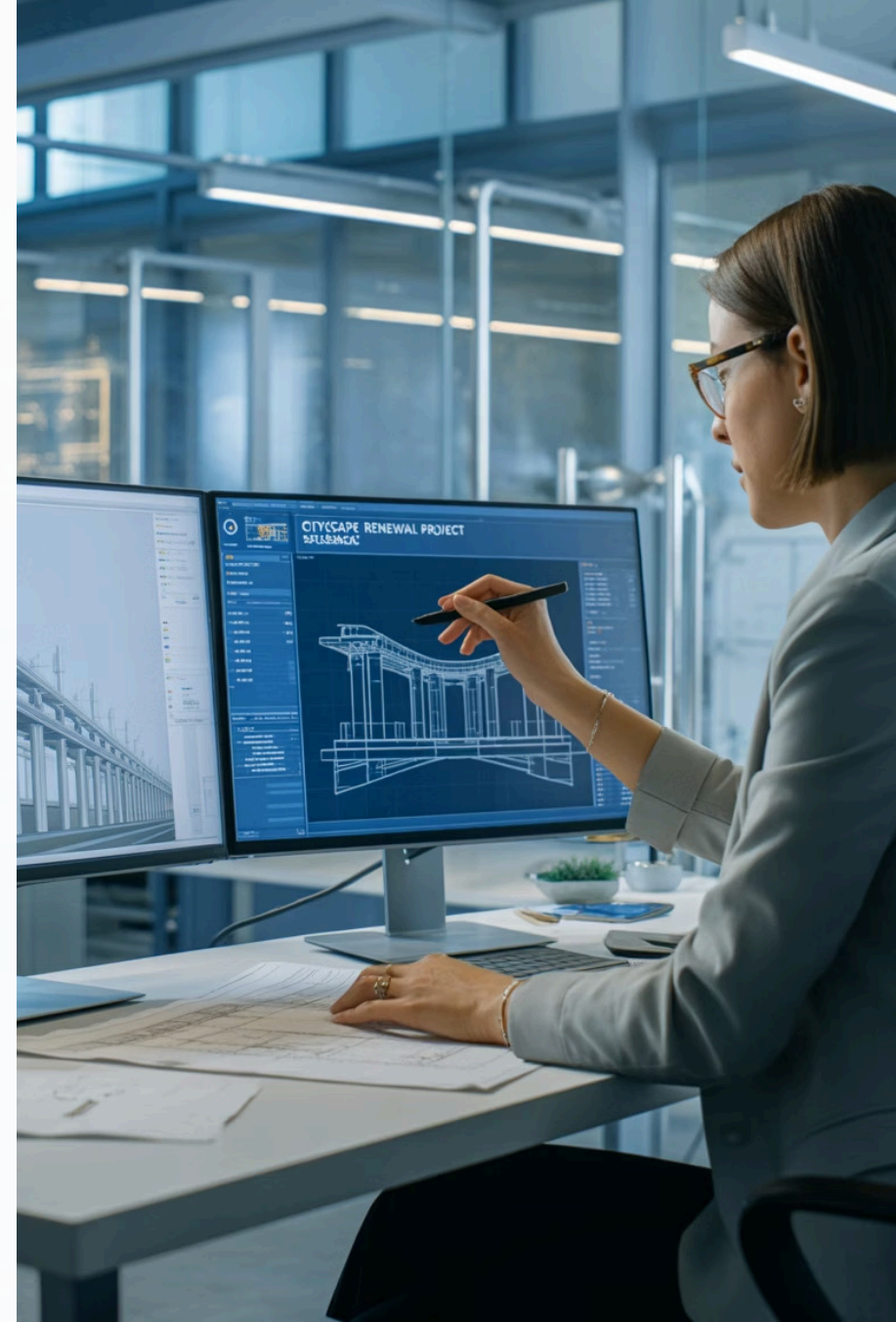


Civil CAD Design Certification Programs

Welcome to our comprehensive overview of Civil CAD Design certification programs. These industry-recognized certifications will equip you with the technical skills and knowledge needed to excel in the field of civil engineering and infrastructure design.

Our 135-hour program covers three powerful software platforms: AutoCAD Civil, Civil 3D, and InRoads. Each certification is designed to align with current industry demands and provide you with marketable skills that employers value.



AutoCAD Civil Fundamentals

Core Curriculum

Master the AutoCAD interface, basic drafting tools, site planning, road design, contour mapping, terrain modeling, grading plans, utility drafting, and construction documentation.

Certification Details

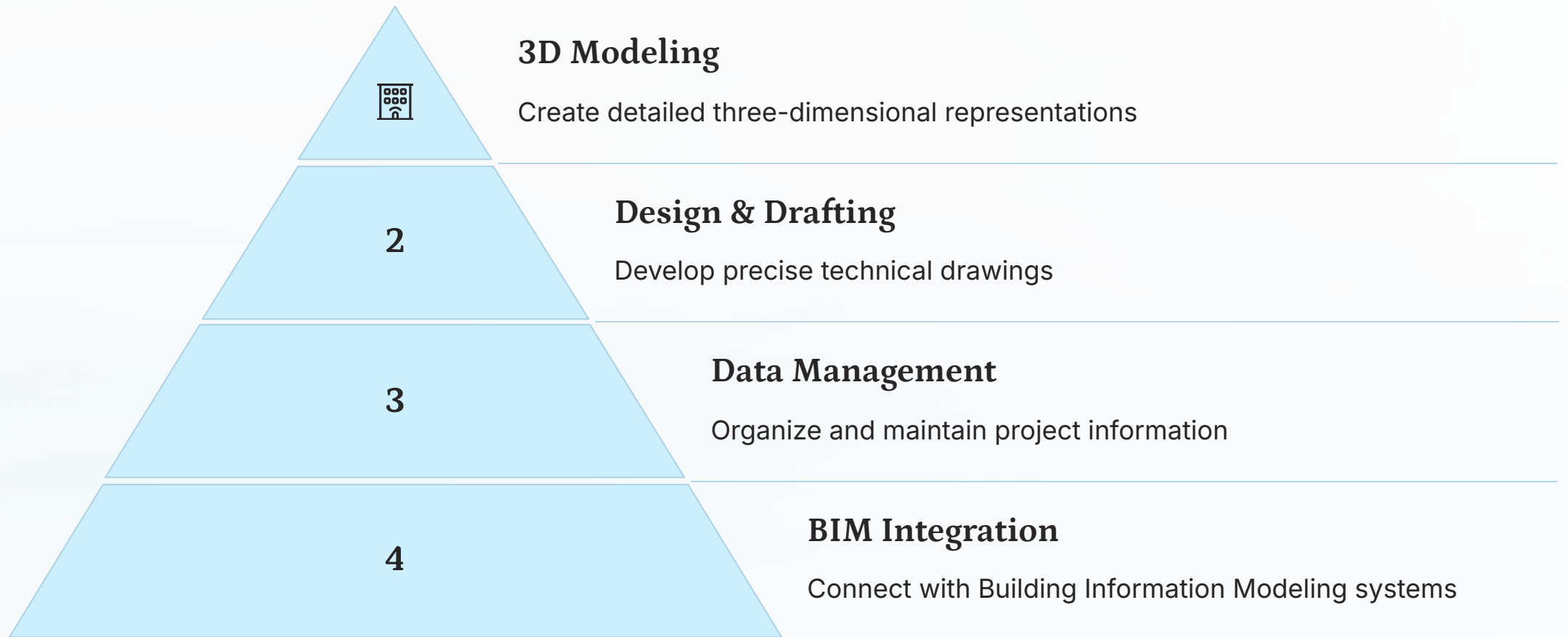
Valid for 3 years with recertification required thereafter. Provided by Autodesk and widely recognized in the AEC industry.

Career Paths

Prepare for roles as Civil Designer, CAD Technician, Draughtsman, BIM Specialist, Infrastructure Engineer, Surveyor, or Urban Planner.

**SITE
PLAN**

Industry Applications of AutoCAD Civil



AutoCAD Civil provides essential tools that align perfectly with industry demands. Professionals use these capabilities to create comprehensive civil engineering designs that meet project specifications while maintaining accuracy and efficiency throughout the development process.



Civil 3D Advanced Capabilities

1

Surface Creation and Terrain Modeling

Generate accurate digital terrain models from survey data



Corridor and Roadway Design

Design complex transportation infrastructure with precision



Pipe Networks

Create comprehensive stormwater and sanitary systems

4

Quantity Take-off & Earthwork Calculations

Generate accurate material estimates and cut/fill volumes

Civil 3D Career Opportunities

Civil Engineer

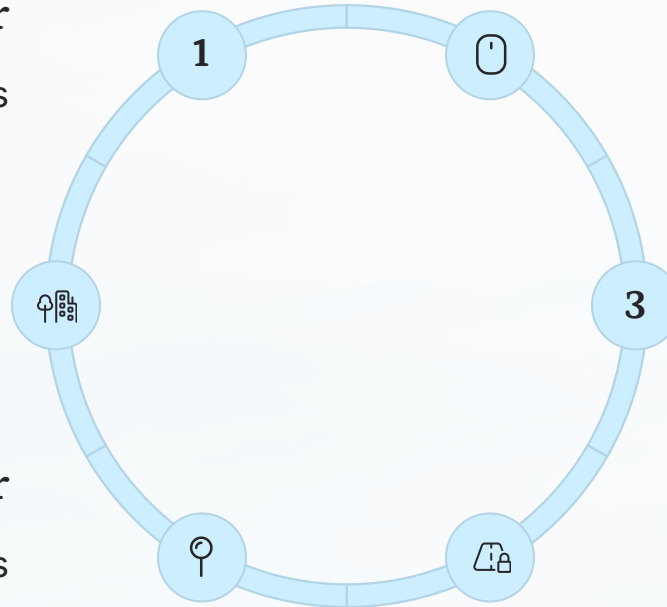
Design and oversee infrastructure projects

Urban Planner

Develop comprehensive land use plans

Surveyor

Measure and map land features



CAD Technician

Create detailed technical drawings

BIM Modeler

Develop comprehensive building information models

Transportation Engineer

Design highways, roads, and transit systems

Civil 3D certification opens doors to diverse career paths in the AEC industry. This Autodesk certification remains valid for 3 years, requiring recertification to maintain current skills. The software's capabilities in infrastructure design, 3D modeling, and BIM collaboration make it highly valued by employers.

Infracore for Infrastructure Planning

Curriculum Highlights

- Introduction to Infracore interface
- Importing real-world data
- Road and highway design
- Bridge and drainage modeling
- Terrain and site design
- Urban planning tools
- Visualization capabilities
- Cloud collaboration features
- Design alternative analysis

Certification Value

Unlike other certifications, Infracore offers lifetime validity and is globally recognized. Provided by stem.org, this certification demonstrates advanced skills in infrastructure planning, data integration, visualization, and analysis.

The software is widely respected in the AEC industry and provides a competitive advantage for professionals seeking roles in civil engineering, infrastructure design, urban planning, and transportation engineering.

Infraworks Career Applications

Infrastructure Planning

Develop comprehensive plans for roads, bridges, and urban developments using real-world data and advanced modeling tools. Create multiple design scenarios to evaluate options before construction begins.

Data Integration

Combine GIS data, CAD files, and other information sources into a unified model. Leverage existing information to create accurate representations of both current conditions and proposed changes.

Visualization

Create compelling visual presentations that help stakeholders understand complex infrastructure projects. Generate photorealistic renderings and animations that communicate design intent effectively.

Analysis

Evaluate design alternatives using built-in analysis tools. Assess factors like traffic flow, drainage patterns, and environmental impact to optimize infrastructure designs.



CAD Designer Exit Profile



Technical Drawing Creation

Develop detailed blueprints and specifications

2

3D Modeling Expertise

Build accurate three-dimensional representations



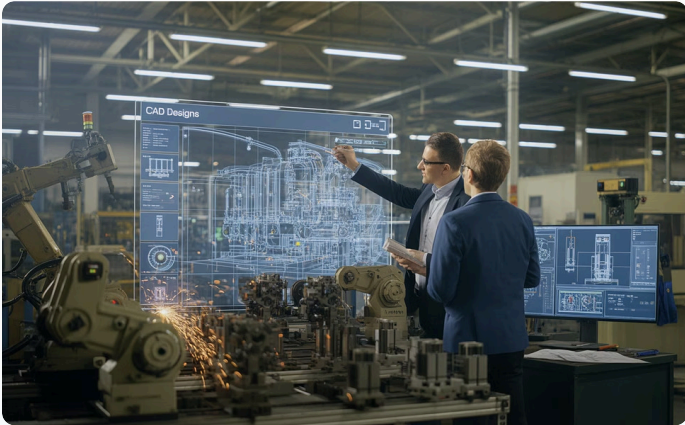
Collaborative Project Work

Partner with engineers and architects

A CAD Designer creates detailed technical drawings, blueprints, and 3D models using specialized software. These professionals are critical in industries such as engineering, architecture, automotive, and manufacturing. They collaborate closely with engineers and architects to develop designs that meet project specifications.

Our 135-hour program prepares you to excel in this role by providing comprehensive training across multiple CAD platforms used in civil engineering and infrastructure design.

Industry Alignment and Applications



Manufacturing & Automotive

CAD Designers create detailed product designs and manufacturing specifications for components and assemblies. Their work enables precise fabrication and assembly of complex parts in manufacturing and automotive industries.



Aerospace & Electronics

In aerospace and electronics, CAD Designers develop intricate component designs that must meet strict safety and performance standards. Their technical drawings guide the production of sophisticated systems.



Architecture & Civil Engineering

CAD Designers create detailed construction documents, site plans, and infrastructure designs. Their work forms the foundation for building projects and civil engineering developments.

Program Overview and Next Steps

Program Duration

Complete all three certifications within 135 hours of comprehensive training



2

Certification

Earn industry-recognized credentials from Autodesk and stem.org

3

Professional Growth

Continue developing expertise through recertification and advanced training



Career Launch

Apply your skills in various industries as a qualified CAD Designer

Our Civil CAD Design program provides a comprehensive pathway to becoming a skilled CAD Designer. Through 135 hours of training across AutoCAD Civil, Civil 3D, and Infraworks, you'll develop the technical expertise needed to succeed in this dynamic field.

Ready to start your journey? Contact our enrollment team today to learn more about upcoming course dates, financing options, and how our program can help you achieve your career goals in civil engineering and infrastructure design.