



# Program Approval Form

For approval of new programs and deletions or modifications to an existing program.

### Action Requested:

- Create New (SCHEV approval required except for minors and certificates)
- Delete Existing
- Modify Existing (check all that apply)
  - Title (SCHEV approval required except for minors, certificates)
  - Concentration** (Choose one):  Add  Delete  Modify
  - Degree Requirements
  - Admission Standards
  - Application Requirements
  - Other Changes: \_\_\_\_\_

### Type (Check one):

- B.A.  B.S.  Minor
- Undergraduate Certificate
- M.A.  M.S.  M.Ed.
- Ph.D.  Graduate Certificate
- Other: \_\_\_\_\_

**College/School:** 
**Department:** 
  
**Submitted by:** 
**Ext:** 
**Email:**

**Effective Term:** Fall 
**Please note:** For students to be admitted to a new degree, minor, certificate or concentration, the program must be fully approved, entered into Banner, and published in the University Catalog.

**Justification:** (attach separate document if necessary)

**Taking only one of CHEM 211 and 212 is not really useful (and 211 is a prerequisite for 212); chemistry is just one subject among several that are appropriate for the minor; and the proposed changes increase the flexibility of the minor without sacrificing coverage by making it accessible to majors that require no chemistry course.**

**Program Title:** (Required)  
Title must identify subject matter. Do not include name of college/school/dept.

**Concentration(s):**

**Admissions Standards / Application Requirements:**  
(Required only if different from those listed in the University Catalog)

**Degree Requirements:**  
Consult University Catalog for models, attach separate document if necessary using track changes for modifications

**Courses offered via distance:**  
(if applicable)

**TOTAL CREDITS REQUIRED:**

Existing	New/Modified
Renewable Energy	
See attached.	See Attached.

## Approval Signatures

Department \_\_\_\_\_ Date \_\_\_\_\_ College/School \_\_\_\_\_ Date \_\_\_\_\_ Provost's Office \_\_\_\_\_ Date \_\_\_\_\_  
*Interdisciplinary Council Use Only*

If this program may impact another unit or is in collaboration with another unit at Mason, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.

Unit Name	Unit Approval Name	Unit Approver's Signature	Date

### For Graduate Programs Only

---

**For Registrar Office's Use Only:** Received \_\_\_\_\_ Banner \_\_\_\_\_ Catalog \_\_\_\_\_  
*revised 5/5/10*

### Old Degree Requirements:

Chemistry (4 credits)

Choose one from the following:

- CHEM 211 - General Chemistry Credits: 4
- CHEM 212 - General Chemistry Credits: 4
- CHEM 251 - General Chemistry for Engineers Credits: 4

Total: 18-20 Credits

### New Degree Requirements:

Other Science or Engineering (3 or 4 credits)

Choose from the following, in consultation with minor advisor:

- CHEM 251 - General Chemistry for Engineers Credits: 4
- ECE 301 - Digital Electronics Credits: 3
- GEOL 321 - Geology of Energy Resources Credits: 3
- PHYS 332 - Solar Cells Credits: 3
- or other appropriate course in science or engineering

Total: 17-20 Credits

---

## Renewable Energy Interdisciplinary Minor: Current Program

### Core Courses (10 credits)

PHYS 331 - Fundamentals of Renewable Energy Credits: 3

PHYS 385 - Materials Science with Applications to Renewable Energy Credits: 3

MATH 113 - Analytic Geometry and Calculus I Credits: 4

### Physics (1-3 credits)

Choose one from the following:

PHYS 245 - College Physics Credits: 3

PHYS 262 - University Physics III Credits: 3

PHYS 266 - Introduction to Thermodynamics Credits: 1

### Chemistry (4 credits)

Choose one from the following:

CHEM 211 - General Chemistry Credits: 4

CHEM 212 - General Chemistry Credits: 4

CHEM 251 - General Chemistry for Engineers Credits: 4

### Internship (3 credits)

Students may choose one of the following options:

PHYS 409 - Physics Internship Credits: 3 focused on renewable energy  
or a 3-credit internship focusing on renewable energy in another natural science  
or engineering field

Total: 18-20 credits