

SURVEYING

This degree program prepares students to enter the civil engineering field. Competency in care and operation of field instruments, solution of problems in the laboratory, drafting of land survey maps and civil engineering plans, and application of studies to field practice are thoroughly explored.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Measure angles and distances using electronic total stations and distance meters.
- Compile field data, adjusting for error from horizontal and vertical traverses.
- Create typical drawing title blocks accepted by local municipalities such as the City of San Diego.
- Calculate and plot contours and other features found on a topographic map.
- Plot easements using bearings, distances and curve information.
- Recognize and apply the appropriate vocabulary of boundary law in discussion, reading, and writing legal descriptions of boundary.
- Describe and solve advanced private boundary and public lands boundary problems.
- Solve introductory property boundaries using title reports and record maps.

CAREER OPPORTUNITIES

Geodetic Surveyor
 Geophysical Prospecting Surveyor
 Instruments Surveyor Assistant
 Land Surveyor
 Marine Surveyor
 Mine Surveyor
 Oil-Well Directional Surveyor

Associate in Science Degree Requirements:

<i>Course</i>	<i>Title</i>	<i>Units</i>
CADD 115	Engineering Graphics	3
or		
ENGR 100	Introduction to Engineering and Design	4
CADD 120	Introduction to Computer-Aided Drafting and Design	3
CADD 127	Survey Drafting Technology	3
MATH 170	Analytic Trigonometry	3
PHYC 110	Introductory Physics	4
SURV/ENGR 218	Plane Surveying	4
SURV 220	Boundary Control and Legal Principles	3
SURV 240	Advanced Surveying	4
Total Required		27-28
Plus General Education Requirements		

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Surveying. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.