

LAND SURVEYING

LAND SURVEYING A.A.S.

Program Code: E.CDS.AAS

Associate in Applied Science (A.A.S.)

Graduation requirement — 64 semester hours

The Land Surveying program prepares the student either for employment as a surveying technician or for transfer to a four-year degree program to become an Illinois professional land surveyor.

See Professional Licensing Notes** for education requirements for becoming a professional land surveyor. See a faculty advisor to discuss four-year degree options.

Surveying technicians and professional land surveyors work in the fields of engineering, construction, land development, aerial photography, geographic information systems, agriculture, natural resource management, and government. Course work focuses on knowledge and hands-on skills needed for entry level employment and for professional licensing.

All of the surveying courses offered in this program have been accepted by the Illinois Land Surveyors Licensing Board as meeting the requirements of the 24 credit hours required by the Illinois Professional Land Surveyor Act of 1989 and the Illinois Administrative Code as amended.

Program Notes*

- SRV 234 and SRV 235 are available during odd-numbered years. SRV 253 and SRV 254 are available during even-numbered years.
- Students may substitute a technical elective for SRV 233 with approval of a faculty advisor.
- Students planning to transfer should take ENG 101 instead of ENG 111. Select a second communications course with advice from a construction faculty advisor.
- Students seeking a professional license should take MAT 124 and MAT 125 instead of MAT 131 and MAT elective.
- General Education electives are chosen from the following categories: communications, social/behavioral sciences, humanities/fine arts, mathematics, physical/life sciences. For more information, see General Education requirements on p. 66.

Suggested Full-time Sequence

FALL	SPRING	SUMMER
1st Semester	2nd Semester	3rd Semester
CIT 130	AVI 111	SRV 234 or
ELT 111	CAD 132	SRV 254
MAT 131 or	CAD 232	
MAT 124*	MAT elec or	
SRV 113	MAT 125*	
SRV 133	SRV 134	
	SRV 235 or	
	SRV 253	

FALL	SPRING	SUMMER
4th Semester	5th Semester	6th Semester
CAD 124	CIT 236	SRV 254 or
ENG 111 or	COM 103 or	SRV 234
ENG 101	COM 120 or	
GIS 110	ENG 102	
SRV 211	Gen Ed elec	
Technical elec	SRV 253 or	
	SRV 235	

Required Program Courses (45 hours) Cr. Hrs.

AVI 111	Commercial UAS Ground School	3
CAD 124	Introduction to AutoCAD	3
CAD 132	Introduction to Microstation	2
CAD 232	Civil Survey CAD Applications	2
CIT 130	Construction Plan Fundamentals	3
CIT 236	Site Development	3
ELT 111	Computer Applications for Technicians	2
GIS 110	Principles of Geographic Information Systems	3
SRV 113	Basic Surveying	3
SRV 133	Surveying Computations I	2
SRV 134	Surveying Computations II	2
SRV 211	Construction Surveying	3
SRV 233*	Surveying Field Experience	2
SRV 234	Design Surveying	3
SRV 235	Control Surveying	3
SRV 253	Legal Aspects of Surveying	3
SRV 254	Boundary Surveying	3

Electives (3 hours)

Choose one from the following courses:

GIS 115	Remote Sensing Applications	3
AVI 112	Introduction to Unmanned Aircraft Systems Flight	3
SRV 239	Land Development Design	3

Required General Education Courses (16 hours)

ENG 101	Composition I	
or ENG 111	Workplace Writing	3
COM 103	Introduction to Public Speaking	
or COM 120	Interpersonal Communication	
or ENG 102	Composition II	3
MAT 131	Applied Mathematics	
or MAT 124*	College Algebra	4
MAT elective		
or MAT 125*	College Trigonometry	3
General Education elective*		3

Total Semester Credit Hours

64

Professional Licensing Notes **

Per the Illinois Professional Land Surveyor Act of 1989 (225 ILCS 330/12), to qualify for admission to the Illinois Surveyor-In-Training (NCEES: Fundamentals of Land Surveying) examination, the candidate must have "a baccalaureate degree in a related science if he or she does not have a baccalaureate degree in land surveying from an accredited college or university."

Per Title 68, Section 1270.15 of the Illinois Administrative Code, "a baccalaureate degree in a Related Science is a baccalaureate degree from an accredited college or university that includes core courses in at least the following subjects, or their equivalents, for the minimum semester hours shown. The following subjects all may be completed prior to, concurrent with, or subsequent to receiving the baccalaureate degree. a) Mathematics (College Algebra and beyond) – 15 semester hours b) Basic Sciences (Physics and/or Chemistry) – 8 semester hours c) Additional Basic Sciences (including, but not limited to: Geology, Geography, Dendrology, Astronomy, Biology, Soil Mechanics, and engineering sciences) – 20 semester hours d) Land Surveying courses (including, but not limited to: fundamentals of land surveying, boundary surveying, route surveying, topographic surveying, descriptions, legal aspects, subdivision design, data computations and adjustments, map projections and geometric geodesy and photogrammetry) – 24 semester hours