

**Department of Materials Science and Engineering**  
**MSE 498 Materials Science & Engineering**  
**Special Topics (1-5, max. 8)**

**Catalog Description:**

Special topics in materials science and engineering offered as a course with lectures, conferences, or laboratory.

**Prerequisites:**

Junior or senior standing in MSE Department

**Textbook and other Required References:**

Varies (depends on specifics of the course)

**Course Objectives:**

The objectives of this course will depend on its use, which varies each quarter. It is a special topics course which is used for small group instruction in a specialty topic, independent study on a specific topic by a student, or a new laboratory course.

**Recent Topics Covered:**

- New laboratory course for MSE 467, Electronic Materials
- This laboratory was introduced using NSF funding to allow students to actually make a semiconductor device in the lab.
- Seminar for incoming sophomores in MSE
- This seminar introduces new students to the full variety of studies and systems of interest to materials engineers.
- Courses for K-12 teachers learning to teach materials science
- This course teaches basic materials with hands on classroom activities, introduces curricula and provides teachers with a peer group for support.
- Independent Study
- Independent study course in smart materials
- Independent study course in computer modeling

**Class Schedule:**

This is an independent study course, with times set depending on need and the schedule of the faculty member who is conducting the course.

**Contribution of course to meeting the professional component:**

This course meets the needs of specific student in learning about specific topics not covered in regular courses, and also provides a means for offering new laboratories on a trial bases.

**Contribution of course to program objectives:**

This course provides specific background and experience for student wishing to study additional topics not available in the regular curriculum. It is useful for students planning on graduate school as well as for those interested in a specific industry, process or application.

**Prepared by:** Thomas Stoebe, Professor, April. 2001