



2017-2018 PETITION/PROGRAM SHEET

Degree: Associate of Applied Science
Major: Land Surveying & Geomatics

This program is pending approval by CMU's Senate, due in May. It will be posted on the website upon approval. The program starts Fall 2017.

About This Major...

The Professional Land Surveyor program prepares students to use equipment that is an integral part of land development for areas of engineering, construction projects and planning.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/wccc/programs.html.

All CMU associate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to: (1) Graduates of this two-year program will be prepared to qualify as a land surveyor intern under C.R.S. 12-25-212 (3) (a) (II) (A) have graduated from a board-approved two-year surveying curriculum; and(B) Have a cumulative record of two years or more of progressive land surveying experience.

Specifically, graduates will...

- 1. Demonstrate the fundamentals of land surveying;
2. Describe the components and use of Global Positioning Systems (GPS) and Geographical Information Systems (GIS) and be able to gather and analyze data from these systems;
3. Demonstrate and describe competently use spreadsheets and other relevant computer programs (CAD and industry specific software programs) to provide accurate surveying analytics;
4. Demonstrate and apply higher level mathematical concepts that are necessary to complete complex survey tasks (analytical geometry, upper level algebra, calculus, statistics);
5. Describe the Common Law roots of Boundary Law, its importance in maintaining accurate records and be able to apply those principles in surveying.

NAME: _____ STUDENT ID #: _____

LOCAL ADDRESS AND PHONE NUMBER: _____

_____ () _____

I, (Signature) _____, hereby certify that I have completed (or will complete) all the courses listed on the Program Sheet. I have read and understand the policies listed on the last page of this program sheet. I further certify that the grade listed for those courses is the final course grade received except for the courses in which I am currently enrolled and the courses which I complete next semester. I have indicated the semester in which I will complete these courses.

Signature of Advisor _____ Date _____ 20__

Signature of Department Head _____ Date _____ 20__

Signature of Registrar _____ Date _____ 20__

DEGREE REQUIREMENTS:

- 60 hours total (A minimum of 15 of the final 30 semester hours of credit at CMU)
- 2.00 cumulative GPA or higher in all CMU coursework
- A grade of "C" or higher must be achieved in coursework toward major content area.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Program sheets are for advising purposes only. Because a program may have requirements specific to the degree, check with your advisor for additional guidelines, including prerequisites, grade point averages, grades, exit examinations, and other expectations. It is the student's responsibility to be aware of, and follow, all guidelines for the degree being pursued. Any exceptions or substitutions must be approved by the faculty advisor and/or Department Head. Courses related to teacher licensure must also be approved by the Teacher Education Dept.
- When filling out the program sheet a course can be used only once.
- See the "Requirements for Undergraduate Degrees and Certificates" in the catalog for additional graduation information.

ESSENTIAL LEARNING REQUIREMENTS (Minimum 15 semester Hours) See the current catalog for a list of courses that fulfill the requirements below. If a course is on the Essential Learning list of options and a requirement for your major, you must use it to fulfill the major requirement and make a different selection within the Essential Learning requirement. The Essential Learning capstone course and co-requisite Essential Speech course (required for bachelor's degrees) cannot be used as options for the below requirements.

Course No Title	Sem.hrs	Grade	Term
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Communication (6 semester hours)

ENGL 111 English Composition	3	_____	_____
ENGL 112 English Composition	3	_____	_____

-OR-

ENGL 111 English Composition <u>and</u>	3	_____	_____
SPCH 101 Interpersonal Communication <u>or</u>	3	_____	_____
SPCH 102 Speechmaking	3	_____	_____

Math (Minimum 3 semester hours)

Math 130 Trigonometry	3	_____	_____
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Social Sciences, Natural Science, Fine Arts, or Humanities (Minimum 6 semester hours)

PHYS 111 General Physic-GTSCI	4	_____	_____
PHYS 111L General Physic Lab	1	_____	_____
_____	1	_____	_____

Course No Title	Sem.hrs	Grade	Term
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WELLNESS REQUIREMENT (2 semester hours)

KINE 100 Health and Wellness	1	_____	_____
KINA 1 _____	1	_____	_____

ASSOCIATE OF APPLIED SCIENCE: PROFESSIONAL LAND SURVEYOR REQUIREMENTS

(43 semester hours)

CADT 107 Advanced CAD	3	_____	_____
CADT 130 CAD-Civil	3	_____	_____
GEOG 131 Introduction to Cartography	3	_____	_____
GEOL 332 Introduction to GIS	2	_____	_____
GEOL 332L Introduction to GIS lab	1	_____	_____
MATH 141 Analytical Geometry	3	_____	_____
STAT 200 Probability and Statistics	3	_____	_____
SURV 100 Intro to Surveying/FW	3	_____	_____
SURV 102 Surveying Calculations	3	_____	_____
SURV 200 Advanced Surveying F/W	5	_____	_____
SURV 203 Legal Aspects of Survey	3	_____	_____
SURV 204 Real Property Descript	2	_____	_____
SURV 205 Advanced Surveying Comp	4	_____	_____
SURV 206 Property Law-Boundary	3	_____	_____
SURV 207 Survey Ethics Overview	2	_____	_____

SUGGESTED COURSE SEQUENCING FOR ASSOCIATE OF APPLIED SCIENCE, MAJOR IN PROFESSIONAL LAND SURVEYOR

This is a recommended sequence of course work. Certain courses may have prerequisites or are only offered during the Fall or Spring semesters. It is the student's responsibility to meet with the assigned advisor and check the 2 year course matrix on the Colorado Mesa website for course availability.

FRESHMAN YEAR

Fall Semester	Hours	Spring Semester	Hours
CADT 107	3	SURV 102	3
ENGL 111	3	ENGL 112	3
GEOG 131	3	SURV 203	3
MATH 130	3	STAT 200	3
SURV 100	3	CADT 130	3
	<u>15</u>		<u>15</u>

SOPHOMORE YEAR

Fall Semester	Hours	Spring Semester	Hours
SURV 200	4	SURV 205	5
SURV 204	2	SURV 206	3
KINE	1	SURV 207	2
MATH 141	3	GEOL 332	2
PHYS 111	4	GEOL 332L	1
PHYS 111L	1	Social Sciences, Nat. History, Fine Arts, or Humanities	1
	<u>15</u>	KINE 100	1
		Health and Wellness	<u>15</u>

POLICIES:

1. Please see the catalog for a complete list of graduation requirements.
2. This program sheet must be submitted with your graduation planning sheet to your advisor during the **semester prior to the semester of graduation, no later than October 1 for spring graduates, no later than March 1 for fall graduates.** You must turn in your "Intent to Graduate" form to the Registrar's Office **by September 15 if you plan to graduate the following May, and by February 15 if you plan to graduate the following December.**
3. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the Department Head for signature. Finally, the Department Head will submit the signed forms to the Registrar's Office. (Students cannot handle the forms once the advisor signs.)
4. If your petition for graduation is denied, it will be your responsibility to reapply for graduation in a subsequent semester. Your "Intent to Graduate" does not automatically move to a later graduation date.
5. NOTE: The semester before graduation, you may be required to take a Major Field Achievement Test (exit exam).