

Surveying Engineering

Program Requirements

Surveying Engineering, BS Program Checksheet

Includes:

- Major Courses and General Education Courses
- Admission and Transfer Requirements
- Graduation Requirements

Why Choose Surveying Engineering?

Instruction in this program emphasizes theoretical principles as well as practical applications of advanced surveying techniques and related computational procedures, geodesy, map compilation and photogrammetry, business aspects of operating a surveying firm, geographic information systems (GIS) and planning and conducting surveys.

Students in the Surveying Engineering program must complete advanced mathematics, have an aptitude for physical science and have the ability to work effectively as a team member.

The Bachelor of Science program in Surveying Engineering is designed to meet the needs of all students in the program. The Surveying Engineering program educational objectives are as follows:

- Program graduates will apply communication skills, lifelong learning attitude, and the knowledge of mathematics and basic science to attain advancement within the surveying profession.
- Program graduates will exhibit creativity, leadership and team-building abilities, cultural appreciation and an understanding of global, societal, and environmental context consistent with the principles of sustainable development.
- Program graduates will be engaged in the professional practice of surveying engineering with high ethical and professional responsibilities.
- Program graduates will strive for professional licensure.

In-depth objectives for the Bachelor of Science in Surveying Engineering are available at <https://www.ferris.edu/CET/ceems/surveying/objectives.htm>.

The Bachelor of Science in Surveying Engineering at Ferris State University is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org/eac/>.

Career Opportunities

Surveying engineering is the science of making precise measurements of the Earth's surface

with the aid of sophisticated electronic instruments. A challenging and satisfying profession, surveying engineering is of vital importance for national defense, exploration, conservation, preservation of natural resources, and land development.

There is a very high demand for surveying engineers with five to six job opportunities for every graduate. Professional surveyors can choose to join existing surveying and/or civil engineering firms or enter private practice following completion of licensing requirements. Graduates may also find employment with local, state and federal governmental agencies. In addition, surveying engineers are needed in resource recovery, oil and mineral exploration, and other high-tech industries.

More Information

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