GEOGRAPHY, BA

Banner Code: SC-BA-GEOG

Undergraduate Advising

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The Geography, BA is designed to offer students the opportunity to study the integrated social and environmental processes that continuously shape and reshape the world we live in. This major provides students with broad training across the core subdisciplines of geography (human, physical, and GIScience), while also offering the requisite flexibility for those students seeking a multidisciplinary educational experience. Students will find numerous opportunities for employment in both the private and public sectors, as well as in academia. Given their interdisciplinary approach and uniquely spatial perspective, geographers are well suited to address important local, regional, and global challenges in today's world.

The Department of Geography and Geoinformation Science (https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/) fosters a supportive, active learning environment in which students are encouraged to work closely with both faculty and peers. The curriculum in this major provides students with the synthesis skills and broad base of knowledge that prepares them to be successful in an ever-evolving job market. For students who wish to pursue their interest in geography with a more technical curriculum, the department also offers a Geography, BS (https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/geography-bs/).

Admissions & Policies

Admissions

University-wide admissions policies can be found in the Undergraduate Admissions Policies (https://catalog.gmu.edu/admissions/undergraduate-policies/) section of this catalog.

To apply for this program, please complete the George Mason University Admissions Application (https://www2.gmu.edu/admissions-aid/apply-now).

Policies

Students must fulfill all Requirements for Bachelor's Degrees (https://catalog.gmu.edu/policies/academic/undergraduate-policies/#text) including the Mason Core (https://catalog.gmu.edu/mason-core/). As outlined in the Requirements tab, students in this bachelor's program must also complete the additional College Requirements for the BA Degree.

GGS 415 Seminar in Geographic Thought and Methodology (Mason Core) (https://catalog.gmu.edu/mason-core/) fulfills the writing intensive requirement.

For policies governing all undergraduate programs, see AP.5 Undergraduate Policies (https://catalog.gmu.edu/policies/academic/undergraduate-policies/).

Requirements

Degree Requirements

Total credits: minimum 120

Students should refer to the Admissions & Policies tab for specific policies related to this program.

Candidates for a degree in geography must complete the approved GGS geography courses with a minimum GPA of 2.00.

Students must complete the Core, Systematic and Regional Geography, and GGS electives, then select one concentration or an additional program, and lastly complete the College Requirements for the BA Degree and the Mason Core and Elective Credits.

Geography

Core Courses

Code	Title	Credits
GGS 102	Physical Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	3-4
or GGS 121	Dynamic Atmosphere and Hydrosphere (Mason Core) (https://catalog.gmu.edu/mason-core/)	
or GGS 122	Dynamic Geosphere and Ecosphere	
GGS 103	Human Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	3
GGS 110	Introduction to Geoinformation Technologies [1]	3
GGS 300	Quantitative Methods for Geographical Analysis	3
GGS 310	Cartographic Design	3
GGS 311	Geographic Information Systems	3
GGS 415	Seminar in Geographic Thought and Methodology (Mason Core) (https://catalog.gmu.edu/mason-core/) [2]	3
GGS 485	Capstone in Geography and Geoinformation Science (Mason Core) (https://catalog.gmu.edu/mason-core/) [3]	3
Total Credits		**24-25**

[1] Credit for the transfer course GGS 201T can be substituted for the GGS 110 requirement
[2] Fulfills writing intensive requirement.
[3] Fulfills Apex course requirement.

Breadth and Experience Courses

Students must take one systematic course and one regional course from the list below:

Code	Title	Credits
Systematic Courses		
Select one from the following:		3
GGS 301	Political Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 302	Global Environmental Hazards	
GGS 303	Geography of Resource Conservation (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 304	Population Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 305	Economic Geography	
GGS 306	Urban Geography	
GGS 307	Geographic Approaches for Sustainable Development	
GGS 309	Introduction to Weather and Climate	
GGS 312	Physical Climatology	
GGS 314	Severe and Extreme Weather	
GGS 321	Biogeography	
GGS 340	Health Geography	
GGS 344	Military Geography	
GGS 346	Geography of Religions and Belief Systems	
GGS 355	Cities of the World	
GGS 356	Transportation Geography	
GGS 357	Urban Planning	
GGS 399	Special Topics in Geography	
Regional Courses		
Select one from the following:		3
GGS 315	Geography of the United States	
GGS 316	Geography of Latin America	
GGS 317	Modern China: A Geographical Appraisal of its Land, People, Culture, and Politics (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 320	Geography of Europe	
GGS 325	Geography of North Africa and the Middle East	
GGS 326	Geography of Eastern Europe and Russia	
GGS 333	Issues in Regional Geography	
GGS 380	Geography of Virginia	
Total Credits		**6**

Elective Courses

Code	Title	Credits
Select 3-4 credits of GGS electives (https://catalog.gmu.edu/courses/ggs/)		3-4
Select 6 credits of upper division GGS electives (https://catalog.gmu.edu/courses/ggs/)		6
Total Credits		**9-10**

Environmental Geography Concentration (EGEO)

The Environmental Geography concentration for the BA in Geography provides a unique opportunity for majors to take a broader, integrative science approach to studies of the environment. In collaboration with the Department of Environmental Science and Policy (https://catalog.gmu.edu/colleges-schools/science/environmental-policy/), BA in Geography majors have the opportunity to focus their studies on geographic approaches to climatology and global changes, environmental issues, policy matters, and sustainability topics.

Some courses may have prerequisite requirements:

Code	Title	Credits
Core Courses		
GGS 303	Geography of Resource Conservation (Mason Core) (https://catalog.gmu.edu/mason-core/)	3
EVPP 336	Tackling Wicked Problems in Society the Environment (Mason Core) (https://catalog.gmu.edu/mason-core/)	3
or EVPP 337	Environmental Policy Making in Developing Countries (Mason Core) (https://catalog.gmu.edu/mason-core/)	
or EVPP 377	Applied Ecology	
Methods Course		
GGS 354	Data Analysis and Global Change Detection Techniques	3
or GGS 379	Remote Sensing	
Electives		**6-7**
Select at least 6 credits from the following options, 3 credits of which must be prefixed GGS:		
GGS 302	Global Environmental Hazards	
GGS 307	Geographic Approaches for Sustainable Development	
GGS 308	Field Mapping Techniques	
GGS 309	Introduction to Weather and Climate	
GGS 312	Physical Climatology	
GGS 314	Severe and Extreme Weather	
GGS 354	Data Analysis and Global Change Detection Techniques [1]	
GGS 379	Remote Sensing [1]	
EVPP 302	Environmental Science: Biomes and Human Dimensions	
EVPP 318	Conservation Biology	
or BIOL 318	Conservation Biology	

EVPP 336	Tackling Wicked Problems in Society the Environment (Mason Core) (https://catalog.gmu.edu/mason-core/) [1]
EVPP 337	Environmental Policy Making in Developing Countries (Mason Core) (https://catalog.gmu.edu/mason-core/) [1]
EVPP 338	Economics of Environmental Policy
EVPP 361	Introduction to Environmental Policy
EVPP 362	Intermediate Environmental Policy
EVPP 377	Applied Ecology [1]
EVPP 381	Nature and Culture in Global Wetlands (Mason Core) (https://catalog.gmu.edu/mason-core/)
EVPP 421	Marine Conservation
EVPP 428	Planetary Health
EVPP 430	Fundamentals of Environmental Geographic Information Systems
EVPP 434	Food-Energy-Water-Climate Nexus
EVPP 436	Politics of Climate Change Governance
EVPP 440	Field Environmental Science
EVPP 475	Global Biodiversity Governance
EVPP 480	Sustainability in Action (Mason Core) (https://catalog.gmu.edu/mason-core/)
ANTH 370	Environment and Culture
ECON 105	Environmental Economics for the Citizen (Mason Core) (https://catalog.gmu.edu/mason-core/)
ECON 335	Environmental Economics
GCH 360	Health and Environment
GEOL 305	Environmental Geology (Mason Core) (https://catalog.gmu.edu/mason-core/)
GOVT 361	Introduction to Environmental Policy
GOVT 362	Intermediate Environmental Policy
PHIL 243	Global Environmental Ethics (Mason Core) (https://catalog.gmu.edu/mason-core/)
Total Credits	**15-16**

[1] Course cannot be selected if previously selected as a core course.

Health Geography Concentration (HGEO)

The field of Health Geography addresses the role of place, location dynamics and geography in health, well-being, and disease. Public health patterns can vary significantly by physical and social characteristics of places both within and between regions, states, or countries. In collaboration with the Department of Global and Community Health (https://catalog.gmu.edu/colleges-schools/public-health/global-community-health/), BA in Geography majors get introduced to local and global health issues and develop their skill set in spatial and statistical analysis of diverse health outcomes in populations.

Some courses may have prerequisite requirements:

Code	Title	Credits
Core Courses		
GGS 340	Health Geography	3
GCH 300	Introduction to Public Health	3
Methods Course		
GGS 432	Spatial Modeling for Public Health	3
or GGS 463	RS: GIS Analysis and Application	
Electives		
Select at least 6 credits from the following options, 3 credits of which must be prefixed GGS:		6
GGS 302	Global Environmental Hazards	
GGS 303	Geography of Resource Conservation (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 304	Population Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 306	Urban Geography	
GGS 321	Biogeography	
GGS 354	Data Analysis and Global Change Detection Techniques	
GGS 357	Urban Planning	
GGS 432	Spatial Modeling for Public Health [1]	
GGS 463	RS: GIS Analysis and Application [1]	
GCH 205	Global Health (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GCH 332	Health and Disease	
GCH 335	Applied Health Statistics	
GCH 360	Health and Environment	
GCH 380	Public Health Research Methods	
GCH 405	Global Health Interventions: History and Systems	
GCH 406	Global Health Interventions: Emerging Issues	
GCH 426	Global Emerging Infectious Diseases	
GCH 412	Fundamentals of Epidemiology	
GCH 445	Social Determinants of Health	
GCH 450	Culture, Sexuality and the Global AIDS Epidemic	
ANTH 363	Humans, Disease, and Death (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ECON 374	Health Economics	
GLOA 388	Global Health and Development	
PHIL 344	Ethical Issues in Global Health	
RELI 341	Spirituality and Healing (Mason Core) (https://catalog.gmu.edu/mason-core/)	

SOCI 390	Sociology of Health, Illness, and Disability	
Total Credits		**15**

[1] Course cannot be selected if previously selected as a core course.

Geoanthropology Concentration (GEA)

Anthropology, a social science, focuses on human activities—past, present, and future. Geography, positioned in the social science and STEM field, studies the physical features of the Earth and its atmosphere, and human activities as they affect and are affected by these, including the distribution of populations and resources, land use, urbanization and other topics. Just as anthropologists use insights from other disciplines to understand humans, geographers cross disciplinary boundaries to collect, store, analyze, model and visualize data. Such broad and inclusive disciplines and definitions yield a large number of possible themes in Geoanthropology. This concentration enables BA in Geography majors, versed in systematic techniques and regional geography, to become better versed in the theoretical constructs of anthropology that situate the environment as part of a global cultural system.

Code	Title	Credits
Core Courses		
GGS 304	Population Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	3
ANTH 114	Introduction to Cultural Anthropology (Mason Core) (https://catalog.gmu.edu/mason-core/)	3
or ANTH 120	Introduction to Archaeology (Mason Core) (https://catalog.gmu.edu/mason-core/)	
Methods Course		
GGS 308	Field Mapping Techniques	3
or GGS 379	Remote Sensing	
Electives		
Select at least 6 credits from the following options, 3 credits of which must be prefixed GGS:		6
GGS 301	Political Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 305	Economic Geography	
GGS 306	Urban Geography	
GGS 307	Geographic Approaches for Sustainable Development	
GGS 309	Introduction to Weather and Climate	
GGS 321	Biogeography	
GGS 346	Geography of Religions and Belief Systems	
GGS 352		
GGS 355	Cities of the World	
GGS 357	Urban Planning	
GGS 315	Geography of the United States	
GGS 316	Geography of Latin America	
GGS 320	Geography of Europe	
GGS 325	Geography of North Africa and the Middle East	
GGS 326	Geography of Eastern Europe and Russia	
GGS 333	Issues in Regional Geography	
GGS 380	Geography of Virginia	
GGS 422	Drone Remote Sensing	
ANTH 302	Peoples and Cultures of Latin America (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ANTH 307	Ancient Mesoamerica (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ANTH 308	Peoples and Cultures of the Middle East (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ANTH 309	Peoples and Cultures of India (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ANTH 317	East Asian Cultures (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ANTH 320	Global Africa (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ANTH 325	Field Techniques in Archaeology	
ANTH 330	Peoples and Cultures of Selected Regions: Non-Western	
ANTH 332	Cross-Cultural Perspectives on Globalization (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ANTH 357	Bioarchaeology	
ANTH 366	Food and Human Evolution	
ANTH 370	Environment and Culture	
ANTH 373	Archaeological Science	
ANTH 374	Archaeology of Hunter-Gatherers	
ANTH 376	Food and Culture	
ANTH 377	Mortuary Archaeology	
ANTH 379	Andean Archaeology	
ANTH 381	Medical Anthropology	
ANTH 382	Urban Anthropology (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ANTH 394	Archaeology of Climate Change	
ANTH 396	Issues in Anthropology: Social Sciences (Mason Core) (https://catalog.gmu.edu/mason-core/) (When the topic is related to culture)	
Total Credits		**15**

Urban Planning (URBP)

Urban planners work to solve issues surrounding the built environment, examining spaces of everyday life in urban regions. While inherently spatial in nature, urban planners also develop transdisciplinary skills involving policy, analytical methods, and social sciences in order to create and maintain communities with high quality of life. Students pursuing the Urban Planning concentration build upon their GIS, cartographic, and geospatial

analysis skills through a focus on urban spaces and urban problems.

Code	Title	Credits
Core Courses		
GGS 357	Urban Planning	3
ARTH 103	Introduction to Architecture (Mason Core) (https://catalog.gmu.edu/mason-core/)	3
Methods Course		
GGS 304	Population Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	3
Electives		
Select at least 6 credits from the following options, 3 credits of which must be prefixed GGS: [1]		6
GGS 301	Political Geography (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 302	Global Environmental Hazards	
GGS 303	Geography of Resource Conservation (Mason Core) (https://catalog.gmu.edu/mason-core/)	
GGS 305	Economic Geography	
GGS 306	Urban Geography	
GGS 307	Geographic Approaches for Sustainable Development	
GGS 355	Cities of the World	
GGS 356	Transportation Geography	
GGS 432	Spatial Modeling for Public Health	
GGS 463	RS: GIS Analysis and Application	
ANTH 382	Urban Anthropology (Mason Core) (https://catalog.gmu.edu/mason-core/)	
ARTH 311	Design of Cities (Mason Core) (https://catalog.gmu.edu/mason-core/)	
CONF 326	Negotiation	
CONF 329	Community Engagement and Collaborative Problem Solving	
ECON 309	Economic Problems and Public Policies	
ECON 330	Public Finance	
EVPP 361	Introduction to Environmental Policy	
EVPP 442	Urban Ecosystems and Processes	
EVPP 490	Special Topics in Environmental Science and Policy (When the topic is "Urban Smart Growth Strategies")	
FNAN 351	Principles of Real Estate	
FNAN 454	Real Estate Development and Investment Fund	
GOVT 304	American State and Local Government	
GOVT 351	Administration in the Political System	
GOVT 354	Nonprofit Sector in Society	
GOVT 464	Issues in Public Policy and Administration (When title is "Urban Economic Development in Smart Growth Era")	
HIST 316	History of Modern Architecture (Mason Core) (https://catalog.gmu.edu/mason-core/)	
INTS 331	The Nonprofit Sector (Mason Core) (https://catalog.gmu.edu/mason-core/)	
NUTR 435	Urban Agriculture	
RMGT 302	Park Management and Operations	
RMGT 405	Planning and Operation of Recreation Facilities	
SOCI 332	The Urban World (Mason Core) (https://catalog.gmu.edu/mason-core/)	
SOCI 352	Social Problems and Solutions (Mason Core) (https://catalog.gmu.edu/mason-core/)	
SOCI 355	Social Inequality (Mason Core) (https://catalog.gmu.edu/mason-core/)	
STAT 474	Introduction to Survey Sampling	
Total Credits		**15**

[1] Other urban topics courses may be taken with advisor approval.

Alternative to a Concentration

Code	Title	Credits
Students who are not selecting a concentration must choose an established minor or second major that provides 15 unique credits. If 15 unique credits are not available in the chosen minor or second major, additional GGS courses may be taken to fulfill this requirement; please consult with an advisor for details. [1]		15

[1] Students choosing an established minor or major must apply a minimum number of credits only to that minor or major, as detailed in AP 4.2.1 (https://catalog.gmu.edu/policies/academic/degree-application-conferral-graduation/#ap-4-2-1).

Mason Core and Elective Credits

In order to meet a minimum of 120 credits, this degree requires additional credits (specific credit counts by concentration are shown below), which may be applied toward any remaining Mason Core (https://catalog.gmu.edu/mason-core/) requirements (outlined below), Requirements for Bachelor's Degrees (https://catalog.gmu.edu/policies/academic/undergraduate-policies/#ap-5-3-2), College Requirements for the BA Degree (outlined below), and electives. Students are strongly encouraged to consult with their advisors to ensure that they fulfill all requirements.

- EGEO Concentration: 63-66 credits
- HGEO Concentration: 64-66 credits

- GEA Concentration: 64-66 credits
- URBP Concentration: 64-66 credits
- Alternative to a Concentration: 64-66 credits

Mason Core

Some Mason Core (https://catalog.gmu.edu/mason-core/) requirements may already be fulfilled by the major requirements listed above. Students are strongly encouraged to consult their advisors to ensure they fulfill all remaining Mason Core (https://catalog.gmu.edu/mason-core/) requirements.

All Integration-level requirements must be completed at George Mason and cannot be satisfied through transfer credit. These courses are integral to the university's educational philosophy and ensure that all graduates demonstrate proficiency in writing, critical thinking, and integrative learning consistent with the university's standards. Rare exceptions to this policy may only be granted by the Provost's Office.

Students who have completed the following credentials are eligible for a waiver of the Foundation and Exploration (lower level) requirement categories with the exception of Written Communication, which must be met by transferring in or taking an approved coruse at George Mason University. The Integration category (upper level) is not waived under this policy. See Admissions (https://catalog.gmu.edu/admissions/undergraduate-policies/#transfertext) for more information.

- VCCS Uniform Certificate of General Studies
- VCCS or Richard Bland Associate of Science (A.S.), Associate of Arts (A.A.), Associate of Arts and Sciences (A.A.&S.), or Associate of Fine Arts (A.F.A.)

Code	Title	Credits
Foundation Requirements		
Written Communication (lower-level) (https://catalog.gmu.edu/mason-core/#written)		3
Oral Communication (https://catalog.gmu.edu/mason-core/#oral)		3
Quantitative Reasoning (https://catalog.gmu.edu/mason-core/#quantitative)		3
Information Technology and Computing (https://catalog.gmu.edu/mason-core/#information-technology)		3
Exploration Requirements		
Arts (https://catalog.gmu.edu/mason-core/#arts)		3
Global Contexts (https://catalog.gmu.edu/mason-core/#global-contexts)		3
Global History (https://catalog.gmu.edu/mason-core/#global-history)		3
Literature (https://catalog.gmu.edu/mason-core/#literature)		3
Natural Science (https://catalog.gmu.edu/mason-core/#natural-science)		7
Social and Behavioral Sciences (https://catalog.gmu.edu/mason-core/#social-behavioral-science)		3
Just Societies (optional) (https://catalog.gmu.edu/mason-core/#justsocieties) [1]		
Integration Requirements		
Written Communication (upper-level) (https://catalog.gmu.edu/mason-core/#written-upper)		3
Writing Intensive (https://catalog.gmu.edu/mason-core/#wi) [2]		3
Mason Apex (https://catalog.gmu.edu/mason-core/#apex) [3]		3
Total Credits		**40**

1. In addition to covering content related to the designated category, Exploration level courses marked with a Just Societies "flag" are specifically designed to help students learn how to interact effectively with others from all walks of life, including those with backgrounds and beliefs that differ from their own. Students who wish to increase their knowledge and skills in this area may choose to enroll in a Just Societies-flagged course. Students interested in this approach to completing their Mason Core Exploration Requirements should work closely with their advisor to identify the appropriate Just Societies-flagged courses.
2. Most programs include the writing-intensive course designated for the major as part of the major requirements; this course is therefore not counted towards the total required for Mason Core.
3. Minimum 3 credits required.

College Requirements for the BA Degree

In addition to the program requirements and the Mason Core (https://catalog.gmu.edu/mason-core/) requirements, students pursuing a BA degree must complete the coursework below. Except where expressly prohibited, a course used to fulfill this college-level requirement may also be used simultaneously to satisfy other requirements such as Mason Core (https://catalog.gmu.edu/mason-core/) requirements, other college-level requirements, or requirements for the major. In some cases, the requirements listed below may be superseded by requirements of the degree program and the Mason Core (https://catalog.gmu.edu/mason-core/).

Foundational Breadth

Choose two courses from approved Mason Core: Arts (https://catalog.gmu.edu/mason-core/#arts), Mason Core: Literature (https://catalog.gmu.edu/mason-core/#literature), Mason Core: Global Contexts (https://catalog.gmu.edu/mason-core/#global-contexts), and Mason Core: Social and Behavioral Sciences (https://catalog.gmu.edu/mason-core/#social-behavioral-science) courses in addition to those required by the Mason Core (https://catalog.gmu.edu/mason-core/). The two courses used to fulfill the college-level requirements must each be from different Mason Core categories. Additionally, they must be from different disciplines than the courses used to fulfill the University Mason Core requirements.

Natural Science

Choose one credit in addition to the Mason Core: Natural Science (https://catalog.gmu.edu/mason-core/#natural-science) requirement for a total of 8 credits[1]. This combined college-level and university requirement must be fulfilled by completing two of any approved Mason Core: Natural Science (https://catalog.gmu.edu/mason-core/#natural-science) courses that include a laboratory experience[2].

Code	Title	Credits
Select an additional Mason Core Natural Science course		1

[1] For Geography, BA majors, this extra credit is not required.
[2] BIOL 124 Human Anatomy and Physiology I and BIOL 125 Human Anatomy and Physiology II may not be used to fulfill this requirement.

Foreign Language

Code	Title	Credits
Intermediate-level proficiency in one foreign language is required and may be fulfilled via one of the options below: [1]		
1. Completing a course in a foreign language numbered 202 (or its equivalent), or higher level courses taught in the language.		
2. Achieving a satisfactory score on an approved proficiency test.		
3. Completing an American Sign Language course meeting intermediate-level proficiency:		
EDSE 218	Intermediate American Sign Language (ASL) I	
EDSE 219	American Sign Language (ASL) III	
EDSE 314	Intermediate American Sign Language (ASL) II	
EDSE 315	American Sign Language (ASL) IV	
EDSE 316	American Sign Language (ASL) V	
EDSE 420	Deaf History and Culture	
4. Conferral of a baccalaureate degree. [2]		

[1] Students who are already proficient in a second language may be eligible for a waiver of this requirement. Additional information on waivers can be found with the college's Office of Academic and Student Affairs (http://cosundergrad.gmu.edu/).
[2] This option is only available to students in the Biology, BA with a concentration in Biological Health who have already conferred a baccalaureate degree.

Honors

Honors in the Major

To graduate with departmental honors in Geography, students must have a minimum GPA of 3.50 in GGS courses, an overall GPA of 3.50, and complete the following courses each with a grade of 'B+' or above:

Code	Title	Credits
GGS 463	RS: GIS Analysis and Application	3
GGS 499	GGS Independent Study [1]	3
3 credits of 500-699 level GGS courses (https://catalog.gmu.edu/courses/ggs/) [2]		3

[1] Before registering for this course, students must have identified a topic under the guidance of a full-time faculty member following departmental guidelines.
[2] Eligibility for these courses is restricted to students who obtain permission from the undergraduate coordinator or those in the Accelerated Master's program.

Accelerated Master's

Bachelor's Degree (any)/Geographic and Cartographic Sciences, Accelerated MS

Overview

Offered by the Department of Geography and Geoinformation Sciences (GGS) (https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/) in the College of Science (https://catalog.gmu.edu/colleges-schools/science/), this bachelor's/accelerated master's degree program enables highly qualified undergraduates to obtain any Mason bachelor's degree and the Geographic and Cartographic Sciences, MS (https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/geographic-cartographic-sciences-ms/) degrees within an accelerated timeframe. The program strategy enables students to undertake graduate coursework during their final year in the bachelor's degree. In the case of a 120 credit bachelor's program, this accelerated master's option can be completed as a 138 credit program (thesis option) or 145 credit program (comprehensive exam option). This accelerated pathway prepares students for professional careers where geoinformation management, geographic analysis, and geospatial visualization are of importance.

Students in this accelerated degree program must fulfill all university requirements for the bachelor's program and the Geographic and Cartographic Sciences, MS (https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/geographic-cartographic-sciences-ms/). While the information below is largely comprehensive, students are strongly encouraged to also review AP.6.7 Bachelor's/Accelerated Master's Degrees (https://catalog.gmu.edu/policies/academic/graduate-policies/#ap-6-7).

Application Requirements

Students with an overall GPA of at least 3.0 may apply for provisional acceptance into this accelerated master's program after completing at least 60 undergraduate credits. Additionally, students they must have completed the following courses with a combined GPA of 3.0 or better: GGS 300 Quantitative Methods for Geographical Analysis, GGS 311 Geographic Information Systems, and any one upper level GGS-prefixed course.

Applicants to all graduate programs at Mason must meet the admission standards and application requirements for graduate study as specified in the Admissions section of this catalog. However, this accelerated master's does not require GRE test scores, letters of recommendation, CV/resume, or a statement of interest.

During the bachelor's degree status, accelerated master's students must complete the graduate courses indicated on their Accelerated Master's Program Application (obtained from the Office of Academic and Student Affairs) with a minimum grade of

B- in each course. They must maintain a minimum GPA of 3.0 in all coursework and in coursework applied to their major.

At the beginning of their final undergraduate semester, they must submit the Bachelor's/Accelerated Master's Transition Form (found on the Office of the University Registrar website). Students are encouraged to begin their master's program in the semester immediately following the term of undergraduate degree conferral, but may elect to delay enrollment in for one semester. Students should consult with their faculty advisor in the Department of Geography and Geoinformation Science and the Office of Academic and Student Affairs to obtain further guidance.

Accelerated Option Requirements

Students admitted to this program may start taking graduate courses after completing 75 undergraduate credits. It is recommended that students register for one of the following courses in their first semester of accelerated coursework:

Code	Title	Credits
GGS 551	Cartographic Design	3
GGS 553	Geographic Information Systems	3
GGS 560	Quantitative Methods	3
GGS 579	Remote Sensing	3

Including the course chosen above, up to 12 credits of graduate coursework may be applied to both undergraduate degree and the master's degree. If students earn at least a B- in these classes, they are granted advanced standing in the master's program and must then complete 18 (thesis option) or 25 (comprehensive exam option) additional credits to receive the master's degree. All other master's degree requirements must be met.

Reserve Graduate Credit

During the bachelor's degree status, students may take up to 6 graduate credits as reserve graduate credit. These credits do not apply to the undergraduate degree, but will reduce the subsequent master's degree credits accordingly. With 12 credits counted toward the undergraduate and graduate degrees plus the maximum 6 reserve credits, the credits necessary for the graduate degree can be reduced by up to 18. The ability to take courses for reserve graduate credit is available to all high achieving undergraduates with the permission of the department. To apply the reserved credits to the master's degree, students must request their transfer from the undergraduate degree to the graduate degree via the Bachelor's/Accelerated Master's Transition Form found on the Office of the University Registrar website.

Bachelor's Degree (any)/Geoinformatics and Geospatial Intelligence, Accelerated MS

Overview

Offered by the Department of Geography and Geoinformation Sciences (GGS) (https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/) in the College of Science (https://catalog.gmu.edu/colleges-schools/science/), this bachelor's/accelerated master's degree program enables highly qualified undergraduates to obtain any Mason bachelor's degree and the Geoinformatics and Geospatial Intelligence, MS (https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/geoinformatics-geospatial-intelligence-ms/)degrees within an accelerated timeframe. The program strategy enables students to undertake graduate coursework during their final year in the bachelor's degree. In the case of a 120 credit bachelor's program, this accelerated master's option can be completed as a 138 credit program. This accelerated pathway prepares students for professional careers where geoinformation management, geographic analysis, and geointelligence and geovisualization are of importance.

Students in this accelerated degree program must fulfill all university requirements for the bachelor's program and the Geoinformatics and Geospatial Intelligence, MS (https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/geoinformatics-geospatial-intelligence-ms/). While the information below is largely comprehensive, students are strongly encouraged to also review AP.6.7 Bachelor's/Accelerated Master's Degrees (https://catalog.gmu.edu/policies/academic/graduate-policies/#ap-6-7).

Application Requirements

Students with an overall GPA of at least 3.0 may apply for provisional acceptance into this accelerated master's program after completing at least 60 undergraduate credits. Additionally, students must have completed the following courses with a combined GPA of 3.0 or better: GGS 300 Quantitative Methods for Geographical Analysis, GGS 311 Geographic Information Systems, and any one upper level GGS-prefixed course.

Applicants to all graduate programs at Mason must meet the admission standards and application requirements for graduate study as specified in the Admissions section of this catalog. However, this accelerated master's does not require GRE test scores, letters of recommendation, CV/resume, or a statement of interest.

During the bachelor’s degree status, accelerated master's students must complete the graduate courses indicated on their Accelerated Master's Program Application (obtained from the Office of Academic and Student Affairs) with a minimum grade of B- in each course. They must maintain a minimum GPA of 3.0 in all coursework and in coursework applied to their major.

At the beginning of their final undergraduate semester, they must submit the Bachelor's/Accelerated Master's Transition Form (found on the Office of the University Registrar website). Students are encouraged to begin their master's program in the semester immediately following the term of undergraduate degree conferral, but may elect to delay enrollment in for one semester. Students should consult with their faculty advisor in the Department of Geography and Geoinformation Science and the Office of Academic and Student Affairs to obtain further guidance.

Accelerated Option Requirements

Students admitted to this program may start taking graduate courses after completing 75 undergraduate credits. It is

recommended that students register for one of the following courses in their first semester of accelerated coursework:

Code	Title	Credits
GGS 553	Geographic Information Systems	3
GGS 579	Remote Sensing	3
GGS 664	Spatial Data Structures	3
GGS 684	Geospatial Intelligence Process Information	3

Including the course chosen above, up to 12 credits of graduate coursework may be applied to both undergraduate degree and the master's degree. If students earn at least a B- in these classes, they are granted advanced standing in the master's program and must then complete 18 additional credits to receive the master's degree. All other master's degree requirements must be met.

Reserve Graduate Credit

During the bachelor's degree status, students may take up to 6 graduate credits as reserve graduate credit. These credits do not apply to the undergraduate degree, but will reduce the subsequent master's degree credits accordingly. With 12 credits counted toward the undergraduate and graduate degrees plus the maximum 6 reserve credits, the credits necessary for the graduate degree can be reduced by up to 18. The ability to take courses for reserve graduate credit is available to all high achieving undergraduates with the permission of the department. To apply the reserved credits to the master's degree, students must request their transfer from the undergraduate degree to the graduate degree via the Bachelor's/Accelerated Master's Transition Form found on the Office of the University Registrar website.