initiatives.

Target Audience / This training course is suitable for:



- Architects and urban planners.
- Interior designers.
- Civil and structural engineers.
- Drafting technicians.
- Construction managers.
- Facilities managers.
- Architectural students.
- Government agencies and equivalents.

Target Sectors and Industries:

- Architecture and Design.
- Construction.
- Real Estate Development.
- Interior Design.
- Urban Planning.
- Civil Engineering.
- Infrastructure.
- Government and public administration agencies.

Target Organizations Departments:

- Architecture.
- Design and Drafting.
- Project Management.
- Construction.
- Facilities Management.
- Real Estate.
- Strategic Planning.
- Research and Development.



Course Offerings:

By the end of this course, the participants will have able to:

- Apply core architectural drafting principles.
- Create and modify drawings in AutoCAD.
- Utilize Revit for Building Information Modeling (BIM).
- Master 2D drafting and 3D modeling techniques.
- Perform accurate blueprint reading.
- Ensure BIM collaboration and data management.
- Adhere to industry drafting standards.
- Produce clear and precise architectural documents.

Course Methodology:

This training course uses a highly practical and case-study driven methodology. The program is built on real-world examples of successful architectural drafting projects. Participants will work in teams to design a small architectural project from schematic design to final construction documents, applying the tools and frameworks learned in the course. We will use interactive workshops to practice skills like layer management in AutoCAD and family creation in Revit. The curriculum is designed to be a collaborative experience where participants can share their unique challenges and innovative solutions. Our trainers, with extensive experience in the field, will provide direct feedback and guidance throughout the course. BIG BEN Training Center is committed to providing a dynamic and practical learning environment, ensuring that participants leave with the skills and confidence to effectively perform architectural drafting.



Course Agenda (Course Units):

Unit One: Foundations of Architectural Drafting

- The role of architectural drawings.
- Introduction to AutoCAD and Revit.
- Understanding 2D drafting vs. BIM.
- The importance of blueprint reading.
- Basic drawing commands in AutoCAD.
- Setting up a project in Revit.
- Case studies in architectural design.

Unit Two: AutoCAD for Architectural Design

- Advanced drawing tools and commands.
- Creating and using dynamic blocks.
- Managing layers and layer states.
- Annotation and dimensioning standards.
- Plotting and printing drawings.
- Using external references (Xrefs) for large projects.
- Ensuring consistent drafting standards.

Unit Three: Revit for Building Information Modeling

- Introduction to the Revit interface.
- Creating walls, doors, and windows.
- Working with floors and roofs.
- Building a simple 3D model.
- The concept of BIM collaboration.
- Using shared parameters.
- Generating schedules and quantities.



Unit Four: Advanced BIM and Data Management

- Creating custom families in Revit.
- Linking different models.
- Managing data in a BIM model.
- Working with views and sheets.
- Performing a basic clash detection.
- Best practices for project workflows.
- Exporting to other formats.

Unit Five: Strategic Application and Industry Trends

- Applying BIM standards.
- Workflow optimization.
- The future of architectural technology.
- The impact of technology on design.
- Career pathways for BIM specialists.
- Leadership in digital design.
- The value of integrated design.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:



How can a deeper understanding of architectural drafting with AutoCAD and Revit and a proactive approach to BIM collaboration empower professionals to move beyond traditional methods and become strategic leaders in creating more accurate, efficient, and innovative projects?

What unique qualities does this course offer compared to other courses?

This training course is unique because it provides a dedicated, strategic focus on architectural drafting with AutoCAD and Revit. While other programs may cover one software, our curriculum is designed to empower professionals with the specific skills needed to address the unique challenges of modern design, from mastering 2D drafting to leveraging BIM for data management. The program is a hands-on experience, with exercises that directly simulate the challenges and decisions involved in a real-world design scenario. We go beyond theoretical concepts to provide a clear, actionable roadmap for balancing the demands of a complex project with the imperative of delivering a successful and well-documented outcome. This course is for professionals who want to lead their organizations toward a more efficient, profitable, and innovative future.