

# SVR 120 - CAD FOR SURVEYING

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## Course Description

Using AutoCAD Civil 3D, this course provides students a single software environment to complete survey mapping projects. Students will learn the basics of how the field measurement data collected from surveyors' instruments are processed into a dynamic Civil 3D model. Included are traverse plotting, site plans, contour mapping, legal descriptions, platted subdivisions, cross sections, and development of plan and profile drawings. Students will directly apply this knowledge in laboratory assignments. Group 2 course

## Credit Hours

4

## Contact Hours

5

## Lecture Hours

3

## Lab Hours

2

## Required Prerequisites

MTH 111 or higher, can be taken concurrently

## General Education Outcomes supported by this course

Quantitative Reasoning

## Course Learning Outcomes

### Knowledge:

- Identify correct terminology used within AutoDesk Civil 3D software.

### Application:

- Develop 2D and 3D modeling skills.
- Create survey workflows.

### Integration:

- Demonstrate 2D and 3D modeling techniques using AutoDesk Civil 3D software.
- Develop multiple layers within their survey project.

### Human Dimension:

- Assess how they assimilate collected data using software for the creation of a land development activity.

### Caring - Civic Learning:

- Understand how poorly collected field data will result in an inadequate design process.

### Learning How to Learn:

- Identify the proper surveying instrument required to complete a 2D and 3D model.