

GEOMATICS - BACHELOR OF SCIENCE IN GEOMATICS

A Suggested Plan of Study for Students

The contents and order of this roadmap may vary depending on the students' transfer credits, some courses may need to be completed in addition to the ones listed below. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

First Year		Credits
Transfer 33 Credits ^{1, 2, 3, 4}		33
Credits		33
Second Year		Credits
Transfer 30 Credits ^{1, 2, 3, 4}		30
Credits		30
Third Year		Credits
Fall		
BLAW 316 or BLAW 325	Legal Environment of Business or Real Estate Principles and Law I	3
IE 451	Engineering Economy	3
SUR 292	Legal Principles and Boundary Law I	3
SUR 361	Geodesy/Geodetic Control Surveying	3
Viewing a Wider World ¹		3
Credits		15
Spring		
ET 355	Site/Land Development and Layout	3
SUR 285	Precise Digital Mapping	3
SUR 312	Public Land Survey System Boundaries	3
SUR 328 & 328L	Construction Surveying & Automation Technologies and Construction Surveying & Automation Technologies Lab	3
SUR 351	Spatial Data Adjustment I	3
Credits		15
Fourth Year		Credits
Fall		
SUR 315 & 315L	Advanced Mapping Technologies and Advanced Mapping Technologies Lab	3
SUR 401	Ethics and Professionalism in Surveying and Mapping	3
SUR 451	Spatial Data Adjustment II	3
SUR 464	Legal Principles and Boundary Law II	3
SUR 485	Emerging Techniques in Geospatial Technologies	3
Credits		15
Spring		
SUR 450	Senior Project	3
SUR 452	Surveying Practicum	3
SUR 461 & 461L	GNSS Positioning and GNSS Positioning Lab	3
Viewing a Wider World ¹		3
Credits		12
Total Credits		120

- ¹ See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of this catalog for a full list of courses. See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of this catalog for a full list of courses.
- ² Mathematics courses require math placement or taking prerequisites before enrollment.
- ³ Transfer students must complete college-level work that includes General Education Area I, IV, V, and VI (19 credits: see the **General Education** (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of this catalog for a full list of courses), Calculus I and II (6-8 credit), Physics I (4 credits), elective science with lab (4 credits), computer drafting (3 credits), statistics (3 credits, 200-level or above), computer programming (3-4 credits), plane surveying (3 credits), introduction to GIS (6-8 credits), surveying/civil drafting (3 credits), and approved electives to bring total transfer credits to 66.
- ⁴ Elective credit may vary based on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The amount indicated in the requirements list is the amount needed to bring the total to 120 credits and may appear in variable form based on the degree. However, students may end up needing to complete more or less on a case-by-case basis and students should discuss elective requirements with their academic advisor.