Baylor offers an ABET accredited degree in General Engineering in addition to Mechanical and Electrical & Computer Engineering. The major is 'Engineering' and the degree awarded is the Bachelor of Science in Engineering (B.S.E.). The B.S.E is Baylor’s oldest engineering degree.

General Engineering students take the same core courses common among the other engineering majors. The curriculum further builds on these fundamentals in follow-on and upper-level courses that deepen one’s engineering understanding and capabilities.

Because the B.S.E. curriculum is broader than that for traditional engineering majors, a number of employers and advisors are advocates of advantages offered by this approach. And too because of this adaptability it is well suited for students who have a well-honed though non-traditional career plan and aspirations that leverage the advantages of the B.S.E. curriculum.

B.S.E. students must also maintain a competitive GPA and make satisfactory academic progress.

An additional B.S.E. requirement is the submission each semester during a student’s last 2 years of a course project or assignment demonstrating the student’s ability to a) apply knowledge of math and engineering science and b) identify, formulate, and solve engineering problems. These are provided to the student’s academic advisor.

To satisfy the B.S.E. degree requirements students must complete one of the following:

a. A targeted set of courses in one of the listed concentration areas.

b. Any minor offered by Baylor with the exception of Engineering or Mathematics. (Note that an additional minor in Mathematics can be completed by the proper choice of math/science elective, but it does not satisfy this requirement.)

---

**Humanitarian Engineering Concentration**

- **Engineering Electives**
  - ELC/ME/BME 33XX: Elective 1 ......................... 3
  - ELC/ME/BME 33XX: Elective 2 ......................... 3
  - ELC/ME/BME 43XX: Elective 3 ......................... 3
  - ELC/ME/BME 43XX: Elective 4 ......................... 3

- **Concentration Electives**
  - ONE from following: ENV 3333 (Watershed Assessment), ENV 4310 (World Food Problems), ENV 4345 (Water Management), ME 4305 (Sustainable Engineering), EGR 3302 (Technologies for Developing Countries) ............ 3

---

**Biomedical Concentration**

- **Engineering Electives**
  - ME 3320: Strength of Materials .......................3
  - ME 3322: Materials & Manufacturing .................3
  - ELC/BME 4351: Digital Signal Processing ..........3
  - BME 4370: Biomaterials ..............................3

- **Concentration Electives**
  - CHE 1341 or CHE 4341: Biochemistry ...............3
  - HP 1420 or BIO 3425: Human Anatomy ..............4
  - HED 3350 or BIO 3422: Human Physiology ..........3-4
  - BME 4374 (Biomechanics) or BME 4376 (Medical Devices Design) ...........................................3
  - BME/ELC 4353 (Image Formation) or BME 4372 (Bioinstrumentation) .......................................3
  - ONE from following – EGR 3V95; BME 4353, 4372, 4374, 4376, 4V97 ........................................3

---

**Geo-Petro Concentration**

- **Engineering Electives**
  - ME 3320: Strength of Materials .......................3
  - ELC 4351: Digital Signal Processing .................3
  - ME 3321: Fluid Dynamics ................................3
  - GEO 4V90 (Numerical Modeling) or GEO 4459 (Engineering Geology) .........................................3-4

- **Concentration Electives**
  - GEO 1405: The Dynamic Earth .........................4
  - GEO 1406: Earth Through Time ........................4
  - GEO 3442: Stratigraphy-Sedimentology ............4
  - GEO 3445: Structural Geology ........................4
  - GEO 4458 (Geophysical Exploration II) or GEO 4465 (Petroleum Geology) or GEO 4361 (Concepts of Petroleum Geoscience) ................. 3-4

---

**Environmental Concentration**

- **Engineering Electives**
  - ME 3345: Advanced Thermodynamics ...............3
  - ELC 4351: Digital Signal Processing ...............3
  - ME 3321: Fluid Dynamics ................................3
  - ME 4345: Heat Transfer ................................3

- **Concentration Electives**
  - ENV 1101: Intro Environmental Analysis ..........1
  - ENV 1301: Exploring Environmental Issues .........3
  - CHE 1302: Modern Chemistry II .....................3
  - ENV 3316: Intro Air Quality ........................3
  - ENV 3387: Environmental Chemistry ...............3
  - ENV 4345: Water Management .......................3
  - ENV 4365: Environment & Energy ..................3

---

This chart and descriptions are intended to be a convenient advising tool. Consult the Baylor University Undergraduate Catalog and the individualized degree audit for complete details.