



A CAREER IN SURVEYING AND MAPPING

Is it for you?

THE PROFESSION

Excellent careers await young people in the broad range of surveying and mapping sciences.

Surveying and mapping technologies have undergone dramatic transformations during the past few decades. Surveying, once viewed as the work of technicians, is now considered a profession of high-tech multi-disciplines having focus and application in land-related issues. Each of these disciplines employs state-of-the-art equipment and resources at the forefront of emerging technologies.

- ***Geodesy***
- ***Photogrammetry***
- ***Land Surveying***
- ***Remote Sensing***
- ***Spatial Information Databases***
- ***Geographic Information Systems***
- ***Cartography***

Surveyors come from many diverse backgrounds. Some may have considered careers in

- ***Geography***
- ***Forestry***
- ***Geology***
- ***Computer Science***
- ***Engineering***

EDUCATION, EXPERIENCE AND LICENSURE

Licensure as a Professional Surveyor is required in all fifty states and the U.S. territories. To obtain licensure, many states now require a degree in Surveying and

Mapping or related sciences along with four years of experience working under the supervision of a licensed professional surveyor. For information on universities offering Surveying and Mapping degrees, visit the ACSM web site www.acsm.net.

There are still some states where licensure can be obtained from practical experience only. This usually requires between six and eight years of experience. In addition to education and experience, an examination is required for licensure. The National Council of Examiners for Engineers and Surveyors (NCEES) has more information regarding examination on their web site at www.ncees.org. For information regarding requirements for licensure in a particular state, contact that state licensing board or utilize the links on the NCEES web site.

State-specific information can also be found by using the links on the ACSM web site to professional societies and associations affiliated with ACSM and NSPS.

EMPLOYMENT

Employment in surveying and mapping covers many areas including:

Land Surveying which is traditional boundary surveys relating to land ownership issues and measurements of the earth's surface.

Geodesy which includes mathematics, physics and astronomy.

Remote Sensing and Photogrammetry which utilizes aircraft, satellites, film and digital camera equipment.

Global Positioning System which involves satellites and 3D positioning with earth-based equipment for surveying, mapping and navigation.

Cartography which includes creating road maps, topo maps and navigation charts.

Geographic Information Systems which is an information framework that is spatial and geographically related.

Salaries, benefits and compensation vary with the locale, the employee's primary assignment, the size of the firm and the availability of personnel. Most surveying and mapping personnel, however, enjoy median to higher salaries for areas in which they are employed.

CAREER OPPORTUNITIES

Whether the surveyor chooses to specialize in one of more of the disciplines, he or she will find a career in surveying both exciting and challenging. It gives the outdoor enthusiast the chance to work in the open and quite often provides the opportunity to travel. Career opportunities are:

- *Professional Surveyor*
- *Photogrammetrist*
- *GIS Manager*
- *Business Owner*
- *Surveying and Engineering Firm*
- *Department of Transportation*
- *Department of Public Works*
- *Construction Business*
- *Energy and Utility Companies*
- *City, County or State Surveyor*
- *Bureau of Land Management*
- *U.S. Forest Service*
- *Department of Agriculture*
- *U.S. Geological Survey*
- *National Geodetic Survey*

Career satisfaction is phenomenal. Most professionals asked described it as “There being no other profession quite like it and would not want to do anything else”. A career in surveying and mapping offers engaging and diverse areas of work, with highly professional skills, advanced technologies and top flight career satisfaction.

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