Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
• Submit original form and attach a course syllabus.

1. This request is submitted by the Department of Mechanical Engineering

2. Course prefix, number and complete title of course: MEEN 686: Composite Materials Processing and Performance


4. Prerequisite(s): Elasticity, continuum mechanics, or equivalent.

   Cross-listed with:

   Cross-listed courses require the signature of both department heads.

5. Is this a variable credit course? □ Yes ☒ No If yes, from ________ to ________

6. Is this a repeatable course? □ Yes ☒ No If yes, this course may be taken ________ times.

   Will this course be repeated within the same semester? □ Yes ☒ No

7. Has this course been taught as 489/689? ☒ Yes □ No If yes, how many times? 1

   Indicate the number of students enrolled for each academic period it was taught. Spring 2008, 8 students

8. This course will be:

   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   M.S. or Ph.D. students in MEEN and other engineering degree programs

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix Course # Title (excluding punctuation)

    MEEN 686 COMPOSITES PROCESS SING

    Lect. Lab SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
    0 3 0 0 0 3 1 4 1 9 0 1 0 0 0 6 1 9 2 0 10-11 0 0 3 6 3 2

   Approval recommended by:

   Head of Department Date
   Chair, College Review Committee Date
   Head of Department (if cross-listed course) Date
   Dean of College Date
   Submitted to Coordinating Board by:
   Date Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu
Curricular Services – 10/08
Texas A&M University
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    MEEN 686 COMPOSITES PROCESSING

    | Code | Lead | SoH | CP | Course Code |
    |------|------|-----|----|-------------|
    | 0300031419010006192008-09003632 | 12/5/2008 | 12-5-08 | 12-5-08 |

    Approval recommended by: [Signature]
    Date
    Head of Department

    Chair, College Review Committee
    Date
    Dean of College
    Date
    Dean of College
    Date

    Submitted to Coordinating Board by:
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Curricular Services – 10/08
MEEN 686: Composite Materials Processing and Performance

Course Description: Fundamental science and design. Processing and design interaction regarding multiphase composites. Processing science, experimental characterization, laminate analysis. Design structure and process.


Coordinator: Dr. Terry Creasy, Department of Mechanical Engineering Room 309, Engineering Physics Building (ENPH), Office Wing (979) 458-0118, tcreasy@tamu.edu

Prerequisites: Elasticity, Continuum Mechanics or equivalent

Course outline by major topics and approximate time assigned to each:

1. Preliminaries of mechanics, characterization, and processing 3 hours/Theory
2. Mechanics of lamina and laminates 9 hours/Theory
3. Design for performance 6 hours/Theory
4. Processing science-thermoset, thermoplastic 9 hours/Theory
5. Design for manufacturing and impact on performance 9 hours/Theory
6. Theory of experimental characterization 9 hours/Theory

TOTAL: 45 hours/Theory

Evaluation:

Homework: 10%  
Mid-Term Exam: 40%  
Structure Design Project: 25%  
Process Design Project: 25%  
TOTAL: 100%
Grading Scale: A≥90; B≥80; C≥70; D≥60; F<60

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe, you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity

For additional information visit http://disability.tamu.edu/aggiehonor
"An Aggie does not lie, or steal, or tolerate those who do."