

College/School: Case School of Engineering  
Department: Mechanical and Aerospace Engineering

PROPOSED: ☐ major  
☒ minor  
☐ program  
☐ sequence  
☐ degree

TITLE: Mechanical Design and Manufacturing

EFFECTIVE: Spring (semester) 2011 (year)

DESCRIPTION: This minor will concentrate on design and manufacturing of mechanical elements. Initial impetus for this program came from the Biomedical Engineering Department, where it was believed that such a minor would enhance the opportunities for certain undergraduate students who are looking to enter the job market after graduation. However, the topics covered in this minor encompass a wide area, and may appeal to students in other disciplines such as Materials Science or Macromolecular Science and Engineering. EECS students interested in robotics may also be attracted to this minor.

The minor requires 5 courses

Required Courses

EMAE172 Mechanical Manufacturing  
EMAE370 Design of Mechanical Elements

Students will then choose, in consultation with their advisors, three courses from:

EMAE372 Relation of Materials to Design  
EMAE290 Computer Aided Manufacturing  
EMAE390 Advanced Manufacturing

EMAE397 Independent Laboratory Research - can be used as an elective in this minor sequence under the following conditions:

- (1) The student writes a one-page proposal about the project explaining how it involves mechanical design and/or manufacturing at an advanced undergraduate level
- (2) The proposal is approved by the student's major advisor, and the advisor for the minor in Mechanical and Aerospace Engineering

Is this major/minor/program/sequence/degree: ☒ new  
☐ modification  
☐ replacement

If modification or replacement please elaborate: \_\_\_\_\_

Does this change in major/minor/program/sequence/degree involve other departments? ☐ Yes ☒ No

If yes, which departments? NA

Contact person/committee: Malcolm Cooke, interim advisor for the minor

SIGNATURES:

Department Curriculum Chair(s)/Program Directors:	<u>[Signature]</u>	DATE	<u>12/15/2010</u>
Department Chair:	<u>[Signature]</u>		<u>12/15/2010</u>
College/School Curriculum Committee Chair:	<u>[Signature]</u>		<u>2/24/11</u>
College/School Dean(s):	<u>[Signature]</u>		<u>3/1/11</u>
UUF Curriculum Committee Chair:	_____		

File copy sent to: ☐ Registrar ☐ Office of Undergraduate Studies/Graduate Studies  
☐ Other: \_\_\_\_\_