

0672



# 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.

		(Check all that apply):		Proposal #	244
College:	Science, Engineering and Technology	<input checked="" type="checkbox"/>	Undergraduate	Effective Date of Change:	
Department:	Mechanical Engineering	<input type="checkbox"/>	Graduate	Academic Year	05-06
Program:	Mechanical Engineering	CIP #		(For Office Use Only)	
Type of Change	COURSE PROPOSALS				
Proposed:	Change in Course—Other				
Title Current:	Fluid Mechanics		Course Designator and Number	Number of Credits	
Title Proposed:			ME 321	3	
24-Char. Abbrev:	Fluid Mechanics		(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\*\*\***

General Education Course:		Cultural Diversity Course:
GE Category #	GE Category Name (Maximum of 3 Categories)	(Please check one.)
N/A		<input type="checkbox"/> Core (At least 75% devoted to topics of race, gender, sexual orientation, age, class, and disabilities as they occur in United States Society.)
N/A		<input type="checkbox"/> Related (At least 25% devoted to the above topics or to a global perspective on topics related to African American, Asian, Hispanic, and Native American inhabitants of the United States.)
N/A		

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:

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

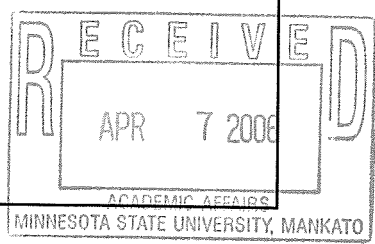
**\*\*\*For New Courses\*\*\***

(Check all that apply):	Instructional Type: Lecture	Course will be offered:
<input type="checkbox"/> Course is an elective.	Grading Format: <input checked="" type="checkbox"/> Grade <input type="checkbox"/> P/N	<input type="checkbox"/> Fall Semester
<input checked="" type="checkbox"/> Course is required for program	Civil Engineering & Mechanical Engineering	<input type="checkbox"/> Spring Semester
<input checked="" type="checkbox"/> Pre- or Co-requisites:	Pre: ME 214, Coreq: ME 241 or ME 299	<input type="checkbox"/> Summer Session
<input type="checkbox"/> 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:

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



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.