

GEOGRAPHY - MASTER OF APPLIED GEOGRAPHY

Overview

The Master of Applied Geography (MAG) program at New Mexico State University's Department of Geography & Environmental Studies provides students with a flexible, interdisciplinary graduate education that prepares them for careers in both academic and professional settings. The program offers two pathways to completion:

Thesis Option (30 credits)

This option is designed for students interested in original research, this track requires coursework, the development of a master's thesis, and a thesis defense. Students work closely with faculty advisors and a thesis committee to produce a significant scholarly contribution to the field.

Non-Thesis (Residency) Option (30 credits)

This option is ideal for students pursuing applied, practice-based careers, this track replaces the thesis with a residency experience in an external organization, an applied residency report, and a final examination.

A Flexible and Interdisciplinary Approach

The MAG program is highly customizable, allowing students to tailor their studies to align with their academic interests and professional goals. Core coursework ensures a strong foundation in geographic theory, integrative research design, and advanced methodologies, while elective courses—drawn from geography and affiliated disciplines—enable students to develop specialized expertise in areas such as geographic information science and technology, environmental policy and planning, conservation and natural resource management, urban and regional planning, and emergency and disaster management.

Funding and Assistantships

Most MAG students receive financial support through teaching or research assistantships, which provide stipends and tuition coverage while offering valuable teaching and research experience. Additional funding opportunities are available through departmental scholarships, external grants, and professional partnerships.

Who Can Apply?

A background in geography is not required to enter the program. However, students without prior coursework in geography may be required to take preparatory courses to ensure success in graduate-level geography coursework. Prospective students are encouraged to consult with the Graduate Program Director to determine optimal pathways for meeting prerequisite requirements.

Career Pathways

Graduates of the MAG program secure careers in diverse professional and academic fields, including data and information management, cultural and natural resource management, environmental consulting, urban and regional planning, education and outreach, emergency management, and public health.

Program Learning Outcomes

Upon completion of the Master of Applied Geography, students will be able to:

1. Apply advanced geographic concepts and methods to assess human and/or environmental problems.

2. Propose ethical solutions to complex and dynamic human and/or environmental problems using critical thinking.
3. Conduct all stages of an independent research project, including conceptualization, planning, implementation, management, and communication through a research report.

More Information

See the Requirements tab for details on course and credit expectations for earning the Master of Applied Geography, and the Roadmap tab for a suggested course sequence.

Course and Credit Requirements

General Information

The Department of Geography and Environmental Studies (GES) at NMSU offers students two options for earning a Master of Applied Geography (MAG): a thesis option and a non-thesis option. The thesis option (30 credits) represents the traditional path for earning a MAG degree and entails the completion of coursework and the writing and defense of a master's thesis. The master's thesis is a piece of original scholarship developed under the direction of an advisor and typically two thesis committee members. The non-thesis option (30 credits) is an alternative path for earning a MAG degree and requires the completion of coursework, the writing of a residency report, and the passing of a final exam. The residency report is a document developed during an internship or residency under the direction of a field supervisor at an agency or firm.

Undergraduate Preparation

An undergraduate geography degree is not required for entry into the MAG program. However, applicants who lack the equivalent of GEOG 1110G Physical Geography, GEOG 1130G Human Geography, and/or GEOG 2130 Map Analysis & Interpretation may be required to take these or similar courses to prepare for the graduate-level work in geography. Applicants without an undergraduate geography degree are strongly encouraged to contact the GES Graduate Program Director and their Graduate Advisor to identify optimal strategies for satisfying basic course requirements.

Prefix	Title	Credits
GEOG 1110G	Physical Geography	4
GEOG 1130G	Human Geography	3
GEOG 2130	Map Analysis & Interpretation	3

Credit, Course, and Grade Requirements

The MAG program aims at offering students flexibility in designing their desired course of graduate study while at the same time ensuring that all students have graduate-level core competencies in geographic concepts and methods. To that end, all students pursuing the MAG degree are required to complete a minimum of 30 graduate credits, including 9 core course credits, 6 thesis credits (thesis option) or 6 residency credits (non-thesis option), and 15 elective credits. Of the 30 graduate credits, at least 15 credits must be in geography and at least 15 credits must be at the 500-level or above. All MAG students must earn a grade of B- or better in the 3 core courses (GEOG 501 Geographic Theory and Application, GEOG 502 Integrative Research Design, and GEOG 584 Qualitative, Critical, and Creative Methodologies or GEOG 585 Spatial Analysis and Modeling). All candidates are moreover required to maintain an overall GPA or 3.00 or higher.

Prefix	Title	Credits
Core Geography Courses ¹		9
GEOG 501	Geographic Theory and Application	3
GEOG 502	Integrative Research Design	3
GEOG 584	Qualitative, Critical, and Creative Methodologies	3
or GEOG 585	Spatial Analysis and Modeling	
Elective Courses ²		15
Select additional courses in geography and/or other disciplines.		
At least 6 of the elective credits must be in geography.		
At least 6 of the elective credits must be at the 500-level or above.		
Thesis / Residency Credits ³		6
GEOG 599	Master's Thesis	6
or GEOG 596	Residency	

¹ Students must earn a grade of B- or better in all 3 core courses.

² Students may be required to take additional courses that their committee deems necessary for the successful completion of the thesis research.

³ For more information regarding the master's thesis requirement, please visit [this GES website](#).

A Suggested Plan of Study for Students

The following road map is a guide for full-time students (9 credits/semester for graduate assistants and/or graduate students receiving financial aid) to earn the Master of Applied Geography (MAG) degree and achieve the following MAG program learning outcomes:

1. Apply advanced geographic concepts and methods to assess human and/or environmental problems.
2. Propose ethical solutions to complex and dynamic human and/or environmental problems using critical thinking.
3. Conduct all stages of an independent research project, including conceptualization, planning, implementation, management, and communication through a research report.

The road map assumes that each student will create a customized plan for degree completion in consultation with their graduate faculty committee. We realize that students may deviate from the road map for various reasons but expect that they diligently attempt to meet the milestones outlined below.

First Year, Fall Semester

First Year		
Fall		Credits
GEOG 501	Geographic Theory and Application	3
GEOG 584	Qualitative, Critical, and Creative Methodologies	3
	or GEOG TBD Elective Course	
Elective Course		3
Credits		9
Total Credits		9

Non- Curricular Recommendations

- Select your Graduate Faculty Advisor.
- Clarify your academic and professional goals and align your curricular path with the MAG program learning outcomes noted above.

- Establish a preliminary thesis / residency topic.
- Identify extracurricular service and outreach opportunities such as leadership in student organizations, community engagement, or peer mentoring.
- Identify professional development opportunities such as conference attendance, workshop participation, or internships.

First Year, Spring Semester

First Year		
Spring		Credits
GEOG 502	Integrative Research Design	3
GEOG 585	Spatial Analysis and Modeling	3
	or GEOG TBD Elective Course	
Elective Course		3
Credits		9
Total Credits		9

Non- Curricular Recommendations

- Finalize your Graduate Faculty Committee and file the Graduate Research Committee form.
- Propose your thesis / residency project to the Graduate Faculty Committee.
- File the "Thesis / Residency Proposal Form."
- File the "Program of Study for Masters Students Form."
- Discuss opportunities for disseminating your scholarly and creative activities via presentations, publications, and other strategies.
- Engage in extracurricular service and outreach activities.
- Take advantage of professional development opportunities.
- Plan for fieldwork, internships, or other activities during the summer.

First Year, Summer Semester

Non- Curricular Recommendations

- Conduct field, archive, and other data collection work for your thesis or residency.
- Conduct data analyses for your thesis or residency.
- Begin writing your thesis or residency report.

Second Year, Fall Semester

Second Year		
Fall		Credits
Elective Course		3
Elective Course		3
GEOG 599	Master's Thesis	3
or GEOG 596	or Residency	
Credits		9
Total Credits		9

Non- Curricular Recommendations

- Finish your data collection and analysis.
- Continue writing your thesis or residency report.
- Disseminate your scholarly and creative activities via presentations, publications, and other strategies.

- Engage in extracurricular service and outreach activities.
- Take advantage of professional development opportunities.

Second Year, Spring Semester

Second Year

Spring		Credits
Elective Course		3
Elective Course		3
GEOG 599 or GEOG 596	Master's Thesis or Residency	3
Credits		9
Total Credits		9

Non- Curricular Recommendations

- Finish writing your thesis or residency report.
- Study the NMSU Graduate School webpages and make sure you meet all deadlines for degree application, form submissions, etc..
- Schedule and hold your thesis defense or oral exam.
- Share your final thesis or residency report as well as all thesis / residency data and metadata with your Graduate Faculty Advisor.
- Disseminate your scholarly and creative activities via presentations, publications, and other strategies.
- Engage in extracurricular service and outreach activities.
- Take advantage of professional development opportunities.