BS Engineering Sciences
all engineering sciences students take the core classes, and then pick one “track” to complete

Core classes
- PHYS 151 & 152
- CHEM 141
- MATH 111, 112, 211, 212
- PHYS 212: Computational modeling for scientists & engineers
- PHYS 220: Math methods for scientists & engineers
- PHYS 222: Fundamentals of engineering design

Engineering physics track
- Phys 253: Modern Physics
- Phys 234: Digital electronics
- Phys 361: Classical mechanics
- Phys 365: Electricity & magnetism
- Phys 421: Thermo & stat physics
- Phys 461: Quantum mechanics
- Phys 444W: Advanced lab

Materials science track
- Organic chemistry 1 & 2

- Either P-Chem 1 & 2
- or Phys 253, 421, & 444

- 2 electives from:
  - Chem 301 (biochem)
  - Phys 461 (quantum)
  - Chem 571 (biomolecular chemistry)
  - Chem 572 (adv. biophysical chem)
  - Phys 525 (solid state)
  - Phys 564 (polymer physics)
  - Phys 562 (soft condensed matter)
  - Phys 552 (biomacromolecules)

Geoscience track
- ENVS 131: Intro Environmental Studies
- ENVS 331: Earth Systems Science
- CS 170: Intro to Computer Science I
- PHYS 421: Thermo & Stat Physics

- 5 electives, including at least one course with a lab (marked with *), from:
  - 230* (Fund. Geo.) / GEOL OX 141*
  - 235 (Env. Geo.)
  - 229* (Meteorology) / GEOL OX 115*
  - 250 (Cartography)
  - GEOL OX 250* (Mineral Resources)
  - 325 (Energy & Climate Change)
  - 328 (Intro Atmos Chem)
  - 330 (Climatology)
  - 346* (Geo. Origins of Landscapes)
  - 348* (Sust. Water Res.)
  - 328 (Intro. to Atmos. Chem.)
  - PHYS 5xx (continuum mechanics)

1 elective may be 399, 494, 498, or 499 (research†)

†must be 4 research credits as a single course in a single semester