The students will be introduced to the fundamental concepts of plane motion; conservation of energy and momentum. ET 321: Dynamics

Motion of a particle, relative motion; kinetics of translation; rotation and plane motion; conservation of energy and momentum. ET 321 Dynamics

Prerequisite: ET 300, EMCH 211 or ET 300 or MCHT 111

ET 322: Strength of Materials

Equilibrium of coplanar force systems; analysis of frames and trusses; shear and moment diagrams; friction; centroids and moment of inertia. ET 300 Mechanics I: Statics

Prerequisite: ET 300, EMCH 211 or ET 300 or MCHT 111

ET 323: Strength of Materials Laboratory

Measurement of mechanical properties of materials, structural testing. ET 323 Strength of Materials Laboratory

Prerequisite: ET 300, EMCH 211 or MCH T111
analyze different modes of buckling in a slender aluminum column. The laboratory demonstrates important concepts from the strength of materials theory course.

**Prerequisite:** or concurrent: ET 322, E MCH213 or MCH T213

ET 495: Internship

1-18 Credits/Maximum of 18

Supervised off-campus, nongroup instruction including field experiences, practica, or internships. Written or oral critique of activity required.

**Prerequisite:** prior approval of proposed assignment by instructor

ET 496: Independent Studies

1-18 Credits/Maximum of 18

Creative projects, including research and design, that are supervised on an individual basis and that fall outside the scope of formal courses.