



Civil 3D Certification Prep Course

Instructor guide

Course duration: ~795 minutes

Product: Autodesk® Civil 3D®

This instructor guide supports delivery of the Civil 3D for Infrastructure Design Professional Certification Prep course. Use it to plan instruction, review module content, and guide hands-on activities. Before teaching, review all related course videos, datasets, and resources.

This course prepares learners for the Autodesk Certified Professional in Civil 3D exam. Participants will apply real-world infrastructure workflows including surface modeling, alignments, grading, corridors, pipe networks, and data management.

Learning objectives:

- Create and annotate alignments, profiles, and sections.
- Generate and analyze terrain surfaces and grading models.
- Design and document pipe and pressure networks.
- Manage Civil 3D data sharing, templates, and coordinate systems.
- Work with survey points, parcels, and site features.
- Model corridors and perform material quantity takeoffs.

Each module is listed below along with suggested time allocations for instruction. The referenced demonstrations are based on the step-by-step instruction included in the course. Review the learning objectives for each module.

Getting started

Total time required for module: 20 minutes

Discuss objectives: 10 minutes

- Review course overview and learning objectives
- Download the course resources and software
- Create an Autodesk ID
- Install the software
- Review the starter activity and articles

Hands-on time: 5 minutes

About this certification

Total time required for module: 10 minutes

Discuss objectives: 10 minutes

- Review the exam objectives
- Explore sample test questions
- Review test-taking tips.

Hands-on time: 5 minutes

See where you stand

Total time required for module: 45 minutes

Discuss objectives: 5 minutes

Pre-test: Before you begin this course, test your skills by taking the following assessment to see where you stand.

Hands-on time: 40 minutes

Alignments, Profiles, and Sections

Total time required: 80 minutes

Discuss objectives: 10 minutes

- Create, modify, and label alignments.
- Create, modify, and label profiles.
- Create, modify, and label profile views.
- Create, modify, and label sample lines and sections.
- Create, modify, and label section views.

Hands-on time: 20 minutes

Assignments:

Practice exercise: 15 minutes

Challenge assignment: 15 minutes

Datasets: see course resources

Surfaces and Grading

Total time required: 90 minutes

Discuss objectives: 15 minutes

- Create, modify, and label surfaces.
- Perform surface analysis.
- Create surface volume calculations.
- Create/modify feature lines.
- Create/modify Grading Creation Tools

Hands-on time: 55 minutes

Assignments:

Practice exercise: 15 minutes

Challenge assignment: 15 minutes

Datasets: see course resources

Pipe and Pressure Networks

Total time required: 65 minutes

Discuss objectives: 15 minutes

- Create, modify, and label gravity pipe networks in plan, profile, and section views.
- Create, modify, and label pressure networks in plan, profile, and section views.
- Create/modify Grading Creation Tools

Hands-on time: 20 minutes

Assignments:

Practice exercise: 15 minutes

Challenge assignment: 15 minutes

Datasets: see course resources



Data Management and Collaboration

Total time required: 90 minutes

Discuss objectives: 15 minutes

- Share Civil 3D data between files.
 - Reference templates.
 - Create sheets using plan production tools.
 - Utilize Reports Manager tools.
 - Utilize import and export tools.
 - Demonstrate knowledge of sites.
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- Modify and apply Civil 3D styles.

Hands-on time: 45 minutes

Assignments:

Practice exercise: 15 minutes

Challenge assignment: 15 minutes

Datasets: see course resources

Points, Parcels, and Survey Data

Total time required: 80 minutes

Discuss objectives: 15 minutes

- Import, create, and modify points.
- Modify and apply point labels.
- Create and modify point groups.
- Create, modify, and label parcels.

Hands-on time: 35 minutes

Assignments:

Practice exercise: 15 minutes

Challenge assignment: 15 minutes

Datasets: see course resources

Corridors

Total time required: 90 minutes

Discuss objectives: 15 minutes

- Create and modify corridors.
- Create and modify assemblies.
- Create corridor surfaces.
- Calculate material quantities.
- Utilize custom PKTs

Hands-on time: 45 minutes

Assignments:

Practice exercise: 15 minutes

Challenge assignment: 15 minutes

Datasets: see course resources

Assignments and Practice Test

Course Challenge: 180 minutes and **Practice Test:** 45 minutes