## Bachelor of Science
### MECHANICAL ENGINEERING
#### Degree Map | 2019-2020

<table>
<thead>
<tr>
<th>YOUR CLASS SCHEDULE</th>
<th>ACADEMIC ADVISING</th>
<th>ENRICHING EXPERIENCES</th>
<th>LIFELONG SUCCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
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</tbody>
</table>
| • Focus on General Education, Math, and Science courses  
• Enroll in 16 and 17 credit hours in Fall and Spring semesters, respectively | • Participate in New Student Orientation  
• Meet with your Academic Advising Center Freshman Advisor before registration  
• Ask you Advisor about the recommended course sequencing for your degree plan | Prioritize Your Wellness  
• Participate in campus recreation  
• Attend Financial Literacy seminars  
• Form healthy study habits  
**Build Your Community**  
• Use FalconLink & attend Club Day  
• Volunteer  
• Attend campus events  
• Explore student chapters of professional societies: ASME, SAE, ANS, SWE  
**Explore Your World**  
• Attend an athletics event, musical performance, or visit the art gallery | Build Your Brand  
• Draft your resume  
• Register for the Job Board  
• Seek freshman research opportunities  
**Craft Your Future**  
• Explore career options  
• Investigate industrial tracks in mechanical engineering: nuclear power and petroleum  
• Have coffee with a faculty member  
• Seek summer internship opportunities |
| **Sophomore**        |                   |                       |                  |
| • Complete basic math and science courses  
• Start core engineering courses  
• Enroll in 17 and 15 credit hours in Fall and Spring semesters, respectively | • Meet with your Academic Advising Center Freshman Advisor before registration  
• Verify course sequencing with your academic advisor | Actively participate in the professional society of your choice  
**Prioritize Your Wellness**  
• Enjoy outdoor spaces on campus  
**Build Your Community**  
• Join an organization  
• Explore campus leadership (SGA, Orientation Leader, Resident Asst.)  
• Participate in a professional society  
**Explore Your World**  
• Consider study abroad  
• Attend a lecture series | Build Your Brand  
• Update your resume  
• Join LinkedIn  
• Consider student employment  
**Craft Your Future**  
• Participate in mock interviews  
• Explore professional licensing of engineers  
• Attend an internship/career fair |
| **Junior**           |                   |                       |                  |
| • Complete core engineering courses  
• Complete mechanical engineering courses  
• If completing an industrial track, begin track courses  
• Enroll in 17 and 15 credit hours in Fall and Spring semesters, respectively | • Meet with your engineering academic advisor before registration  
• Verify course sequencing with your engineering academic advisor | Prioritize Your Wellness  
• Attend a health fair  
**Build Your Community**  
• Run for organization officer role  
• Apply to be a Falcon Ambassador  
**Explore Your World**  
• Consider study abroad  
• Participate in service learning | Build Your Brand  
• Update your resume  
• Attend workshops on job hunting and interviewing  
• Conduct research with faculty |
| **Senior**           |                   |                       |                  |
| • Complete mechanical engineering courses  
• Complete industrial track courses  
• Enroll in 14 and 15 credit hours in Fall and Spring semesters, respectively | • Meet with your engineering academic advisor before registration  
• Finalize course selections for spring graduation | Prioritize Your Wellness  
• Attend financial literacy seminars  
**Build Your Community**  
• Attend your ring ceremony  
• Join Alumni Association upon graduation  
**Explore Your World**  
• Consider study abroad (summer prior to senior year) | Build Your Brand  
• Update your resume  
• Present research  
**Craft Your Future**  
• Prepare for the Fundamentals of Engineering Examination in the spring semester  
• Attend career fairs  
• Apply for full time jobs |

**UTPB students will graduate with these skills:**
- Leadership
- Problem-solving
- Communication
- Engineering Design
- Social Responsibility
- Confidence
- Global Awareness
- Teamwork
- Critical Thinking

**Career opportunities:**
- Design Engineer
- Technical Sales
- Project Manager
- Manufacturing
- HVAC Design
- Process Control

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College of Engineering | Engineering Building, Room 2.002 | 432-552-3430 | engineering@utpb.edu
# Bachelor of Science in Mechanical Engineering Requirements

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1301</td>
<td>ENGL 1302</td>
</tr>
<tr>
<td>HIST 1301</td>
<td>HIST 1302</td>
</tr>
<tr>
<td>MATH 2413</td>
<td>MATH 2414</td>
</tr>
<tr>
<td>CHEM 1311</td>
<td>CHEM 1111</td>
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<tr>
<td>ENGR 1204</td>
<td>ENGR 2125</td>
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<tr>
<td></td>
<td>PHYS 2125</td>
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<td>16 hours</td>
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<table>
<thead>
<tr>
<th>Semester 3</th>
<th>Semester 4</th>
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<tbody>
<tr>
<td>PLSC 2305</td>
<td>MATH 3301</td>
</tr>
<tr>
<td>MATH 2415</td>
<td>MATH 3320</td>
</tr>
<tr>
<td>PHYS 2326</td>
<td>ENGR 3303</td>
</tr>
<tr>
<td>PHYS 2126</td>
<td>ENGR 2302</td>
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<tr>
<td>ENGR 2301</td>
<td>ENGR 2305</td>
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<td>17 hours</td>
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<table>
<thead>
<tr>
<th>Semester 5</th>
<th>Semester 6</th>
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<tbody>
<tr>
<td>ENGR 3332</td>
<td>MENG 3348</td>
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<tr>
<td>ENGR 3375</td>
<td>MENG 3351</td>
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<tr>
<td>ENGR 3354</td>
<td>MENG 3356</td>
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<tr>
<td>ENGR 3390</td>
<td>MENG 3364</td>
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<tr>
<td>MENG 3206</td>
<td>MENG 3376</td>
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<tr>
<td>MATH 3310</td>
<td>MENG</td>
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<tr>
<td></td>
<td>17 hours</td>
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</table>

<table>
<thead>
<tr>
<th>Semester 7</th>
<th>Semester 8</th>
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</thead>
<tbody>
<tr>
<td>MENG 3324</td>
<td>ENGR 3326</td>
</tr>
<tr>
<td>MENG 4205</td>
<td>MENG 4206</td>
</tr>
<tr>
<td>Technical Elective</td>
<td>MENG 4478</td>
</tr>
<tr>
<td>Technical Elective</td>
<td>Language, Philosophy and Culture Course</td>
</tr>
<tr>
<td>Social and Behavioral Science Course</td>
<td>PLSC 2306</td>
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<tr>
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<td>14 hours</td>
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15 hours