

# Land Surveying –AS (Associate GE Track)

## Program Description

The focus of the Land Surveying program is to provide the student with a thorough background in land surveying and mapping in addition to an introduction to the collecting, manipulating, formatting and mapping of geospatial data. A student who successfully completes the program will have the technical expertise necessary for an entry level position in the field of Land Surveying or related fields of geographic information systems specialists, architectural services, and engineering services. Land Surveyors typically measure and record property boundaries and the topography of the land covered by construction and engineering projects. Surveys are used to establish legal boundaries to prepare maps and exhibits, and write descriptions of land tracts that satisfy legal requirements. The program also assists students in preparing for the Fundamentals of Surveying Exam (formerly the Land Surveyor In-Training or LSIT exam) and the Professional Land Surveyor Exam issued by the State of California.

## Program SLO

Demonstrate proficiency in the core skills and knowledge required for employment in land surveying.

The sequence listed below, satisfies your AS requirements. Connect with a counselor to develop an individual student education plan through the Counseling Department @ <https://www.canyons.edu/counseling> or (661) 362-3288/(661) 362-3811.

Major courses are sequenced and **BOLDED** based on recommendations by the [Land Surveying Department](#).

### First Semester (0-17 Units minimum)

Course	Title	Units	GE Area
<b>SURV 101</b>	<b>Introduction to Land Surveying (FA, SP)</b>	<b>4</b>	<b>Major</b>
* <b>Math 102 or Math 102X</b>	<b>Trigonometry (FA, WI, SP, SU) Trigonometry &amp; Support for Trigonometry (FA,SP)</b>	<b>4 5</b>	<b>Major &amp; Area Dii</b>
ENGL 101/101H	English Composition (FA,WI,SP,SU)	4	Area Di
Physical Educationand Wellness	HLHSCI 100 - Health Education (FA, WI, SP,SU) HLHSCI 150 - Nutrition (FA, SP, SU) HLHSCI 243* Women and Health (FA, SP) PE KPEA or KPEI or Dance Activity (FA, WI, SP,SU)	2-3	Area F
American Institutions Course – Choose Option I or II	Complete first course in chosen option – (note: must take both classes within same option) (FA, WI, SP, SU) – see “American Institutions” table below	3	Area E
	<b>Term Total:</b>	<b>17-19</b>	

\*Note: The program recommends you speak with a counselor regarding your math placement.

### Second Semester (18- 33 Units minimum)

Course	Title	Units	GE Area
<b>SURV 102</b>	<b>Advanced Land Surveying (SP,SU)</b>	<b>4</b>	<b>Major</b>
<b>SURV 110</b>	<b>CAD for Surveyors (FA, SP, SU)</b>	<b>3</b>	<b>Major</b>
<b>GIS 101</b>	<b>Introduction to Geographic Information Systems (SP)</b>	<b>3</b>	<b>Major</b>
American Institutions Course	Complete second course in chosen option – (note: must take both classes within same option) (FA, WI, SP, SU) – see “American Institutions” table below	3	Area E

Social Science Course	Choose one course from COC GE Area B (FA, WI, SP, SU)	3	Area B
<b>Term Total:</b>		<b>16</b>	

### Third Semester (34 - 49 Units minimum)

Course	Title	Units	GE Area
SURV 103	Advanced Applications in Land Surveying I (FA - 1 <sup>st</sup> 8 weeks)	3	Major
SURV 104	Advanced Applications in Land Surveying II (FA - 2 <sup>nd</sup> 8 weeks)	3	Major
SURV 260	Boundary Control and Legal Principles I (FA)	3	Major -
Natural Sciences Course	Choose one course from COC GE Area A ( <i>lab not required</i> ) (FA, WI, SP, SU)	3	Area A
** Humanities and Fine Arts	Choose one course from COC GE Area C (FA, WI, SP, SU)	3	Area C & Diversity
<b>Term Total:</b>		<b>15</b>	

\*\*Consider taking a humanities general education course GE Area C with an (\*) indication on the Associate Degree Requirements Checklist. Courses with an (\*) will also meet the GE Diversity Requirement. Refer to the [Associate Degree Checklist](#) for details.

### Fourth Semester (50-60 Units minimum)

Course	Title	Units	GE Area
SURV 265	Boundary Control and Legal Principles II (SP)	3	Major - AS
SURV 107	Construction Surveying (SP)	4	Major - AS
Elective Course OR Diversity if not yet met	Choose any course that is an associate degree applicable course (FA, WI, SP, SU) OR Diversity Requirement (May double with other GE Notated with an Asterisk on the GE Checklist)	2-3	Elective or Diversity
Elective Course	Choose any course that is an associate degree applicable course (FA, WI, SP, SU)	3	Elective
<b>Term Total:</b>		<b>12-13</b>	

**Total Units: 60+**

Notes: In order to complete your AS degree in two years a minimum of 15 units per semester is necessary. You may consider taking winter/summer coursework to help lighten your load during fall/spring.

**American Institutions Requirement** – Select one of the options below and complete a total of 6 units

<b>Option 1</b>	One course from the following: Economics 170/170H, History 111/111H, History 112/112H, History 120/120H, or History 130 <b>AND</b> Political Science 150/150H (FA, WI, SP, SU)
<b>Option 2</b>	History 111/111H AND History 112/112H (FA, WI, SP, SU)

### Counseling Resources:

Land Surveying Department Website: [www.canyons.edu/surv](http://www.canyons.edu/surv)

[Associate Degree Checklist:](#)

[https://www.canyons.edu/\\_resources/documents/student-services/counseling/top10/AssociateDegreeRequirements20192020.pdf](https://www.canyons.edu/_resources/documents/student-services/counseling/top10/AssociateDegreeRequirements20192020.pdf)

[Petition for Certificate](#) - petitions are due during the semester you complete your program

<https://www.canyons.edu/student-services/admissions/records/forms.php>

[Petition for Associate Degree](#) – petitions are due before the first Friday of the graduating term

[https://www.canyons.edu/\\_resources/documents/student-services/admissions/AR052PetitionForAssociateDegreeFillable.pdf](https://www.canyons.edu/_resources/documents/student-services/admissions/AR052PetitionForAssociateDegreeFillable.pdf)

## **Career Resources**

California Board for Professional Engineers, Land Surveyors, and Geologists - <https://www.bpelsg.ca.gov/>

Land Surveying at College of the Canyons LinkedIn Group-<https://www.linkedin.com/groups/13551034/>

California Career Zone – Surveyors: <https://www.cacareerzone.org/profile/17-1022.00>

O\*Net Online -Surveyors: <https://www.onetonline.org/link/summary/17-1022.00>

Bureau of Labor and Statistics - Surveyors: [https://www.bls.gov/ooh/architecture-and-](https://www.bls.gov/ooh/architecture-and-engineering/surveyors.htm)

[engineering/surveyors.htm](https://www.bls.gov/ooh/architecture-and-engineering/surveyors.htm)

Professional Associations: <https://www.canyons.edu/academics/surveying/information/links.php>