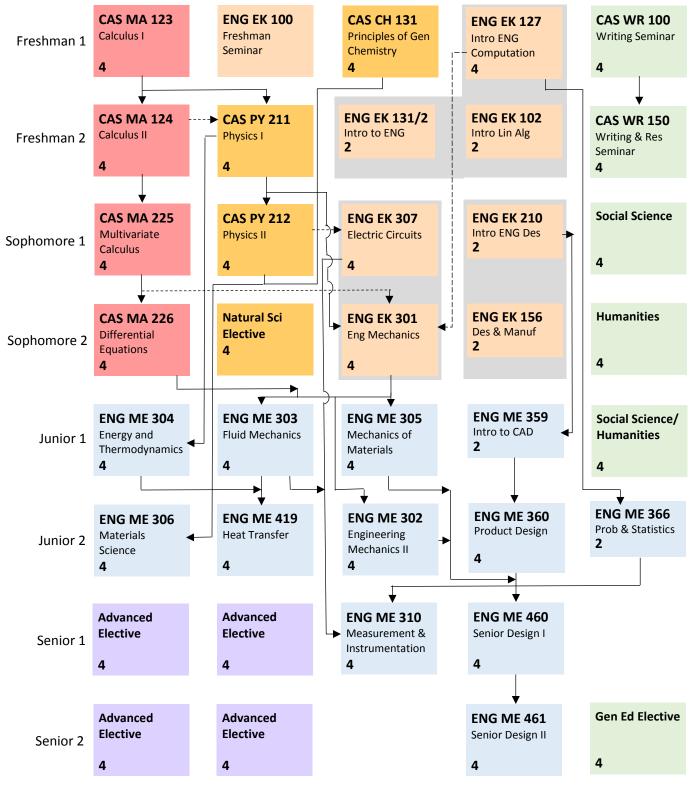
# College of Engineering Mechanical Engineering – 2019 (136 credits)



- Students planning to study abroad sophomore 2 should take EK 301 in sophomore 1.
- Students who have successfully completed or who have AP credit for both CAS CH 101 and CAS CH102 have satisfied the Chemistry and Natural Science Elective requirements.
- Grey box = either semester
- Many courses are offered every semester order can be rearranged as long as prereqs fulfilled.
- Students must complete 48 credits of upper-division program coursework (not including social science/humanities or writing).

## **General Education Electives Checklist**

- ☐ 1. CAS WR 100
- ☐ 2. CAS WR 150
- ☐ 3. One Social Science course
- ☐ 4. One Humanities course
- ☐ 5. One Social Science or Humanities course
- ☐ 6. One General Education elective course
- □ 7. Total of at least 24 credits



### **REQUIREMENTS**

Mechanical Engineering majors are required to complete a minimum of 136 credits as detailed on the Program Planning Sheet on the other side of this page.

### **GENERAL EDUCATION COURSES**

For a list of specific courses that satisfy the Social Science, Humanities and General Education Elective, please go to the College of Engineering Undergraduate Requirements website at: <a href="http://www.bu.edu/eng/current-students/ugrad/requirements/">http://www.bu.edu/eng/current-students/ugrad/requirements/</a>.

#### NATURAL SCIENCE ELECTIVES Mechanical Engineering majors complete one Natural Science Elective from the following list:

Biomedical Engineering (BE):

ENG BE 209 Principles of Molecular Cell Biology & Biotechnology

Astronomy (AS):

Any 200-level or higher course

Any 100-level course that includes a lab

Biology (BI):

Any 200-level or higher course

Any 100-level course that includes a lab

Neuroscience (NE):

ΑII

Chemistry (CH):

Any 200-level or higher course

Physics (PY):

CAS PY 231- The Physics in Music Any 300-level or higher course

Earth & Environment (ES)

CAS ES 101 Dynamic Earth

CAS ES 105 Environmental Earth Sciences

CAS ES 140 Earthquakes, Volcanoes, Natural Disasters

CAS ES 142 Intro Beach & Shoreline Processes

CAS ES 144 Oceanography

CAS ES 222 Mineralogy

The following GE courses:

CAS GE 101 Natural Environments: The Atmosphere

CAS GE 104 - Natural Environ: Physical Landscape

CAS GE 110 – Our Changing Planet

CAS GE 302 - Remote Sensing of the Environment

CAS GE 307 – Biogeography

CAS GE 310 – Climate & the Environment

CAS GE 365 – Intro Geographic Information Systems CAS GE 440 – Digital Image Proc & Remote Sensing CAS GE 445 – Physical Models in Remote Sensing CAS GE 448 – Remote Sensing of Vegetation

CAS GE 456 – Terrestrial Ecosystems & Carbon Cycle CAS GE 483 – Geodynamics II: Fluids & Fluid Transport

ADVANCED\_ELECTIVES Mechanical Engineering majors complete four Advanced Elective courses (16 credits).

Acceptable courses include all engineering (ENG) courses 300 level or above including ENG ME 452 and ENG ME 457, as long as there is not significant overlap with other courses being used for the degree (See Notes below). Acceptable courses outside of ENG include:

CAS AS 414 Solar & Space Physics

QST SI 480 The Business of Technology Innovation

QST SI 482 Technology and its Commercialization

Additionally, other 300-level or higher courses from the following programs may be acceptable by petition: MA, BI, CH, PY, ES, GE, NE, and AS.

#### Notes:

For each of the following seven sets of courses, only one course can be taken for credit in each set due to the overlap of material:

- (1) ENG ME 403, ENG ME 404, ENG BE 402, ENG EC 402
- (2) ENG ME 303, ENG BE 436
- (3) ENG ME 501, ENG EC 501
- (4) ENG EK 102, ENG EK 103, CAS MA 142, CAS MA 242
- (5) ENG BE 401, ENG BE 403, ENG EC 401
- (6) ENG ME 366, ENG EC 381, ENG EK 481, ENG BE 200
- (7) ENG ME 460, ENG ME 560