

ENGR & MATH SCIENCES (CEMS)

Courses

CEMS 0001. CEMS Study CATS. 0 Credits.

An academic success program designed to support first- and second-year College of Engineering & Mathematical Sciences students with the goal of increasing student success and retention. Prerequisite: Dean's Office permission.

CEMS 1500. CEMS First Year Seminar. 0 or 1 Credits.

First-year experience for College of Engineering and Mathematical Sciences majors that introduces the design process and strategies for building equitable and effective teams. These skills will be developed in the context of a semester-long project. Students interact with faculty, professionals and peers in their fields. Prerequisite: College of Engineering and Mathematical Sciences major.

CEMS 1990. Special Topics. 1-18 Credits.

See Schedule of Topics for specific titles.

CEMS 1991. Internship. 1-3 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

CEMS 1993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

CEMS 2010. HCOL Research Experience. 1 Credit.

Required Junior year course for HCOL students. Explores a range of careers and important research areas in industry, national labs, and academia. Culminates in students identifying a research advisor and a general topic area. Prerequisite: Junior standing.

CEMS 2020. Research Thesis Proposal. 1 Credit.

Preparation for the senior thesis. Focuses on developing the thesis idea with the academic advisor and culminates in a thesis proposal and proposal presentation. Prerequisites: CEMS 2010 or Instructor permission.

CEMS 2990. Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.

CEMS 2991. Internship. 1-18 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

CEMS 2993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

CEMS 2994. Teaching Assistantship. 1-3 Credits.

Undergraduate student service as a teaching assistant, usually in an introductory-level course in the discipline, for which credit is awarded. Offered at department discretion.

CEMS 2995. Undergraduate Research. 1-18 Credits.

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

CEMS 3899. Cooperative Education. 12 Credits.

Supports students as they engage in experiential learning and reflect about their work experiences. Helps students maximize their cooperative education (co-op) position to ensure they are gaining industry relevant skills that will allow them to excel in their remaining academic coursework and throughout their careers. Prerequisites: College of Engineering and Mathematical Sciences undergraduate student, sophomore or junior standing only, GPA requirement.

CEMS 3910. Energy Policy and Economics. 3 Credits.

Provides overview of environmental, social and economic aspects of energy to build understanding of how to play a more effective role in shaping future policy or business decisions surrounding energy. Project-based. Prerequisites: Minimum Sophomore standing or Instructor permission. Co-requisites: A course with SU designation, a course in Physics.

CEMS 3990. Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.

CEMS 3991. Internship. 1-18 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

CEMS 3993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

CEMS 3994. Teaching Assistantship. 1-3 Credits.

Undergraduate student service as a teaching assistant, usually in an introductory-level course in the discipline, for which credit is awarded. Offered at department discretion.

CEMS 3995. Undergraduate Research. 1-18 Credits.

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.