

LAND SURVEYING AND GEOMATICS (TECHNICAL CERTIFICATE)

Degree: Technical Certificate

Program of Study: Land Surveying and Geomatics

Program Code: 1122

About This Major . . .

WCCC/CMU initiate a post-baccalaureate certificate in an on-line format that allows individuals across Colorado – and in surrounding states – to complete 20 hours of surveying-specific course work and a combined internship/capstone project that equates to an additional four credit hours. This certificate would allow students who have a degree, but do not have sufficient surveying-related knowledge and course work to successfully pass the Colorado-required exam to attain a Professional Surveyor License to complete that course work. (Note: These students would still need to prove they had completed the 9 additional math credit hours beyond basic college algebra and geometry not incorporated within the certificate.)

For more information on what you can do with this major, visit WCCC's Programs of Study (<https://www.coloradomesa.edu/wccc/programs>) page.

All CMU/WCCC technical certificate graduates are expected to demonstrate proficiency in communication fluency, quantitative fluency, specialized knowledge/applied learning, and critical thinking. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Demonstrate the theoretical knowledge and practical skills in the performance of surveying (Specialized knowledge)
2. Demonstrate skills practice according to the Land Surveying and Geomatics curriculum and tools (Applied Learning)
3. Demonstrate the ability to learn and apply math needed in Land Surveying (Quantitative Fluency)
4. Communicate effectively with instructors, surveyors and other individuals in the state and BLM (Communication Fluency)
5. Demonstrate error recognition and the ability to correctly interpret symbols, common and statutory laws in the state (Critical Thinking)

Institutional Certificate Requirements

The following institutional requirements apply to all CMU or WCCC Technical Certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Consists of 100-200 level courses.
- At least fifty percent of the credit hours must be taken at CMU/WCCC.
- 2.00 cumulative GPA or higher in all CMU/WCCC coursework.
- A grade lower than "C" will not be counted toward meeting the requirements.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and

internships, cannot exceed twenty-five percent of the semester credit hours required for a technical certificate.

- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Certificate Requirements.
- The Catalog Year determines which program sheet and certificate requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

Program Specific Certificate Requirements

(32-33 semester hours, must earn a grade of "C" or better in each course.)

Code	Title	Semester Credit Hours
STAT 200	Probability and Statistics-GTMA1	3
MATH 135 or MATH 151	Engineering Calculus I Calculus I-GT-MA1	4-5
SURV 100	Introduction to Surveying/Field Work	3
SURV 102	Surveying Calculations I	3
SURV 200	Advanced Surveying Field Work	4
SURV 203	Legal Aspects of Surveying	3
SURV 204	Real Property Descriptions	2
SURV 205	Advanced Surveying Computations/Calculations	4
SURV 207	Surveying Ethics: An Overview of Ethical Expectations	2
SURV 298	Internship/Capstone Project	4
Total Semester Credit Hours		32-33

Course	Title	Semester Credit Hours
First Year		
Fall Semester		
STAT 200	Probability and Statistics-GTMA1	3
SURV 100	Introduction to Surveying/Field Work	3
SURV 102	Surveying Calculations I	3
SURV 200	Advanced Surveying Field Work	4
SURV 203	Legal Aspects of Surveying	3
SURV 204	Real Property Descriptions	2
Semester Credit Hours		18
Spring Semester		
MATH 135 or MATH 151	Engineering Calculus I or Calculus I-GT-MA1	4-5
SURV 205	Advanced Surveying Computations/Calculations	4
SURV 207	Surveying Ethics: An Overview of Ethical Expectations	2
SURV 298	Internship/Capstone Project	4
Semester Credit Hours		14-15
Total Semester Credit Hours		32-33

Advising Process and DegreeWorks

Documentation on the pages related to this program is intended for informational purposes to help determine what courses and associated requirements are needed to earn a certificate. Some courses are critical to complete in specific semesters while others may be moved around. Meeting with an academic advisor is essential in planning courses and discussing the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended certificate.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a certificate and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their certificate requirements (for one-semester certificates, complete in the first week of class):

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at <http://www.coloradomesa.edu/registrar/graduation.html>.

If a student's petition for graduation is denied, it will be her/his responsibility to consult the Registrar's Office regarding next steps.