GENERAL ENGINEERING (4100)

4100:101 Tools for Engineering (3 Credits)
Corequisite: 3450:221. Introduction to engineering. Free-hand, engineering, and CAD drawing. Introduction to computer programming, computer applications including word processing, spreadsheets, data base. Introduction to engineering economics. Required for Chemical, Civil, and Electrical Engineering majors.

4100:110 Women in Engineering Seminar & Peer Group (1 Credit)
Beginning women students may elect this one-credit course that provides an overview of the career opportunities for women in engineering. The course utilizes dynamic speakers to reinforce the student’s educational and career choices. Small groups meet weekly, led by an upper-class engineering student. This interactive peer environment fosters personal development for first-year students.

4100:120 IDEA Engineering Seminar (1 Credit)
Explore career opportunities/personal development in all fields of engineering, assist with transition from high school to engineering studies. Of particular interest to underrepresented groups.

4100:180 Engineering Design (1 Credit)
See department for course description.

4100:200 Freshman Internship (0 Credits)
Elective for cooperative education student who has completed freshman year. Mandatory for students in the Aerospace Systems Engineering Program, with possibility of waiver if transferring into Program after first year or if student needed to begin mathematics sequence with Precalculus Mathematics in freshman year. Practice in industry and comprehensive written reports of this experience.

4100:201 Energy & Environment (2 Credits)
Interactions between energy production, consumption and environment. Case studies. Not for engineering, chemistry or physics major.

4100:202 Atmospheric Pollution (2 Credits)

4100:203 Environmental Science & Engineering (3 Credits)
Science and engineering fundamentals required to understand environmental issues and alternative solutions. Not for engineering, chemistry, or physics majors.

4100:300 Cooperative Education Work Period (0 Credits)
Prerequisite: Admission to the College of Engineering and completion of sophomore year. Elective for cooperative education student who has completed sophomore year. Practice in industry and comprehensive written reports of this experience.

4100:301 Cooperative Education Work Period (0 Credits)
Prerequisite: Admission to the College of Engineering. Required for cooperative education student only. Practice in industry and comprehensive written reports of this experience. Offered spring semester of third year.

4100:302 Cooperative Education Work Period (0 Credits)
Prerequisite: Admission to the College of Engineering. Required for cooperative education student only. Practice in industry and comprehensive written reports of this experience. Offered fall semester of fourth year.

4100:400 Engineering Management and Leadership (3 Credits)
This is a case and discussion oriented course that examines the role of the engineering manager as a leader, problem solver, strategic planner, and a well-rounded business minded individual.

4100:403 Cooperative Education Work Period (0 Credits)
Prerequisite: Admission to the College of Engineering. Required for cooperative education student only. Practice in industry and comprehensive written reports of this experience. Offered summer after fourth year.