



# 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)  
 Inactivate Existing  
 Modify Existing (check ALL that apply)  
 Title (SCHEV approval required except for minors)  
 Concentration (Choose one):  Add  Delete  Modify  
 Degree Requirements  
 Admission Standards/ Application Requirements  
 Other  
 Changes: \_\_\_\_\_

### Type (Check one):

B.A.  B.S.  Minor  
 Master's  
 Ph.D.  
 Undergraduate Certificate\*  
 Graduate Certificate\*  
 Bachelor's/Accelerated Master's  Other:

**College/School:** Volgenau School of Engineering **Department:** Mechanical Engineering  
**Submitted by:** Colin James Reagle **Ext:** 3-1712 **Email:** creagle@gmu.edu

**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)

The current versions lists 3 options for electives which included ME 431 and ME 432 as requirements for minor option #3: Dynamics Systems and Controls. However, since ME 431 is no longer a required course for the major, we chose to revisit the requirements for this option. Minor students should be getting the most essential elements of ME as they are only taking a few courses in our discipline.

Through a robust discussion, I believe we arrived at a conclusion that the entire department was happy with. The new version would allow students to complete the elective requirement by selecting 2 courses from a list of courses (which includes all the courses listed in current version's options 1/2/3 plus a few additional ones). This is consistent with some of the other engineering minors in VSE.

### 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


Existing	New/Modified
Minor in Mechanical Engineering	
<b>Core Requirements:</b> <ul style="list-style-type: none"> <li>ME 151 Practicum in Engineering OR ENGR 107 - Introduction to Engineering Credits: 2</li> <li>ME 211 - Statics Credits: 3</li> <li>ME 212 - Solid Mechanics Credits: 3</li> <li>ME 221 - Thermodynamics Credits: 3</li> <li>ME 231 - Dynamics Credits: 3</li> </ul> <b>Elective Requirements:</b> <p>Option 1: Thermal Fluid Systems</p> <ul style="list-style-type: none"> <li>ME 322 - Fluid Mechanics Credits: 3</li> <li>ME 342 - Design of Thermal Systems Credits: 3</li> </ul> <p>Option 2: Mechanical Systems</p> <ul style="list-style-type: none"> <li>ME 313 - Material Science Credits: 3</li> <li>ME 341 - Design of Mechanical Elements Credits: 3</li> </ul> <p>Option 3: Systems Dynamics and Control</p> <ul style="list-style-type: none"> <li>ME 431 - System Dynamics Credits: 3</li> <li>ME 432 - Control Engineering Credits: 4</li> </ul>	<b>Core Requirements:</b> <ul style="list-style-type: none"> <li>ME 151 Practicum in Engineering OR ENGR 107 - Introduction to Engineering Credits: 2</li> <li>ME 211 - Statics Credits: 3</li> <li>ME 212 - Solid Mechanics Credits: 3</li> <li>ME 221 - Thermodynamics Credits: 3</li> <li>ME 231 - Dynamics Credits: 3</li> </ul> <b>Elective Requirements:</b> <p>Select two additional courses from the following:</p> <ul style="list-style-type: none"> <li>ME 313 Material Science Credits: 3</li> <li>ME 322 Fluid Mechanics Credits: 3</li> <li>ME 323 Heat Transfer Credits: 3</li> <li>ME 341 Design of Mechanical Elements Credits: 3</li> <li>ME 342 Design of Thermal Systems Credits: 3</li> <li>ME 352 Entrepreneurship in Engineering Credits: 3</li> <li>ME 431 Systems Dynamics Credits: 3</li> <li>ME 432 Control Engineering Credits: 4</li> <li>ME 454 Project Mgmt for Engineers Credits: 3</li> <li>ME 471 Introduction to Astronautics Credits: 3</li> <li>ME 499 Special Topics in Mechanical Engineering Credits: <del>4</del> <i>at least 3</i></li> </ul>

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

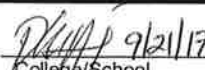
TOTAL CREDITS REQUIRED:

\*For Certificates Only: Indicate whether students are able to pursue on a  Full-time basis  Part-time basis


**Approval Signatures**

  
 Department
 

 9/7/17  
 Date
 

  
 College/School
 

 9/21/17  
 Date
 

  
 Date
 

 Provost's Office  
*Required for Minors and Interdisciplinary Programs*

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 Undergraduate Programs only**

Undergraduate Council Member
  Provost Office
  Undergraduate Council Approval Date

**For Graduate Programs Only**

Graduate Council Member
  Provost Office
  Graduate Council Approval Date

*For Registrar Office's Use Only:* Received \_\_\_\_\_ Banner \_\_\_\_\_ Catalog \_\_\_\_\_ *revised 9/2/2016*