



## SURVEYING & GEOMATICS TECHNICIAN

Surveying is the science of establishing, locating, defining, and describing positions on the surface of the earth. These positions can be used to create maps and boundaries. Surveyors use elements of mathematics, physics, and law and work with engineers, architects, planners, geologists, environmentalists, and the public. A surveyor can work for consulting firms, construction, and federal and state agencies. Surveyors have the opportunity for creating a balance of indoor and outdoor working conditions.

### CERTIFICATE OF PROFICIENCY

(46-50 credits)

#### GENERAL EDUCATION REQUIREMENTS

Course Number	Course Description	CR
<u>Communication Skills – 5 credits</u>		
PTWR 135	Technical Writing <sup>[1]</sup>	5
<u>Computational Skills – 5 credits</u>		
MATH 103	Trigonometry*	5
<u>Human Relations – 5 credits</u>		
CMST& 210	Interpersonal Communication <sup>[1]</sup>	5

#### MAJOR COURSE REQUIREMENTS

Course Number	Course Description	CR
CADD 140	Basic AutoCAD	4
SURV 104	Applied Math for Surveying	5
SURV 121	Field Survey I	5
SURV 122	Field Survey II	5
SURV 123	Professional Ethics	1
SURV 163	Route Surveying	5
		36

#### GIS Option <sup>[2]</sup>

SURV 125	Intro to GIS	3
SURV 250	ARC GIS I	3
SURV 252	Intro to Map Projections	2
SURV 253	Intro to GPS	2
		46

#### Surveying Option <sup>[2]</sup>

SURV 202	Boundary Surveys	4
SURV 203	Legal Descriptions	3
SURV 223	Boundary Law I	3
SURV 264	Survey Software Applications	4
		50

[1] Recommended or approved substitute (only 3 credits applied)

[2] Choose one option.

#### Program Notes

- Students needing to build skills in math and/or English, will be advised to complete the survey program in more than four quarters.
- Some courses have laboratory fees.
- Success in the surveying program requires minimum grade of "C" must be achieved in all major course requirements unless they are pass/no pass.

#### GIS Option (46 Credits)

Prerequisites: Students must be ready for Math 103 to start in the fall.

##### Fall Quarter

MATH	103	5
SURV	121	5
SURV	125	3
SURV	252	2
Total Credits		15

##### Spring Quarter

SURV	104	5
SURV	163	5
PTWR	135	5
Total Credits		15

##### Winter Quarter

CADD	140	4
SURV	122	5
SURV	123	1
SURV	250	3
SURV	253	2
Total Credits		15

##### Summer Quarter

CMST	210	5
Total Credits		5

#### Surveying Option (50 Credits)

Prerequisites: Students must be ready for Math 103 to start in the fall.

##### Fall Quarter

MATH	103	5
SURV	121	5
SURV	202	4
Total Credits		14

##### Spring Quarter

SURV	104	5
SURV	163	5
SURV	203	3
PTWR	135	5
Total Credits		18

##### Winter Quarter

CADD	140	4
SURV	223	3
SURV	123	1
SURV	264	4
SURV	122	5
Total Credits		17

##### Summer Quarter

CMST	210	5
Total Credits		5