



CERTIFICATE

## Certificate in Surveying Technology

**Total Credit Hours:** 38-39

**About** Certificate in Surveying Technology

The Surveying Technology program prepares the student for immediate employment as a surveying or Geographic Information Systems (GIS) technician and teaches the student knowledge and skills that will enable one to adapt to ever evolving technical and technological changes in geospatial field and office applications. The graduate will be prepared to face the challenge of modern Surveying and GIS practice. The program emphasizes applications-based approaches and provides an overview of the geospatial fields of surveying, mapping, and GIS and prepares the student for further study and for the Level 1 Certified Survey Technician examination prepared by the American Society on Surveying and Mapping National Society of Professional Surveyors (ACSM-NSPS).

### [REQUIREMENTS FOR CERTIFICATE](#)

Major Requirements		
Course	Course Name	Credits
<b>English (Choose 1)</b>		
EN110	Freshman Composition	3
EN110A	Freshman Composition with Instructional Lab	4
<b>Course</b>		
<b>Course Name</b>		
<b>Credits</b>		
AE121	Technical Engineering Draw I	3
AE150	Computer Aided Drafting I (CAD I)	3
CE211	Plane Surveying I	3
CE222	Plane Surveying II	3
CS101	Introduction to Computer Systems &	3

	Information Technology	
HL130	First Aid & Safety	1
MA161A	College Algebra & Trigonometry I	3
MA161B	College Algebra & Trigonometry II	3
SU100	Surveying Drafting	3
SU101	Surveying Problems I	3
SU230	Advanced Surveying	3
SU250	Introduction to Geographic Information Systems	3
SU292	Surveying Practicum	1
<b>Certificate Total</b>		<b>41</b>

2024-2025 College Catalog

[GENERAL REQUIREMENTS FOR CERTIFICATE](#)

# General Requirements for Certificates

Effective fall Semester 2003, several academic policy changes were implemented to ensure that students are adequately prepared to meet business and industry standards. All Undeclared or newly Declared Students enrolled in regularly scheduled postsecondary courses must be enrolled in or must have completed developmental coursework for Math and English or have successfully placed into post-secondary Math and English (or equivalent).

Students must fulfill the English general education requirement by the time they have enrolled in 12 credits of classes. This means that students may take only nine (9) credits before they must begin meeting the general education requirements. All declared students in Certificate programs will be required to successfully complete minimum general education course requirements. For more information, refer to the Admissions Information, General Education Policy section of this catalog.

## A. General Education Requirements

Students must demonstrate proficiency in reading, writing, understanding and speaking English as indicated by one of the following:

- Test out of the English Placement Test (or equivalent), or
- Satisfactory completion of EN097 courses and
- Test out of the Math Placement Test (or equivalent), or
- Satisfactory completion of MA098 course

\*Students in the Certificate of Construction Technology program can successfully complete their math requirements with MA094 Mathematics for the Trades in lieu of MA098 Intermediate Algebra.

B. Major Requirements. Total Major Requirements vary by program. Minimum Total Credits Required for a Certificate is 30 credits.

\* No course may be counted for both Major and General Education requirements.

\*\* Placement testing is not mandatory for admission to the College. Completion of placement testing or equivalent, however, is required for enrollment into English and mathematics courses. Therefore, students who plan to enroll full-time in a program should take the placement test to be eligible for a full load of courses.

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[Student Learning Outcomes](#)

Upon successful completion of the Certificate in Surveying Technology program, students will be able to:

1. Demonstrate preparedness to enter productive technical positions in the geospatial fields of surveying, mapping, and Geographic Information Systems.
2. Develop a professional work ethic needed in the surveying industry.
3. Successfully pass the American Society on Surveying and Mapping National Society of Professional Surveyors (ACSM-NSPS) Level 1 Certified Survey Technician examination.

**Check out some of these amazing Certificate in Surveying Technology courses...**

**SU230 Advanced Surveying**

This course will cover advanced topics in surveying including highway and construction surveying, property and legal issues in boundary surveying, concepts of elementary geodetic surveying, and an overview of Global Positioning Systems (GPS) as applied to surveying for centimeter accuracy measurement.

[+ More Info](#) [1]

**SU100 Surveying Drafting**

This course deals with typical job responsibilities of an office draftsman or survey party chief in completing a graphic description of survey fieldwork. These descriptions/plans result from a great variety of engineering fieldwork requiring diverse methods of graphic resolution.

[+ More Info](#) [2]

**CE211 Plane Surveying I**

A beginning course in surveying techniques designed to give the student an understanding of the fundamentals of chaining, leveling, and proper use of the transit. Care and adjustment of instruments and office procedure are also considered. Provision is made by appropriate fieldwork for practical application of the techniques learned.

[+ More Info](#) [3]

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**You may also be interested in these related Programs...**



[4]

[Certificate in Computer Aided Design & Drafting \(CADD\)](#) [4]

Computer Aided Design and Drafting (CADD) systems are used by drafters to prepare electronic drawings that can be viewed, printed, or programmed directly into automated manufacturing systems.

[+ More Info](#) [4]



[5]

[Associate of Science in Surveying Technology](#) [5]

The Surveying Technology program prepares the student for immediate employment as a surveying or Geographic Information Systems (GIS) technician and teaches the student knowledge and skills that will enable one to adapt to ever evolving technical and technological changes in geospatial field and office applications.

[+ More Info](#) [5]



[6]

[Associate of Science in Pre-Architectural Drafting](#) [6]

The A.S. in Pre-Architectural Drafting covers pre-architecture, building materials and properties, technical drafting, basic computer aided design and drafting (CADD), architectural computer modeling, and an introductory engineering course.

[+ More Info](#) [6]