

Program Change Request

Date Submitted: 04/27/20 12:25 am

Viewing: **RNRG : Renewable Energy**

Interdisciplinary Minor

Last approved: 03/16/20 10:45 am

Last edit: 08/07/20 3:26 pm

Changes proposed by: prubin

Catalog Pages

Using this Program

[Renewable Energy Interdisciplinary Minor](#)

Are you completing this form on someone else's behalf?

No

Effective Catalog: 2020-2021

Program Level: Undergraduate

Program Type: Minor

Title:

Renewable Energy Interdisciplinary Minor

Banner Title: Renewable Energy Interdiscipl

Registrar's Office

Use Only –

Program Start Term

College/School: College of Science

**Department /
Academic Unit:** Physics & Astronomy

**Jointly Owned
Program?** No

Academic Themes:

In Workflow

1. Registrar-
Programs:Workflow
Review
2. PHYS UG
Committee
3. PHYS Chair
4. SC Curriculum
Committee
5. SC Associate Dean
6. SC CAT Editor
7. Assoc Provost-
Undergraduate
8. Registrar-Programs

Approval Path

1. 04/27/20 10:28 am
Tory Sarro (vsarro):
Approved for
Registrar-
Programs:Workflow
Review
2. 05/13/20 9:34 am
Philip Rubin
(prubin): Approved
for PHYS UG
Committee
3. 05/13/20 11:05 am
Paul So (paso):
Approved for PHYS
Chair

History

1. Nov 14, 2017 by
clmig-jwehrheim

2. Feb 22, 2018 by
Rebekah Zacharias
(rzachari)
3. Feb 3, 2019 by
Philip Rubin
(prubin)
4. Mar 16, 2020 by
Tory Sarro (vsarro)

Business, Economics, & Entrepreneurship
Engineering, Technology, & Design
Environment, Sustainability, & Social Action
Government, Policy, & International Affairs
Science & Math

Justification

Increase accessibility to non-science majors and interdisciplinarity of the program.
PHYS 411 is a new course going through approvals simultaneously.

Catalog Published Information

Total Credits Required: Total credits: **15-18**
~~17-20~~

Registrar's Office Use Only - Program Code:
RNRG

Registrar/IRR Use
Only – Program CIP
Code

Admission
Requirements:

Program-Specific
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 [AP.5.3.4 Minors](#).

Degree Requirements:

Students should refer to the [Admissions & Policies](#) tab for specific policies related to this program.

Core Course

PHYS 331	Physics of Renewable Energy	3
PHYS 385	Materials Science with Applications to Renewable Energy	3
MATH 113	Analytic Geometry and Calculus I (Mason Core)	4
PHYS 131	Introduction to Renewable Energy	3
Total Credits		3

Electives

Select 12-15 credits from the following:

12-15

<u>ACCT 203</u>	Survey of Accounting
or <u>ACCT 204</u>	Honors Survey of Accounting
<u>BULE 303</u>	Legal Environment of Business
<u>BUS 200</u>	Global Environment of Business (<u>Mason Core</u>)
<u>BUS 210</u>	Business Analytics I
<u>BUS 310</u>	Business Analytics II
<u>CEIE 100</u>	Environmental Engineering around the World (<u>Mason Core</u>)
<u>CHEM 101</u>	Introduction to Modern Chemistry (<u>Mason Core</u>)
or <u>CHEM 102</u>	Chemistry for Changing Times (<u>Mason Core</u>)
or <u>CHEM 103</u>	Chemical Science in a Modern Society (<u>Mason Core</u>)
or <u>CHEM 104</u>	Chemistry for Changing Times (<u>Mason Core</u>)
or <u>CHEM 155</u>	Introduction to Environmental Chemistry I (<u>Mason Core</u>)
or <u>CHEM 211</u>	General Chemistry I (<u>Mason Core</u>)
or <u>CHEM 271</u>	General Chemistry for Engineers Lecture (<u>Mason Core</u>)
<u>CHEM 156</u>	Introduction to Environmental Chemistry II (<u>Mason Core</u>)
or <u>CHEM 212</u>	General Chemistry II (<u>Mason Core</u>)
<u>CHEM 331</u>	Physical Chemistry I
<u>CHEM 332</u>	Physical Chemistry II
<u>CLIM 101</u>	Global Warming: Weather, Climate, and Society (<u>Mason Core</u>)
or <u>CLIM 102</u>	Introduction to Global Climate Change Science (<u>Mason Core</u>)
<u>COMM 303</u>	Writing across the Media
<u>COMM 330</u>	Principles of Public Relations
<u>COMM 391</u>	Writing for Public Relations
<u>ECON 100</u>	Economics for the Citizen (<u>Mason Core</u>)
or <u>ECON 103</u>	Contemporary Microeconomic Principles (<u>Mason Core</u>)
or <u>ECON 104</u>	Contemporary Macroeconomic Principles (<u>Mason Core</u>)
or <u>ECON 105</u>	Environmental Economics for the Citizen (<u>Mason Core</u>)
<u>ECON 309</u>	Economic Problems and Public Policies
<u>ECON 335</u>	Environmental Economics
<u>ECON 435</u>	Economics of Energy
<u>EVPP 322</u>	Business and Sustainability
<u>EVPP 338</u>	Economics of Environmental Policy

<u>EVPP/GOVT 361</u>	Introduction to Environmental Policy
<u>EVPP 401</u>	Integrated Environmental Assessment
<u>EVPP 432</u>	Energy Policy
<u>EVPP 472</u>	Tools and Techniques for International Development
<u>GGG 102</u>	Physical Geography (<u>Mason Core</u>)
<u>GGG 121</u>	Dynamic Atmosphere and Hydrosphere (<u>Mason Core</u>)
<u>GGG 122</u>	Dynamic Geosphere and Ecosphere
<u>GGG 303</u>	Geography of Resource Conservation (<u>Mason Core</u>)
<u>GGG 307</u>	Geographic Approaches for Sustainable Development
<u>GEOL 321</u>	Geology of Energy Resources
<u>GOVT 304</u>	American State and Local Government
<u>GOVT 358</u>	Nonprofit Financial Planning
<u>GOVT 364</u>	Public Policy Making
<u>MGMT 303</u>	Principles of Management
<u>MBUS 300</u>	Accounting in a Global Economy
<u>MBUS 306</u>	Managing Projects and Operations
<u>PHYS 331</u>	Physics of Renewable Energy
<u>PHYS 332</u>	Solar Cells
<u>PHYS 385</u>	Materials Science with Applications to Renewable Energy
<u>PHYS 411</u>	Course PHYS 411 Not Found
<u>STAT 250</u>	Introductory Statistics I (<u>Mason Core</u>)
or <u>STAT 344</u>	Probability and Statistics for Engineers and Scientists I
or <u>STAT 346</u>	Probability for Engineers

Total Credits

12-15

~~Core Courses-Physics~~

Select one from the following:

1-3

PHYS 245	College Physics II (Mason Core)
PHYS 262	University Physics III (Mason Core)
PHYS 266	Introduction to Thermodynamics

~~Total Credits~~

~~0~~

~~Other Science or Engineering Course~~

Select 3-4 credits from the following in consultation with minor advisor:

3-4

PHYS 332	Solar Cells
CHEM 212	General Chemistry II (Mason Core)
& CHEM 214	and General Chemistry Laboratory II (Mason Core)
GEOL 321	Geology of Energy Resources
CHEM 271	General Chemistry for Engineers Lecture (Mason Core)
CHEM 272	General Chemistry for Engineers Lab (Mason Core)
ECE 301	Digital Electronics

~~Other appropriate science or engineering course chosen in consultation with the minor advisor.~~

~~Total Credits~~

~~0~~

Internship

Select one from the following options:

3

PHYS 409

Physics Internship 1

Total Credits

0

~~1 Or a 3 credit internship in another natural science or engineering field. The course must be focused on renewable energy and chosen in consultation with the minor advisor.~~

**Retroactive
Requirements
Updates:**

Green Leaf Program Designation

Is this a Green Leaf program? No

Does this program cover material which crosses into another department?

No

**Additional
Attachments**

**Reviewer
Comments**

**Additional
Comments**

Is this course required of all students in this degree program?

`%wi_required.eshtml%`