# Bachelor of Science, Major in Engineering Technology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science, Major in Engineering Technology</td>
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</tbody>
</table>

## Core Curriculum
- Component Area I (Communication) 6
- Component Area II (Mathematics) 3
- Component Area III (Life and Physical Science) 8
- Component Area IV (Language, Philosophy, and Culture) 3
- Component Area V (Creative Arts) 3
- Component Area VI (U.S. History) 6
- Component Area VII (Political Science/Government) 6
- Component Area VIII (Social and Behavioral Sciences) 3
- Component Area IX (Component Area Option) 4

## Degree Specific Requirements

### MATH 1314
- Pre Calculus Algebra 1
  - 3

### MATH 1316
- Plane Trigonometry
  - 3-4
  - or PHYS 1401
    - Physics Boot Camp
  - or PHYS 1301
    - General Phy-Mechanics & Heat
    - and General Physics Laboratory I
  - or PHYS 1302
    - Gen Phy-Snd,Lght, Elec, & Mag
    - and General Physics Laboratory II
  - or ENGL 3330
    - Intro to Technical Writing
    - or MATH 3379
    - Statistical Methods in Practice

### Major: Foundation

#### ETEC 1010
- Engineering Foundations
  - 1-2

#### ETEE 1340
- Introduction to Circuits
  - 3

#### ETDD 1361
- Engineering Graphics
  - 3

#### ETEC 1371
- Descriptive Geometry
  - 3
  - or ETDD 1366
    - Machining Technology I

#### ETEC 2382
- Manufacturing Processes
  - 3
  - or ETDD 2366
    - Machining Technology II

#### ETDD 3310
- Product Design & Development
  - 3

#### ETEC 3374
- Time And Motion Study
  - 3
  - or ETEC 3300
    - Technology Innovations

#### ETEC 3375
- Statics
  - 3

#### ETEC 3367
- Engineering Materials Techn
  - 3

#### ETSM 3386
- Industrial Safety
  - 3

#### ETEC 4340
- Alternative Energy Technology
  - 3
  - or ETEC 3340
    - Solar and Wind Energy Systems

#### ETDD 4380
- Material Hand & Plant Layout
  - 3

#### ETEC 4384
- Supervisory Personnel Practice
  - 3

#### ETDD 4388
- 3D Parametric Design
  - 3
  - or ETDD 4339
    - Advanced Computer-Aided Drafting and Modeling

#### ETEC 4391
- Work Base Mentorship
  - 3

#### ETEC 4399
- Senior Design
  - 3

## Minor: Required

### Minor
- 6
Bachelor of Science, Major in Engineering Technology

Minor (12 hours advanced)

Total Hours 120-122

1. MATH 1316 or MATH 1314 or MATH 1420 or MATH 1324 satisfies the Core Curriculum requirement for Component Area II (Mathematics) and the Degree Specific requirement. MATH 1420 also satisfies one semester credit hour of the Core Curriculum requirement for Component Area IX (Component Area Option).

2. All minors can be paired with this degree program.

Notes

Students must earn a 2.0 minimum overall GPA in all coursework.

Students must meet a 2.0 minimum overall major GPA in all major coursework.

Students must earn a 2.0 minimum SHSU GPA in all coursework.

Students must meet a 2.0 minimum SHSU major GPA in all major coursework.

Students should use elective and/or minor hours to satisfy the 42 advanced hour requirement.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Component Area I</td>
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<td>Component Area I</td>
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<tr>
<td>Component Area IX</td>
<td>4</td>
<td>Component Area IV</td>
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<tr>
<td>ETDD 1361</td>
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<td>ETEC 1371 or ETDD 1366</td>
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<td>ETEC 1010</td>
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<td>ETEE 1340</td>
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<td>MATH 1314$^1$</td>
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<td>MATH 1316 or PHYS 1401$^1$</td>
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14-15

15-16

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
<td>Component Area V</td>
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<td>Component Area VI</td>
<td>3</td>
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<tr>
<td>Component Area VI</td>
<td>3</td>
<td>Component Area VII</td>
<td>3</td>
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<tr>
<td>ETEC 2382 or ETDD 2366</td>
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<td>Component Area VIII</td>
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Minor$^2$

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<tr>
<th>Minor</th>
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<th>ENGL 3330 or MATH 3379</th>
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<tbody>
<tr>
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<td>PHYS 1302 &amp; PHYS 1102</td>
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<table>
<thead>
<tr>
<th>Third Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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### Component Area VII

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<thead>
<tr>
<th>Course Code</th>
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<tr>
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<td>ETEC 3367</td>
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<tr>
<td>Minor²</td>
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#### Fourth Year

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<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
<th>Minor Advanced²</th>
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<tr>
<td>ETDD 4388 or 4339</td>
<td>3</td>
<td>ETEC 3375</td>
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<td>6 Minor Advanced²</td>
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<td>ETEC 4340 or 3340</td>
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<td>ETEC 4391</td>
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<tr>
<td>ETSM 3386</td>
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The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state’s 60x30TX plan and was designed to help students articulate their skills to employers. Marketable skills are those skills valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The BS in Engineering Technology is designed to provide graduates with the following marketable skills:

- Communicate technology problem solutions.
- Apply technology tools in applied engineering and technology.
- Analyze data and notice trends to successfully provide solutions.
- Team-based skills including leadership and conflict resolution abilities.
- Prepare to engage in lifelong learning.