Minnesota State University, Mankato
Curriculum Proposal

Please type or select the requested information. Print completed forms, add appropriate paper attachments, and route through MSU's curricular process for recommendations and decisions.

College: Science, Engineering and Technology  Undergraduate
Department: Mechanical Engineering  Graduate
Program: Mechanical Engineering  CIP #
Type of Change: COURSE PROPOSALS
Proposal: Change in Course—Other

Title Current: Fluid Mechanics
Title Proposed: Fluid Mechanics
24-Char. Abbrev: Fluid Mechanics

Course Designator and Number  Credits
ME 321  3
(if applicable)

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):

Introduction to fluid flow, fluid properties, fluid statics, the integral and differential approach to basic flow equations. Bernoulli's equation, similitude and dimensional analysis, viscous internal and external flows, one dimensional compressible flow. Pre: ME 214. Coreq: ME 241 or ME 299 F

Rationale or Justification for change:

Add ME 299 as coreq because CIVE students are required to take ME 299 instead of ME 241.

***For General Education or Cultural Diversity Courses Only***

<table>
<thead>
<tr>
<th>GE Category #</th>
<th>GE Category Name (Maximum of 3 Categories)</th>
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<tbody>
<tr>
<td>N/A</td>
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7 For Writing Intensive Courses, attach a description of the kind and quantity of writing.
7 For Upper Division Courses, include a description of the respects in which it is broad and general rather than narrow and specific, and so suitable as GE.

Attach paper copies of the following:

a. Syllabus or course outline.
b. Course's student learning outcomes associated with each GE competency or CD designation.
c. List of strategies to be used to assess students' achievement of each GE competency or CD designation.

***For New Courses***

<table>
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<tr>
<th>Instructional Type:</th>
<th>Course Designation:</th>
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<tr>
<td>Lecture</td>
<td>Civil Engineering &amp; Mechanical Engineering</td>
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Grading Format: D Grade  P/N
Pre- or Co-requisites:
Pre: ME 214, Coreq: ME 241 or ME 299

Course will be offered:

Fall Semester
Spring Semester
Summer Session

Other courses are being changed or eliminated. (Explain.)

Course content or title is similar to courses in other departments. (Attach copy of letter of agreement with other program(s) contacted. Indicate the nature of the discussions and/or resolution of differences or potential conflicts.)

Attach paper copies of the following:

a. Syllabus or course outline.
b. Course's student learning outcomes.
c. A list of resources required to offer and support this course.
d. A description of how teaching this course will affect department staffing.
e. If 400/500 level course, an explanation of added expectations of graduate students.

Revised September 2002
Minnesota State University  
Department of Mechanical & Civil Engineering  

ME 321 – Fluid Mechanics  

Proposed Change  

Add ME 299 as an alternate co-requisites  

2005-06 Bulletin Listing  

Introduction to fluid flow, fluid properties, fluid statics, the integral and differential approach to basic flow equations. Bernoulli equation, similitude and dimensional analysis, viscous internal and external flows, one dimensional compressible flow. Pre: ME 214. Coreq: ME 241 F  

Proposed Bulletin Listing  

Introduction to fluid flow, fluid properties, fluid statics, the integral and differential approach to basic flow equations. Bernoulli equation, similitude and dimensional analysis, viscous internal and external flows, one dimensional compressible flow. Pre: ME 214. Coreq: ME 241 or ME 299 F  

Rationale  

In 2004, the Civil Engineering Program replaced ME 241 with ME 299 as required course in the thermal area. It was an oversight then that the co-requisite for ME 321 was not modified to correspond to the program revision.