ENGR & MATH SCIENCES (CEMS)

Courses
CEMS 033. SU: Sustainable Energy Sources. 3 Credits.
Qualitative and quantitative study of renewable energy sources in comparison to fossil fuels: methods of harvesting, applications, environmental and financial sustainability. Assessment of current national and international energy mixes, considering challenges and opportunities in the energy transition. Prerequisites: MATH 009 or any higher level MATH class or Instructor permission.

CEMS 085. Robotics. 3 Credits.
An exploration of the fundamentals of engineering and electronics. Lectures will include principles of engineering, physics, electronics, mechanics, and computer programming. Laboratory experiments will require students to build simple robots to demonstrate these principles. Prerequisite: Non-degree students only.

CEMS 090. 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 092. 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 095. Introductory Special Topics. 1-18 Credits.
See Schedule of Topics for specific titles.

CEMS 101. HCOL Research Experience. 1 Credit.
CEMS HCOL students are required to enroll in this course in their Junior year, as part of their pre-thesis requirements. Expectations for the course are set by the student’s HCOL Thesis advisor. Prerequisite: Junior standing.

CEMS 190. 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 192. 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 195. Intermediate Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

CEMS 197. 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 198. 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 290. 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 292. 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 295. Advanced Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

CEMS 297. 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 298. 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.