

# RENEWABLE ENERGY INTERDISCIPLINARY MINOR

**Banner Code:** RNRG

## Undergraduate Physics Advisor

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This college-wide interdisciplinary minor is designed for students considering a career in the field of renewable energy, or as preparation for graduate work in a wide range of academic disciplines.

Renewable energy, as normally understood, includes a variety of methods of energy generation, such as solar, wind, hydro, tidal, and geothermal, as well as energy storage methods and energy conservation. Jobs related to renewable energy lie in a wide range of areas including engineering, business, marketing, finance, installation, software, legal affairs, and research. Projections suggest that employment opportunities in the renewable energy field will increase dramatically in the near future. The renewable energy interdisciplinary minor is therefore ideally suited for students with majors in engineering, business, policy, and science.

## Admissions & Policies

### Policies

Eight credits of coursework must be unique to the minor and students must complete all coursework with a minimum GPA of 2.00. For policies governing all minors, see AP5.3.4 Minors (<http://catalog.gmu.edu/policies/academic/undergraduate-policies/#ap-5-3-4>).

## Requirements

### Minor Requirements

Total credits: 15-17

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

### Core Courses

Code	Title	Credits
Complete the following core courses:		
RENE 131	Introduction to Renewable Energy	3
RENE 411	Renewable Energy Internship	3
Total Credits		6

### Minor Options

Code	Title	Credits
Choose three courses, including:		
One (1) course (3 credits) from Category A		9 - 11
One (1) course (3-4 credits) from Category B		

One (1) course (3-4 credits) from Category C or one (1) 300-400 level course (3-4 credits) from Category A or Category B

#### Category A: Economics and Policy

ECON 100	Economics for the Citizen (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or ECON 103	Contemporary Microeconomic Principles (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or ECON 104	Contemporary Macroeconomic Principles (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or ECON 105	Environmental Economics for the Citizen (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
ECON 309	Economic Problems and Public Policies
ECON 335	Environmental Economics
ECON 435	Economics of Energy (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
EVPP 338	Economics of Environmental Policy
EVPP/GOVT 361	Introduction to Environmental Policy
EVPP 432	Energy Policy
GGG 303	Geography of Resource Conservation (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
GGG 307	Geographic Approaches for Sustainable Development
GOVT 304	American State and Local Government
GOVT 364	Public Policy Making

#### Category B: Science and Technology

CEIE 100	Environmental Issues and Solutions Around the World (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
CHEM 101	Introduction to Modern Chemistry (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or CHEM 102	Chemistry for Changing Times (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or CHEM 103	Chemical Science in a Modern Society (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or CHEM 104	Chemistry for Changing Times (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or CHEM 155	Introduction to Environmental Chemistry I (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or CHEM 211	General Chemistry I (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or CHEM 271	General Chemistry for Engineers Lecture (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
CHEM 156	Introduction to Environmental Chemistry II (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or CHEM 212	General Chemistry II (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
CHEM 331	Physical Chemistry I
CHEM 332	Physical Chemistry II

2 Renewable Energy Interdisciplinary Minor

CLIM 101	Global Warming: Weather, Climate, and Society (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or CLIM 102	Introduction to Global Climate Change Science (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
GGG 102	Physical Geography (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
GGG 121	Dynamic Atmosphere and Hydrosphere (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
GGG 122	Dynamic Geosphere and Ecosphere
GEOL 321	Geology of Energy Resources
PHYS 331	Physics of Renewable Energy
PHYS 332	Solar Cells
PHYS 385	Materials Science with Applications to Renewable Energy
STAT 250	Introductory Statistics I (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
or STAT 344	Probability and Statistics for Engineers and Scientists I
or STAT 346	Probability for Engineers

**Category C: Business and Communication**

ACCT 203	Survey of Accounting
or ACCT 204	Honors Survey of Accounting
BULE 303	Legal Environment of Business
BUS 200	Global Environment of Business (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
BUS 210	Business Analytics I (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )
BUS 310	Business Analytics II
COMM 204	Introduction to Public Relations
COMM 309	Writing across the Media
EVPP 322	Business and Sustainability
GOVT 358	Nonprofit Financial Planning
MBUS 300	Accounting in a Global Economy
MBUS 306	Managing Projects and Operations
MGMT 303	Principles of Management

Total Credits

9-11