

Land Surveying/Geomatics Emphasis

Graduates with a BAS with an emphasis in Land Surveying/Geomatics will be able to:

- Proficiently apply sound measurement methods, mathematics, science, and surveying tools to collect, analyze, and edit spatial information in professional applications.
- Develop a sound background in the humanities, social sciences, and the arts, to function in multicultural and diverse environments.
- Provide fundamentals in business management to enable graduates to understand business environments and decision-making processes.
- Convey spatial information in graphical, textual, and verbal forms as an individual or as a collaborating member of a professional team.
- Prepare to take and pass the Fundamentals of Land Surveying examination developed by the National Council of Examiners for Engineering and Surveying (NCEES).
- Satisfy the educational requirements for licensure required by NRS.625.270 as a professional Land Surveyor in Nevada and recognize the benefit of life-long learning by participating in continuing education as students or as instructors.

Entrance to the Land Surveying/Geomatics Emphasis requires an earned associate's degree and the completion of a college- level trigonometry course.

Lower-Division Prerequisites

The following courses or transfer equivalents are prerequisites for completion of the upper-division emphasis requirements:

CADD 121 CAD for Land Surveyors

GIS 109 Introduction to Geographic Information Systems

MATH 181 Calculus I

PHYS 151 General Physics I or PHYS 180 Physics for Scientists and Engineers I

STAT 152 Introduction to Statistics

SUR 280 Fundamentals of Geomatics I

SUR 281 Fundamentals of Geomatics II

SUR 290 Introduction to Urban Development

U.S. and Nevada Constitution*

I. General Education

COM 101 Oral Communication, or THTR 102 Introduction to Stage Voice, or THTR 221 Oral Interpretation	3
ECON 311 Professional Ethics	3
ENG 333 Professional Communications	3
INT 339 Integrative Humanities Seminar, or INT 349 Integrative Social Science Seminar	3
INT 359 Integrative Mathematics Seminar, or INT 369 Integrative Science Seminar	3
MATH 182 Calculus II	4
Total credits for Section I	19

SUGGESTED COURSE SEQUENCE*
BAS—Land Surveying/Geomatics

FALL—1st Semester Credits

COM 101, THTR 102, or THTR 221 (3)
INT 339 or INT 349 (3)
MATH 182 (4)
SUR 320 (3)
SUR 360 (3)
TOTAL 16

SPRING—2nd Semester Credits

INT 359 or INT 369 (3)
ENG 333 (3)
PHYS 152 or PHYS 181 (4)
SUR 330 (3)
SUR 365 (3)
TOTAL 16

FALL—3rd Semester Credits

ECON 311 (3)
MGT 310 (3)
SUR 340 (3)
SUR 440 (3)
SUR 460 (3)
TOTAL 15

SPRING—4th Semester Credits

FIN 310 (3)
MGT 323 or MGT 367 (3)
MGT 441 (3)
SUR 450 or SUR 455 (3)
SUR 495 (3)
TOTAL 15

Total credits = 62

II. Emphasis Requirements

SUR 320 GIS for Surveyors	3
SUR 330 Introduction to Least Squares Adjustment	3
SUR 340 Photogrammetry and Remote Sensing	3
SUR 360 Public Land Survey System	3
SUR 365 Legal Descriptions	3
SUR 440 Geodetic and GPS Surveying	3
SUR 450 Construction Surveying, or SUR 455 Mine Surveying	3
SUR 460 Advanced Boundary Analysis	3
SUR 495 Land Surveying/Geomatics Capstone	3
Total credits for Section II	27

III. Applied Science Core

FIN 310 Applied Accounting and Finance	3
MGT 310 Foundations of Management Theory and Practice	3
MGT 323 Organizational and Interpersonal Behavior, or MGT 367 Human Resource Management	3
MGT 441 Operational Quality Control and Problem Solving	3
PHYS 152 General Physics II or PHYS 181 Physics for Scientists and Engineers II	4
Total credits for Section III	16
Total credits for Section I, II, and III.....	62

*All students graduating from Nevada institutions of higher education must satisfy the U.S. and Nevada Constitutions requirement. Contact your academic advisor for details. *Students admitted to the BAS Program with an associate's degree other than an Associate of Arts or Associate of Science will be required to take both INT 339 and INT 349, increasing the BAS-LSG Degree total credits to 65 for graduation.