

**THE UNIVERSITY OF AKRON  
SUMMIT COLLEGE**

**SURVEYING & MAPPING**

**2980: Bachelor of Science Degree**

Formerly known as Surveying & Mapping Technology and accredited by the  
Technology Accreditation Commission of the Accreditation Board for Engineering and Technology,  
111 Market Place, Suite 1050, Baltimore, MD 21202-4012 — Telephone 410-347-7700

**THIRD YEAR**

**Fall Semester**

	<u>Credit Hours</u>	<u>Prerequisites</u>
2030:345    Technical Data Analysis	2	2030:154 or equiv with grade of C- or better or placement test
2820:310    Programming for Technologists	2	2820:131 & 2030:255
2980:310    Surveying Computations & Adjustments	2	2980:222 & 223
3300:112    English Composition II	3	
3350:447    Remote Sensing	3	3350:305 or Permission (BSSM students receive perm.)
2980:xxx    Surveying Elective(s)	2	
3600:120    Introduction to Ethics	<u>3</u>	
	17	

**Spring Semester**

2030:255    Technical Calculus I	3	2030:154 or equiv. with a grade of C- or better or placement test
2030:480    Advanced Topics in Tech. Math	2	
2420:211    Basic Accounting I	3	
2980:315    Boundary Control & Legal Principles	3	12 cr. in surveying courses or perm.
2980:427    Ohio Lands	2	
3400:210    Humanities in the Western Tradition I	<u>4</u>	32 credits & 3300:112
	17	

**FOURTH YEAR - Cooperative Work Study (must have a minimum of 64 credit hours completed.)**

**FIFTH YEAR**

**Fall Semester**

Humanities Elective	3	32 credits & 3300:112
Area Studies & Cultural Diversity	2	32 credits
Technical Electives	2	
2980:415    Legal Aspects of Surveying	3	2980:315
2980:421    Subdivision Design (Sch. Lab)	3	2980:222 & 315
2980:422    GPS Surveying (Sch. Lab)	2	2980:102 or equivalent
2980:xxx    Surveying Elective(s)	<u>2</u>	2980:102 or equivalent
	17	

**Spring Semester**

Area Studies & Cultural Diversity	2	32 credits
Technical Electives	2	
2420:103    Essentials of Management Technology	3	
2980:430    Surveying Project	3	Senior Standing & permission
2980:xxx    Surveying Elective(s)	3	
5550:211    First Aid and CPR	<u>2</u>	
	15	

**TOTAL CREDITS = 66**

**Technical Electives**

2990:xxx	Any 2990 course	
2420:117	Small Business Development	3
2420:212	Basic Accounting II	2
2420:227	Entrepreneurship Projects	4
2880:151	Industrial Safety and Environmental Protection	2
2940:210	Computer Aided Drawing I	3
2940:211	Computer Aided Drawing II	3
3350:310	Physical and Environmental Geography	3
3350:440	Cartography	3
3350:405	Geographic Information Systems	3
3350:433	Introduction to Planning	3
3350:448	Advanced Cartography	3
3350:449	Advanced Remote Sensing	3

**Surveying Electives**

2980:325	OSHA Safety Requirements for Surveyors	1
2980:330	Applied Photogrammetry	3
2980:335	The Business of Surveying	2
2980:420	Route Surveying	3
2980:425	Land Navigation	3
2980:426	History of Surveying to 1785	2
2980:428	History of Surveying Since 1785	2
2980:445	Applications in GIS Using GPS	3
2980:450	Topics in Professional Practice	2
2980:489	Special Topics in Surveying	1-3
2980:490	Workshop in Surveying	1-3
2980:495	Internship: Surveying & Mapping	3
2980:498	Independent Study	1-3
2985:xxx	Any 2985 course	

**BACHELOR OF SCIENCE IN SURVEYING AND MAPPING**

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**Program Description:**

The Bachelor of Science in Surveying and Mapping program is an upper level degree program designed to provide the student with additional education beyond the A.A.S. degree in Land Surveying. This degree is also designed to meet the formal education requirements for registration as a Professional Surveyor in the state of Ohio.

This upper level degree program is defined as follows:

- The first two years are completed as an A.A.S. degree in Land Surveying or similarly based program.
- Two of the remaining three years are for the completion of prescribed course work.
- The remaining year of the three years is devoted to a cooperative work experience in the surveying and mapping field. The student normally enters the co-op segment between the junior and senior years.

The B.S. in Surveying and Mapping degree program includes classroom, laboratory, and industry experiences which stress the application of established surveying and mapping knowledge.

**Requirements for Admission:**

Applicants for the Surveying and Mapping program must hold an associate degree in Land Surveying from an accredited program or provide an equivalent academic background. The applicant must have a minimum cumulative grade point average of 2.0 out of a possible 4.0. Applicants with an associate degree in a discipline other than Land Surveying will be required to complete a specific formal set of courses as specified at the time of admission. Final approval for admission is based upon recommendations from the Director of the Surveying and Mapping Program.

**Cooperative Work Study Requirement:**

The required Cooperative Work Study experience of the Surveying and Mapping program consists of 52 weeks of surveying work experience which may begin after the student has completed 34 hours of course work in the Surveying and Mapping program. This program may be satisfied by any one of the following options:

- A. One calendar year.
- B. Three semesters (Summer I and II counts as one semester for the co-op).
- C. Department review of prior or concurrent work experience.

Students having prior or concurrent work experience should submit to the Surveying and Mapping Co-op Review Committee appropriate documentation before signing their program contract. The Surveying and Mapping Co-op Review Committee will determine whether this work experience satisfies the co-op requirement. All students must be cleared through the University Co-Op Office.

**Requirements for Graduation:**

- Compliance with the requirements of the general studies program as outlined in this Bulletin.
- Completion of the requirements for the associate degree in Land Surveying at The University of Akron or an approved associate degree program. Students transferring from another institution must have their transcripts evaluated to ensure that they have the required number of credits in surveying courses. Those found deficient must complete lower level surveying course work before upper level Surveying and Mapping courses can be taken.
- Successful completion of a minimum of 132 credits in the B.S. in Surveying and Mapping program including the associate degree program, the general education courses, a one-year co-op, and the following course requirement:

<b>Third and Fifth Year Requirements</b>		<b>Credits</b>
xxxx:xxx	Humanities Requirement (see advisor)	3
xxxx:xxx	Area Studies/Cultural Diversity Reqmts. (see advisor)	4
2030:345	Technical Data Analysis	2
2030:255	Technical Calculus I	3
2030:480	Advanced Topics in Tech. Math	2
2420:103	Essentials of Management Technology	3
2420:211	Basic Accounting I	3
2820:310	Programming for Technologists	2
2980:310	Survey Computations and Adjustments	2
2980:315	Boundary Control & Legal Principles	3
2980:415	Legal Aspects of Surveying	3
2980:421	Subdivision Design	3
2980:422	GPS Surveying	2
2980:427	Ohio Lands	2
2980:430	Surveying Project	3
3300:112	English Composition II	3
3350:447	Remote Sensing	3
3400:210	Humanities in the Western Tradition I	4
3600:120	Introduction to Ethics	3
5550:211	First Aid & Cardiopulmonary Resuscitation	2
	Technical Electives	4
	Surveying Electives	7