

# Civil 3D Certificate Program (Self-Paced)

Develop the skills to design and refurbish public infrastructure using AutoCAD Civil 3D. This hands-on program prepares you for a career in civil engineering, focusing on 3D modeling, data management, and real-world project applications.

Group classes in Live Online and onsite training is available for this course. For more information, email [corporate@nobledesktop.com](mailto:corporate@nobledesktop.com) or visit: <https://www.nobledesktop.com/certificates/civil-3d-certificate-program>



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## Course Outline

This package includes these courses

- Introduction to AutoCAD (Self-Paced) (30 Hours)
- Intermediate AutoCAD (Self-Paced) (30 Hours)
- Intermediate Civil 3D: Surveying and Mapping (Self-Paced) (30 Hours)
- Intermediate Civil 3D: Transportation Design (Self-Paced) (30 Hours)
- Intermediate Civil 3D: Land Development (Self-Paced) (30 Hours)

### Introduction to AutoCAD (Self-Paced)

We start at the very beginning, using AutoCAD to draw drafting symbols, kitchen and bath fixtures, and then create a floor plan. We assemble everything into one sheet file. Learn about Drawing on Layers, Adding Text, Dimensions & Plotting.

- Create drafting symbols, kitchen and bath fixtures, a floor plan and integrate all information into one deliverable sheet file.
- Distinguish the differences required to generate drawings for use as annotation and real-world model components.
- Create and insert blocks and externally reference files and determine the appropriate times to apply those skill sets.
- Master file management, drafting on layers, integrating drawing component files and plotting while creating on the class residential project.

### Intermediate AutoCAD (Self-Paced)

Use AutoCAD to draw an abbreviated set of construction documents for a residential project: floor plan, roof plan, foundation plan, electrical plan & building elevations. Create, insert and link drawings. Learn the best workflow.

- Create an abbreviated set of construction documents including floor plan, foundation plan, electrical plan and building elevations for a small residential project.
- Create and insert blocks, externally reference files and determine the appropriate times to apply those skill sets to optimize project efficiency.
- Demonstrate layer and file management, external file referencing, use of model/layout environments and user coordinate systems.

- Apply intermediate-level skills including layer management, user coordinate system development, creating sheet layout environments and plotting.

## **Intermediate Civil 3D: Surveying and Mapping (Self-Paced)**

In this course you will become familiar with alignments, surface profiles, design profiles and view windows, assemblies, corridors, intersections, sample lines, cross sections, and 3D visualization.

- Create multiple types of alignments
- Develop surface and design profiles
- Adjust profile view windows
- Label both alignments and profiles
- Build corridors with the required sub-elements and create a cul-de-sac
- Create an intersection corridor and create sample lines along a corridor
- Display cross sections
- Visualize a roadway in a 3-dimensional drive through

## **Intermediate Civil 3D: Transportation Design (Self-Paced)**

In this course you will become familiar with alignments, surface profiles, design profiles and view windows, assemblies, corridors, intersections, sample lines, cross sections, and 3D visualization.

- Create multiple types of alignments
- Develop surface and design profiles
- Adjust profile view windows
- Label both alignments and profiles
- Build corridors with the required sub-elements and create a cul-de-sac
- Create an intersection corridor and create sample lines along a corridor
- Display cross sections
- Visualize a roadway in a 3-dimensional drive through

## **Intermediate Civil 3D: Land Development (Self-Paced)**

In this course you will build drawing template files, utilize data shortcuts, work with feature lines, learn about site interactions, create grading groups, lay out pipe networks, and draft pressure networks.

- Create multiple Civil 3D object and label styles
- Develop a custom drawing template file
- Manage data shortcuts
- Create and edit feature lines and grading groups
- Learn about pipe and pressure parts catalogs
- Layout pipe and pressure networks
- Annotate pipe and pressure networks
- Create a custom drawing sheet