

# ENVIRONMENTAL SCIENCE, BS

**Banner Code: SC-BS-EVSC**

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The Environmental Science, BS provides students with rigorous training in the fundamental science of the environment and in the application of key scientific principles to the analysis of environmental processes and problems. Subsequently, the program introduces students to the development of practical responses to those problems. The program covers ecological systems, environmental policy, fundamental techniques of environmental science and engineering, protection and improvement of environmental quality, and public and private decision-making processes. Graduates of the program are prepared to undertake careers in a variety of environmental science fields and are also qualified to pursue advanced scientific/professional education.

This is a Green Leaf program (<https://catalog.gmu.edu/student-services/green-leaf-programs-courses/>).

## 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/#ap-5-3-2>), including the Mason Core (<https://catalog.gmu.edu/mason-core/>).

Students can fulfill the writing intensive requirement for this major by taking EVPP 337 Environmental Policy Making in Developing Countries (Mason Core) (<https://catalog.gmu.edu/mason-core/>).

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

This is a Green Leaf program.

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

Please note that all CONS courses are offered through the Smithsonian-Mason Semester (<https://smconservation.gmu.edu/>).

### Core Requirements

All students must complete the following core courses:

#### Environmental Science

Code	Title	Credits
EVPP 210	Environmental Biology: Molecules and Cells <sup>1</sup>	4
EVPP 301	Environmental Science: Biological Diversity and Ecosystems	4
EVPP 302	Environmental Science: Biomes and Human Dimensions	4
EVPP 305 & EVPP 306	Environmental Microbiology Essentials and Environmental Microbiology Essentials Laboratory	4
EVPP 337	Environmental Policy Making in Developing Countries (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> ) <sup>2</sup>	3
EVPP 361	Introduction to Environmental Policy	3
EVPP 377	Applied Ecology	3
EVPP 430	Fundamentals of Environmental Geographic Information Systems	3
BIOL 214 or STAT 250	Biostatistics for Biology Majors <sup>3</sup> or Introductory Statistics I (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	3-4
Select one from the following:		3
EVPP 336	Tackling Wicked Problems in Society the Environment (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
EVPP 338	Economics of Environmental Policy	
EVPP 362	Intermediate Environmental Policy	
EVPP 475	Global Biodiversity Governance	
Select one from the following:		3-4
EVPP 378	RS: Ecological Sustainability (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
EVPP 480	Sustainability in Action (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
CONS 490	RS: Integrated Conservation Strategies (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
<b>Total Credits</b>		<b>37-39</b>

<sup>1</sup> The requirement for EVPP 210 Environmental Biology: Molecules and Cells can be fulfilled for a student who received transfer credit for BIOL 213 Cell Structure and Function.

<sup>2</sup> Fulfills the writing intensive requirement.

<sup>3</sup> BIOL 214 Biostatistics for Biology Majors is recommended by the Department of Environmental Science and Policy.

**Chemistry**

Code	Title	Credits
CHEM 211 & CHEM 213	General Chemistry I (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> ) and General Chemistry Laboratory I (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	4
CHEM 212 & CHEM 214	General Chemistry II (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> ) and General Chemistry Laboratory II (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	4
<b>Total Credits</b>		<b>8</b>

**Mathematics**

Code	Title	Credits
Select one of the following two options:		4-6
Option One: Select one course from the following:		
MATH 111	Linear Mathematical Modeling (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
MATH 113	Analytic Geometry and Calculus I (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
MATH 114	Analytic Geometry and Calculus II	
Option Two: Complete the following courses:		
MATH 123	Calculus with Algebra/Trigonometry, Part A	
MATH 124	Calculus with Algebra/Trigonometry, Part B (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
Total Credits		4-6

**Geology**

Code	Title	Credits
GEOL 102 & GEOL 104	Historical Geology (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> ) and Historical Geology Laboratory (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	4
<b>Total Credits</b>		<b>4</b>

**Information Technology**

Code	Title	Credits
CDS 130	Computing for Scientists (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	3
<b>Total Credits</b>		<b>3</b>

**Concentration in Conservation (CNSV)**

Code	Title	Credits
Select at least 21 credits from the following: <sup>1</sup>		21
EVPP 115	Special Topics in Environmental Science (May be repeated only when topics vary.)	
EVPP 318	Conservation Biology	
EVPP 350	Freshwater Ecosystems	

EVPP 378	RS: Ecological Sustainability (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )
EVPP 381	Nature and Culture in Global Wetlands (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )
EVPP 395	Undergraduate Research in Environmental Science and Policy
EVPP 396	Directed Topic in Environmental Science and Policy <sup>2</sup>
EVPP 419	Marine Mammal Biology and Conservation
EVPP 420	Marine Mammal Biology and Conservation Field Course
EVPP 421	Marine Conservation
EVPP 427	Conservation Medicine
EVPP 428	Planetary Health
EVPP 440	Field Environmental Science <sup>2</sup>
EVPP 445	Principles of Environmental Toxicology
EVPP 475	Global Biodiversity Governance
EVPP 485	Quantitative Data Analysis for Environmental Scientists
EVPP 490	Special Topics in Environmental Science and Policy
EVPP 494	Internship
BIOL 300	BioDiversity
BIOL 435	Selected Topics in Biology <sup>2</sup>
GGG 303	Geography of Resource Conservation (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )
GGG 307	Geographic Approaches for Sustainable Development
CONS 320	Conservation in Practice
CONS 400	Conservation Seminar
CONS 401	Conservation Theory
CONS 402	Applied Conservation
CONS 404	Biodiversity Monitoring
CONS 405	Landscape and Macrosystems Ecology
CONS 406	Small Population Management
CONS 410	Human Dimensions in Conservation (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )
CONS 490	RS: Integrated Conservation Strategies (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> ) (Synthesis course)
CONS 491	RS: Conservation Management Planning (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )
CONS 496	Research in Conservation (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )
CONS 497	Special Topics in Conservation
CONS 499	Independent Study/Research
INTS 311	The Mysteries of Migration: Consequences for Conservation (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )

Alternative courses may be taken as approved by the program coordinator.

**Total Credits** 21

<sup>1</sup> Credits must be unique to this concentration and are not permitted to share with the Core Requirements in this degree.

Students should consult with an advisor to ensure that they do not exceed allowable credits of EVPP 395 and EVPP 494.

<sup>2</sup> In a relevant topic.

## Concentration in Ecological Science (EC SI)

**Code** **Title** **Credits**  
Select at least 21 unique credits from the following: <sup>1</sup> 21

EVPP 115	Special Topics in Environmental Science (May be repeated only when topics vary.)	
EVPP 309	Oceanography	
EVPP 318	Conservation Biology	
EVPP 350	Freshwater Ecosystems	
EVPP 378	RS: Ecological Sustainability (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
EVPP 381	Nature and Culture in Global Wetlands (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
EVPP 395	Undergraduate Research in Environmental Science and Policy	
EVPP 396	Directed Topic in Environmental Science and Policy <sup>2</sup>	
EVPP 408	Mushrooms, Molds and Society	
EVPP 427	Conservation Medicine	
EVPP 428	Planetary Health	
EVPP 429	Environmental Science Communication	
EVPP 434	Food-Energy-Water-Climate Nexus	
EVPP 435	The Diversity of Fishes	
EVPP 440	Field Environmental Science <sup>2</sup>	
EVPP 441	Protist Diversity and Ecology	
EVPP 445	Principles of Environmental Toxicology	
EVPP 449	Marine Ecology	
EVPP 485	Quantitative Data Analysis for Environmental Scientists	
EVPP 490	Special Topics in Environmental Science and Policy	
EVPP 494	Internship	
BIOL 300	BioDiversity	
BIOL 345	Plant Ecology	
BIOL 435	Selected Topics in Biology <sup>2</sup>	
BIOL 459	Fungi and Ecosystems	
GEOL 305	Environmental Geology (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
GEOL 306	Soil Science	
GGs 307	Geographic Approaches for Sustainable Development	
CEIE 401	Sustainable Land Development	
CEIE 440	Water Supply and Distribution	
CEIE 444	Water Resources Planning and Design	

CEIE 453 Water and Wastewater Treatment Processes

Alternative courses may be taken as approved by the program coordinator.

**Total Credits** 21

<sup>1</sup> Credits must be unique to this concentration and are not permitted to share with the Core Requirements in this degree.

Students should consult with an advisor to ensure that they do not exceed allowable credits of EVPP 395 and EVPP 494.

<sup>2</sup> In a relevant topic.

## Concentration in Environmental Health (EVHL)

**Code** **Title** **Credits**  
**Required Courses**

EVPP 427	Conservation Medicine	3
EVPP 445	Principles of Environmental Toxicology	3

### Course Options

Select at least 15 credits from the following <sup>1</sup> 15

EVPP 115	Special Topics in Environmental Science (May be repeated only when topics vary.)	
EVPP 395	Undergraduate Research in Environmental Science and Policy	
EVPP 396	Directed Topic in Environmental Science and Policy <sup>2</sup>	
EVPP 428	Planetary Health	
EVPP 440	Field Environmental Science <sup>2</sup>	
EVPP 441	Protist Diversity and Ecology	
EVPP 485	Quantitative Data Analysis for Environmental Scientists	
EVPP 490	Special Topics in Environmental Science and Policy	
EVPP 494	Internship	
BIOL 305 & BIOL 306	Biology of Microorganisms and Biology of Microorganisms Laboratory	
BIOL 402	Applied and Industrial Microbiology	
BIOL 404	Medical Microbiology	
BIOL 465	Histology	
CLIM 319	Air Pollution	
GGs 302	Global Environmental Hazards	
GGs 304	Population Geography (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
GGs 307	Geographic Approaches for Sustainable Development	
GCH 205	Global Health (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
GCH 360	Health and Environment	
Alternative courses may be taken as approved by the program coordinator.		

**Total Credits** 21

<sup>1</sup> Credits must be unique to this concentration and are not permitted to share with the Core Requirements in this degree.

Students should consult with an advisor to ensure that they do not exceed allowable credits of EVPP 395 and EVPP 494.

<sup>2</sup> In a relevant topic.

## Concentration in Human and Ecosystem Response to Climate Change (HERC)

Code	Title	Credits
<b>Course Options</b>		
Select 21 unique credits from the following courses; at least 15 of these credits must be in EVPP-prefixed courses: <sup>1</sup>		21
EVPP 115	Special Topics in Environmental Science (May be repeated only when topics vary.)	
EVPP 309	Oceanography	
EVPP 336	Tackling Wicked Problems in Society the Environment (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
EVPP 338	Economics of Environmental Policy	
EVPP 362	Intermediate Environmental Policy	
EVPP 378	RS: Ecological Sustainability (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
EVPP 381	Nature and Culture in Global Wetlands (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
EVPP 395	Undergraduate Research in Environmental Science and Policy	
EVPP 396	Directed Topic in Environmental Science and Policy	
EVPP 427	Conservation Medicine	
EVPP 428	Planetary Health	
EVPP 429	Environmental Science Communication	
EVPP 432	Energy Policy	
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 445	Principles of Environmental Toxicology	
EVPP 465	Coral Reef Ecology, Health, and Conservation	
EVPP 466	Coral Reef Ecology, Health, and Conservation Lab/Field Experience	
EVPP 485	Quantitative Data Analysis for Environmental Scientists	
EVPP 490	Special Topics in Environmental Science and Policy	
EVPP 494	Internship	
CLIM 101	Global Warming: Weather, Climate, and Society (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
CLIM 111	Introduction to the Fundamentals of Atmospheric Science (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
CLIM 112	Introduction to the Fundamentals of Atmospheric Science Lab (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	

CLIM 312	Physical Climatology	
CLIM 314	Severe and Extreme Weather	
CLIM 319	Air Pollution	
CLIM 390	Topics in Climate Research	
CLIM 412	Physical Oceanography	
CLIM 438	Atmospheric Chemistry	
CLIM 456	Introduction to Atmospheric Radiation	
GEOL 309	Oceanography	
GGs 121	Dynamic Atmosphere and Hydrosphere (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
GGs 302	Global Environmental Hazards	
GGs 304	Population Geography (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
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 354	Data Analysis and Global Change Detection Techniques	
PHIL 243	Global Environmental Ethics (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
PHIL 343	Topics in Environmental Philosophy (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
Alternative courses may be taken as approved by the program coordinator.		
<b>Total Credits</b>		<b>21</b>

<sup>1</sup> Credits must be unique to this concentration and are not permitted to share with the Core Requirements in this degree. Students should consult with an advisor to ensure that they do not exceed allowable credits of EVPP 395 and EVPP 494.

## Concentration in Marine, Estuarine and Freshwater Ecology (MEFC)

Code	Title	Credits
<b>Required Courses</b>		
EVPP 309	Oceanography	3
EVPP 350	Freshwater Ecosystems	4
EVPP 421	Marine Conservation	3
EVPP 449	Marine Ecology	3
<b>Course Options</b>		
Select at least 8 credits from the following: <sup>1</sup>		8
EVPP 115	Special Topics in Environmental Science (May be repeated only when topics vary.)	
EVPP 318	Conservation Biology	
EVPP 363	Coastal Morphology and Processes	
EVPP 395	Undergraduate Research in Environmental Science and Policy	
EVPP 396	Directed Topic in Environmental Science and Policy <sup>2</sup>	

EVPP 419	Marine Mammal Biology and Conservation
EVPP 420	Marine Mammal Biology and Conservation Field Course
EVPP 427	Conservation Medicine
EVPP 434	Food-Energy-Water-Climate Nexus
EVPP 435	The Diversity of Fishes
EVPP 440	Field Environmental Science <sup>2</sup>
EVPP 441	Protist Diversity and Ecology
EVPP 445	Principles of Environmental Toxicology
EVPP 475	Global Biodiversity Governance
EVPP 485	Quantitative Data Analysis for Environmental Scientists
EVPP 490	Special Topics in Environmental Science and Policy
EVPP 494	Internship
EVPP 563	Coastal Morphology and Processes
BIOL 331	Invertebrate Zoology
BIOL 480	The Diversity of Fishes
GEOL 364	Marine Geology
GEOL 458	Chemical Oceanography
GGG 307	Geographic Approaches for Sustainable Development
CLIM 412	Physical Oceanography
Alternative courses may be taken as approved by the program coordinator.	
<b>Total Credits</b>	<b>21</b>

<sup>1</sup> Credits must be unique to this concentration and are not permitted to share with the Core Requirements in this degree. Students should consult with an advisor to ensure that they do not exceed allowable credits of EVPP 395 and EVPP 494.

<sup>2</sup> In a relevant topic.

## Concentration in Wildlife Conservation and Management (WICM)

Code	Title	Credits
<b>Wildlife Courses</b>		
Select 6 credits from the following: <sup>1</sup>		6
EVPP 318	Conservation Biology	
EVPP 445	Principles of Environmental Toxicology	
EVPP 490	Special Topics in Environmental Science and Policy	
Select 15 credits from the following: <sup>1</sup>		15
EVPP 115	Special Topics in Environmental Science (May be repeated only when topics vary.)	
EVPP 395	Undergraduate Research in Environmental Science and Policy <sup>2</sup>	
EVPP 396	Directed Topic in Environmental Science and Policy <sup>2</sup>	
EVPP 419	Marine Mammal Biology and Conservation	
EVPP 427	Conservation Medicine	
EVPP 428	Planetary Health	

EVPP 435	The Diversity of Fishes
EVPP 445	Principles of Environmental Toxicology
EVPP 475	Global Biodiversity Governance
EVPP 485	Quantitative Data Analysis for Environmental Scientists
EVPP 490	Special Topics in Environmental Science and Policy
EVPP 494	Internship <sup>2</sup>
BIOL 304	Plant Biology
BIOL 344	Plant Diversity and Evolution
BIOL 345	Plant Ecology
BIOL 311	General Genetics
BIOL 326	Animal Physiology
BIOL 331	Invertebrate Zoology
BIOL 332	Insect Biology
BIOL 437	Ornithology
BIOL 438	Mammalogy
BIOL 439	Herpetology
BIOL 454	Marine Mammal Biology and Conservation
BIOL 460	Infectious Diseases Wildlife
RMGT 300	People With Nature
RMGT 302	Park Management and Operations
RMGT 402	Human Behavior in Natural Environments

**Total Credits** **21**

<sup>1</sup> Credits must be unique to this concentration and are not permitted to share with the Core Requirements in this degree.

Students should consult with an advisor to ensure that they do not exceed allowable credits of EVPP 395 and EVPP 494.

<sup>2</sup> In a topic relevant to wildlife.

## Mason Core and Elective Credits

In order to meet a minimum of 120 credits, this degree requires an additional 39-43 credits, 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>), and elective courses. Students are strongly encouraged to consult with their advisors to ensure that they fulfill all requirements.

### 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.

Students who have completed the following credentials are eligible for a waiver of the Foundation and Exploration (lower level) requirement categories. 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
<b>Foundation Requirements</b>		
	Written Communication (lower-level) ( <a href="https://catalog.gmu.edu/mason-core/#written">https://catalog.gmu.edu/mason-core/#written</a> )	3
	Oral Communication ( <a href="https://catalog.gmu.edu/mason-core/#oral">https://catalog.gmu.edu/mason-core/#oral</a> )	3
	Quantitative Reasoning ( <a href="https://catalog.gmu.edu/mason-core/#quantitative">https://catalog.gmu.edu/mason-core/#quantitative</a> )	3
	Information Technology and Computing ( <a href="https://catalog.gmu.edu/mason-core/#information-technology">https://catalog.gmu.edu/mason-core/#information-technology</a> )	3
<b>Exploration Requirements</b>		
	Arts ( <a href="https://catalog.gmu.edu/mason-core/#arts">https://catalog.gmu.edu/mason-core/#arts</a> )	3
	Global Contexts ( <a href="https://catalog.gmu.edu/mason-core/#global-contexts">https://catalog.gmu.edu/mason-core/#global-contexts</a> )	3
	Global History ( <a href="https://catalog.gmu.edu/mason-core/#global-history">https://catalog.gmu.edu/mason-core/#global-history</a> )	3
	Literature ( <a href="https://catalog.gmu.edu/mason-core/#literature">https://catalog.gmu.edu/mason-core/#literature</a> )	3
	Natural Science ( <a href="https://catalog.gmu.edu/mason-core/#natural-science">https://catalog.gmu.edu/mason-core/#natural-science</a> )	7
	Social and Behavioral Sciences ( <a href="https://catalog.gmu.edu/mason-core/#social-behavioral-science">https://catalog.gmu.edu/mason-core/#social-behavioral-science</a> )	3
	Just Societies (optional) ( <a href="https://catalog.gmu.edu/mason-core/#justsocieties">https://catalog.gmu.edu/mason-core/#justsocieties</a> ) <sup>1</sup>	
<b>Integration Requirements</b>		
	Written Communication (upper-level) ( <a href="https://catalog.gmu.edu/mason-core/#written">https://catalog.gmu.edu/mason-core/#written</a> )	3
	Writing Intensive ( <a href="https://catalog.gmu.edu/mason-core/#wi">https://catalog.gmu.edu/mason-core/#wi</a> ) <sup>2</sup>	3
	Mason Apex ( <a href="https://catalog.gmu.edu/mason-core/#apex">https://catalog.gmu.edu/mason-core/#apex</a> ) <sup>3</sup>	3
<b>Total Credits</b>		<b>40</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Minimum 3 credits required.

## Accelerated Master's

### Bachelor's Degree (selected)/ Environmental Science and Policy, Accelerated MS

#### Overview

This bachelor's/accelerated master's degree program allows academically strong undergraduates with a commitment to advance their education to obtain a Green Leaf-designated (<https://catalog.gmu.edu/student-services/green-leaf-programs-courses/>) bachelor's degree and the Environmental Science and Policy, MS (<https://catalog.gmu.edu/colleges-schools/science/environmental-policy/environmental-science-policy-ms/>) degrees within an accelerated timeframe. Upon completion of this 141-credit accelerated program, students will be exceptionally well prepared for entry into their careers or into a doctoral program in the field or in a related discipline.

Students are eligible to apply for this accelerated program once they have earned at least 60 undergraduate credits and can enroll in up to 18 credits of graduate coursework after successfully completing 75 undergraduate credits. This flexibility makes it possible for students to complete a bachelor's and a master's in five years.

For more detailed information, see AP6.7 Bachelor's/Accelerated Master's Degrees (<https://catalog.gmu.edu/policies/academic/graduate-policies/#ap-6-7>). For policies governing all graduate degrees, see AP6 Graduate Policies (<https://catalog.gmu.edu/policies/academic/graduate-policies/>). For more information on undergraduates enrolling in graduate courses, see AP1.4.4 Graduate Course Enrollment by Undergraduates (<https://catalog.gmu.edu/policies/academic/registration-attendance/#text>).

#### Admission Requirements

Applicants to all graduate programs at George Mason University must meet the admission standards and application requirements for graduate study as specified in the Graduate Admission Policies (<https://catalog.gmu.edu/admissions/graduate-policies/>) section of this catalog.

Important application information and processes for this accelerated master's program can be found here (<https://www.gmu.edu/admissions-aid/accelerated-masters/>).

The GRE exam is not required for this accelerated master's program.

Students should submit three letters of recommendation (at least one from a former professor or someone with a PhD), a recent resume, a statement of interest/research goals and interests (including information on the candidate's proposed MS research), and a letter from their advisor (Perspective Advisor Form (<https://science.gmu.edu/media/prospective-advisor-form-dnp-form-revised-mar-2023/>)) stating that the advisor agrees to take on the candidate as an MS student, how the candidate would be a good fit for them and why candidate's research topic would be suitable.

Students with an overall GPA of at least 3.20 who are pursuing any Green Leaf-designated (<https://catalog.gmu.edu/student-services/green-leaf-programs-courses/>) major or minor may apply to this accelerated master's program after completing two semesters of chemistry (including CHEM 211 General Chemistry I (Mason Core) (<https://catalog.gmu.edu/mason-core/>) and CHEM 212 General Chemistry

II (Mason Core) (<https://catalog.gmu.edu/mason-core/>) and three semesters of biology, including a course in ecology, or the equivalent, for example:

Code	Title	Credits
Select one of the following options:		13
<b>Option 1:</b>		
BIOL 213	Cell Structure and Function	
BIOL 214	Biostatistics for Biology Majors	
BIOL 308	Foundations of Ecology and Evolution (Mason Core) ( <a href="https://catalog.gmu.edu/mason-core/">https://catalog.gmu.edu/mason-core/</a> )	
<b>Option 2:</b>		
EVPP 210	Environmental Biology: Molecules and Cells	
EVPP 301	Environmental Science: Biological Diversity and Ecosystems	
EVPP 302	Environmental Science: Biomes and Human Dimensions	
EVPP 305	Environmental Microbiology Essentials	
EVPP 306	Environmental Microbiology Essentials Laboratory	
<b>Option 3:</b>		
CONS 401	Conservation Theory	
CONS 402	Applied Conservation	
6 credits of BIOL or CONS electives		

### Graduate Advisor

By at least the beginning of their senior year, students should seek out a faculty member in the Department of Environmental Science and Policy (<https://catalog.gmu.edu/colleges-schools/science/environmental-policy/#facultytext>) who is willing to serve as their advisor. This advisor will aid the student in choosing the appropriate graduate courses to take and help to prepare the student for graduate studies. Admission into a research-oriented master's concentration is dependent upon securing the agreement of a faculty advisor. Faculty from a variety of departments and colleges at George Mason University (called "program faculty") can serve as master's advisors. Potential students are encouraged to speak with the graduate program coordinator in the department to obtain guidance on this issue.

### Accelerated Option Requirements

After the completion of 75 undergraduate credits, students may complete 3 to 12 credits of graduate coursework that can apply to both the undergraduate and graduate degrees.

In addition to applying to graduate from the undergraduate program, students in the accelerated program must submit a bachelor's/accelerated master's transition form (available from the Office of the University Registrar (<https://registrar.gmu.edu/forms/>)) to the College of Science's Office of Academic and Student Affairs (<https://cos.gmu.edu/about/contact-us/>) by the last day to add classes of their final undergraduate semester. Students should enroll for courses in the master's program in the fall or spring semester immediately following conferral of the bachelor's degree, but should contact an advisor if they would like to defer up to one semester.

Students must maintain an overall GPA of 3.00 or higher in all graduate coursework and should consult with their faculty advisor to coordinate their academic goals.

### Reserve Graduate Credits

Accelerated master's students may also take up to 6 graduate credits as reserve graduate credits. These credits do not apply to the undergraduate degree, but will reduce the master's degree by up to 6 credits. With 12 graduate credits counted toward the undergraduate and graduate degrees plus the maximum 6 reserve graduate credits, the credits necessary for the graduate degree can be reduced by up to 18.

### Graduate Course Suggestions

The following list of suggested courses is provided for general reference. To ensure an efficient route to graduation and post-graduation readiness, students are strongly encouraged to meet with an advisor before registering for graduate-level courses.

Code	Title	Credits
EVPP 518	Conservation Biology	3
EVPP 529	Environmental Science Communication	3
EVPP 621	Overview of Biodiversity Conservation	3
EVPP 635	Environment and Society	3