

	<b>YOUR CLASS SCHEDULE</b>	<b>ACADEMIC ADVISING</b>	<b>ENRICHING EXPERIENCES</b>	<b>LIFELONG SUCCESS</b>
<b>Freshman</b>	<ul style="list-style-type: none"> <li>Complete core courses recommended for your degree plan</li> <li>Focus on English, Calculus, Chemistry, and Physics courses.</li> <li>Enroll in 17 credit hours in Fall semester and 15 credit hours in Spring semester.</li> </ul>	<ul style="list-style-type: none"> <li>Participate in New Student Orientation</li> <li>Meet with your Academic Advising Center Freshman Advisor before registration.</li> <li>Ask your Advisor about the College of Engineering recommended core courses for your degree plan</li> </ul>	<p><b>Prioritize Your Wellness</b></p> <ul style="list-style-type: none"> <li>Participate in campus recreation</li> <li>Attend Financial Literacy seminars</li> <li>Form healthy study habits</li> </ul> <p><b>Build Your Community</b></p> <ul style="list-style-type: none"> <li>Use FalconLink &amp; attend Club Day</li> <li>Volunteer</li> <li>Attend campus events</li> </ul> <p><b>Explore Your World</b></p> <ul style="list-style-type: none"> <li>Attend an athletics event, musical performance, or visit the art gallery</li> </ul>	<p><b>Build Your Brand</b></p> <ul style="list-style-type: none"> <li>Draft your resume</li> <li>Register for the Job Board</li> <li>Seek freshman research opportunities</li> </ul> <p><b>Craft Your Future</b></p> <ul style="list-style-type: none"> <li>Explore career options</li> <li>Have coffee with a faculty member</li> </ul>
<b>Sophomore</b>	<ul style="list-style-type: none"> <li>Complete core courses recommended for your degree plan</li> <li>Complete Physics and Chemistry courses.</li> <li>Enroll in 15 credit hours in Fall semester and 16 credit hours in Spring semester.</li> </ul>	<ul style="list-style-type: none"> <li>Meet with your Academic Advising Center Advisor before registration.</li> <li>Ask your Advisor about the College of Engineering recommended core courses for your degree plan</li> </ul>	<p><b>Prioritize Your Wellness</b></p> <ul style="list-style-type: none"> <li>Enjoy outdoor spaces on campus</li> </ul> <p><b>Build Your Community</b></p> <ul style="list-style-type: none"> <li>Join an organization (ex: AIChE or SPE)</li> <li>Explore campus leadership (SGA, Orientation Leader, Resident Asst.)</li> </ul> <p><b>Explore Your World</b></p> <ul style="list-style-type: none"> <li>Consider study abroad</li> <li>Attend a lecture series</li> </ul>	<p><b>Build Your Brand</b></p> <ul style="list-style-type: none"> <li>Update your resume</li> <li>Join LinkedIn</li> <li>Consider student employment</li> </ul> <p><b>Craft Your Future</b></p> <ul style="list-style-type: none"> <li>Participate in mock interviews</li> <li>Attend an internship/career fair</li> <li>Seek summer internship opportunities</li> </ul>
<b>Junior</b>	<ul style="list-style-type: none"> <li>Focus on Chemical Engineering courses</li> <li>Enroll in 15 credit hours in Fall semester and 17 credit hours in spring semester.</li> </ul>	<ul style="list-style-type: none"> <li>Meet with your Chemical Engineering Academic Advisor before registration.</li> </ul>	<p><b>Prioritize Your Wellness</b></p> <ul style="list-style-type: none"> <li>Attend a health fair</li> </ul> <p><b>Build Your Community</b></p> <ul style="list-style-type: none"> <li>Run for organization officer role</li> <li>Apply to be a Falcon Ambassador</li> </ul> <p><b>Explore Your World</b></p> <ul style="list-style-type: none"> <li>Consider study abroad</li> <li>Participate in service learning</li> </ul>	<p><b>Build Your Brand</b></p> <ul style="list-style-type: none"> <li>Update your resume</li> <li>Attend workshops on job hunting and interviewing</li> <li>Conduct research with faculty</li> </ul> <p><b>Craft Your Future</b></p> <ul style="list-style-type: none"> <li>Search for summer internships or fellowships</li> </ul>
<b>Senior</b>	<ul style="list-style-type: none"> <li>Focus on Chemical Engineering courses</li> <li>Complete capstone senior design course in chemical engineering</li> <li>Enroll in 17 credit hours in Fall semester and 14 credit hours in Spring semester.</li> </ul>	<ul style="list-style-type: none"> <li>Meet with your Chemical Engineering Academic Advisor before registration.</li> <li>Discuss senior design projects with your advisor.</li> </ul>	<p><b>Prioritize Your Wellness</b></p> <ul style="list-style-type: none"> <li>Attend financial literacy seminars</li> </ul> <p><b>Build Your Community</b></p> <ul style="list-style-type: none"> <li>Attend your ring ceremony</li> <li>Join Alumni Association upon graduation</li> </ul> <p><b>Explore Your World</b></p> <ul style="list-style-type: none"> <li>Consider study abroad (summer prior to senior year)</li> </ul>	<p><b>Build Your Brand</b></p> <ul style="list-style-type: none"> <li>Update your resume</li> <li>Present research</li> </ul> <p><b>Craft Your Future</b></p> <ul style="list-style-type: none"> <li>Apply for full time jobs</li> </ul>

### UTPB students will graduate with these skills:

- Leadership
- Problem-solving
- Communication
- Critical Thinking
- Collaboration
- Confidence
- Global Awareness
- Teamwork
- Volunteering

### Career opportunities:

- Energy (Oil & Gas)
- Chemicals
- Environmental
- Biotechnology
- Food Industry
- Pharmaceutical
- Manufacturing
- Materials



## BACHELOR of SCIENCE (BS) IN CHEMICAL ENGINEERING REQUIREMENTS

### Semester 1

ENGL 1301 English Composition I  
PLSC 2305 American National Politics  
MATH 2413 Calculus I  
CHEM 1311 General Chemistry I  
CHEM 1111 General Chemistry Lab I  
COMM 1315 Communication

**17 hours**

### Semester 2

CHEM 1312 General Chemistry II  
CHEM 1112 General Chemistry Lab II  
CENG 2333 Elementary Chemical Engineering  
MATH 2414 Calculus II  
PHYS 2325 University Physics I  
PHYS 2125 University Physics Lab I

**15 hours**

### Semester 3

MATH 2415 Calculus III  
PHYS 2326 University Physics II  
PHYS 2126 University Physics Lab II  
ENGL 1302 Composition II  
CHEM 3311 Organic Chemistry I  
CHEM 3111 Organic Chemistry Lab I

**15 hours**

### Semester 4

ARTS Arts Elective (3 credit hours)  
MATH 3320 Differential Equations  
MATH 3301 Statistics  
Social Science Elective (3 credit hours)  
CHEM 3312 Organic Chemistry II  
CHEM 3114 Organic Chemistry Lab II

**16 hours**

### Semester 5

EENG 3375 Intro to Thermodynamics  
CENG 3304 Chem. Engr. Fluid Oper.  
CENG 3320 Chem. Eng. Analysis  
CENG 3313 Heat Transfer Operations  
CENG 4324 Chem. Engr. Mass Transfer

**15 hours**

### Semester 6

CENG 3354 Chem. Engr. Thermodynamics  
HIST 1301 US history to 1877  
ENGR 3303 Intro to Materials Science  
CENG 4372 Chem. Engr. kinetics  
CENG 4355 Process Safety Engineering  
CENG 3211 Chemical Engr. Lab I

**17 hours**

### Semester 7

PLSC 2306 State and Local Politics  
CENG 4361 Process Dynamics & Control  
ENGL 2000 level Lan/Phil/Cultural Course  
CENG 4369 Gas & Petro Processing  
CENG 4300 level Technical Elective  
CENG 4211 Chemical Engr. Lab II

**17 hours**

### Semester 8

PENG 3326 Engineering Economics  
HIST 1302 US History since 1877  
ENGR 4195 Professional Practice  
CENG 4300 level Technical Elective  
CENG 4410 Senior Design

**14 hours**