



# Texarkana College

## Queen City High School Early Enrollment Pathway Plan

### Associate of Science Degree

Major: Engineering

Student Name \_\_\_\_\_ TC ID# \_\_\_\_\_

Academic Coach for Dual Credit (AC/DC) \_\_\_\_\_

TSIA2 Eng \_\_\_\_\_ TSIA2 Math \_\_\_\_\_ ACT \_\_\_\_\_ PSAT \_\_\_\_\_ EOC Eng II \_\_\_\_\_ EOC Alg. I + Alg. II C+ \_\_\_\_\_

Advising Dates: \_\_\_\_\_

TC Course	Courses Title	Credit Hours	Grade Level Completed	Grade Level Course is Available	Comments/Planning
<b>CORE COURSES - 45 Total Hours</b>					
ENGL 1301	Composition I <sup>1</sup>	3		12 or *EA	
ENGL 1302 OR ENGL 2311	Composition II <sup>1</sup> OR Technical & Business Writing <sup>1</sup>	3		12 or *EA	
EDUC/PSYC 1300	Learning Frameworks <sup>9</sup>	3		*EA	
MATH 1316	Plane Trigonometry <sup>9</sup>	3		*EA	
HIST 1301	United States History I <sup>6</sup>	3		11 or *EA	
HIST 1302	United States History II <sup>6</sup>	3		11 or *EA	
XXXX xxxx	Creative Arts Elective <sup>5</sup>	3		9, 10, 11, 12 or *EA	
XXXX xxxx	Social & Behavioral Science <sup>8</sup>	3		11, 12 or *EA	
SPCH 1315 OR SPCH 1321	Public Speaking <sup>9</sup> OR Business & Professional Communication <sup>9</sup>	3		10, 11, 12 or *EA	
XXXX xxxx	ENGL 2327/2328 American Literature I/II <sup>4</sup> ENGL 2332/2333 World Literature I/II <sup>4</sup> HIST 2321/2322 World Civilizations I/II <sup>4</sup> PHIL 2306 Introduction to Ethics <sup>4</sup>	3		*EA	
GOVT 2305	Federal Government <sup>7</sup>	3		12 or *EA	
GOVT 2306	Texas Government <sup>7</sup>	3		*EA	
CHEM 1311	General Chemistry I Lecture <sup>12</sup>	3		*EA	
CHEM 1111	General Chemistry I Lab <sup>12</sup>	1		*EA	
PHYS 2325	University Physics I Lecture <sup>12</sup>	3		*EA	
PHYS 2125	University Physics I Lab <sup>12</sup>	1		*EA	
<b>TOTAL CORE HOURS</b>		<b>44</b>			
<b>ADDITIONAL COURSES FOR DEGREE – 15 Total Hours</b>					
MATH 2413	Calculus I <sup>12</sup>	4		*EA	
MATH 2414	Calculus II <sup>12</sup>	4		*EA	
*MATH xxxx	*MATH 2318 Linear Algebra <sup>12</sup> *MATH 2320 Differential Equations <sup>12</sup> MATH 2415 Calculus III <sup>12</sup>	*3+1/4		*EA	
PHYS 2326	University Physics II Lecture <sup>12</sup>	3		*EA	
PHYS 2126	University Physics II Lab <sup>12</sup>	1		*EA	
*XXXX xxxx	*Free Elective	*1		#	*1 SCH Free Elective Required only if a 3 SCH MATH course is selected in final semester
<b>TOTAL NON-CORE HOURS</b>		<b>16</b>			
<b>Total Credit Hours</b>		<b>60</b>			

Many courses have pre-requisite or co-requisites and/or TSI requirements that must be met. Check course descriptions in the TC Catalog. Students planning to transfer to a four-year institution should check degree requirements of the college or university to which they plan to transfer.

\*Course offered through TC's Early Admission program. #DC/EA course(s) not used to fulfill degree requirements. Grade levels for DC vary by course.

## Explanation for Superscripts

<b>1</b>	<b>Communication Block (010):</b> Complete each of the following: ENGL 1301 <b>and</b> ENGL 1302 or 2311	<b>2</b>	<b>Mathematics Block (020):</b> Complete one of the following: MATH 1314, 1316, 1324, 1325, 1332, 1350, 1442, 2412, or 2413
<b>3</b>	<b>Life &amp; Physical Sciences Block (030):</b> Complete two of the following: BIOL 1306, 1307, 1308, 1309, 1311, 1313, 1322, 2301, 2302, 2306, 2320, 2321; CHEM 1305, 1307, 1311, 1312, 1419; GEOL 1303; PHYS 1301, 1303, 1304, 1315, 2325	<b>4</b>	<b>Language, Philosophy, &amp; Culture Block (040):</b> Complete one of the following: ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2341; HIST 2321, 2322; PHIL 2306
<b>5</b>	<b>Creative Arts Block (050):</b> Complete one of the following: ARTS 1301, 1310; DRAM 1310, 2366; MUSI 1306	<b>6</b>	<b>American History Block (060):</b> Complete each of the following: HIST 1301 <b>and</b> 1302
<b>7</b>	<b>Government/Political Science Block (070):</b> Complete each of the following: GOVT 2305 <b>and</b> 2306	<b>8</b>	<b>Social &amp; Behavioral Sciences Block (080):</b> Complete one of the following: COMM 1307; ECON 2301, 2302; GEOG 1303; PSYC 2301, 2308, 2314; SOCI 1301
<b>9</b>	<b>Component Area Option Block (090): 9A: Choose one from the following:</b> SPCH 1315; SPCH 1318; SPCH 1321 <b>OR</b> any courses in Component Areas (010), (020), (030), (040), (050), & (080) that are not used to fulfill another core requirement except MATH 2413, which is listed below.  <b>AND</b> <b>9B: Choose one from the following:</b> BCIS 1305; MATH 2413; PSYC/EDUC 1300	<b>10</b>	<b>Lab Science Course</b> Choose a lab science course that corresponds to the Life & Physical Sciences courses you take: BIOL 1106, 1107, 1108, 1109, 1111, 1113, 2101, 2102, 2120, 2121; CHEM 1105, 1107, 1111, 1112; PHYS 1101, 1103, 1104, 1115, 2125
<b>11</b>	<b>Elective Option:</b> Choose any college level course	<b>12</b>	<b>Degree Requirement</b> This course is required for this particular degree

### LEARNING OUTCOMES/MARKETABLE SKILLS

Critical Thinking | Teamwork | Communication | Empirical & Quantitative Reasoning | Mathematical Skills | Numeracy | Organization Self-Discipline | Time Management | Leadership | Investigative Skills | Analytical Skills | Management

### EDUCATIONAL OPPORTUNITIES

B.A. Business | B.S. Math Education | B.S. Physics | B.S. Mathematics | B.S. CIS | B.S. Statistics

### CAREER OPPORTUNITIES (B.S. or Higher)

Design Engineer | Biomedical Engineer | Chemical Engineer | Civil Engineer | Computer Engineer | Mechanical Engineer | Electrical Engineer | Environmental Engineer | Software Engineer | Software Designer | Physics/Math Teacher

### HIGH SCHOOL ENDORSEMENTS

STEM | Business & Industry | Multi-Disciplinary

### LINKS TO COLLEGES & PROFESSIONAL ORGANIZATIONS:

Texas A&M Texarkana Department of Electrical Engineering: <http://tamut.edu/Academics/Colleges-and-Departments/STEM/Electrical-Engineering/index.html>

Stephen F. Austin State University Department of Engineering/Physics: <http://www.engineering.sfasu.edu/>

University of North Texas College of Engineering: <https://engineering.unt.edu/>

Southern Arkansas University College of Science and Engineering: <https://web.saumag.edu/science/engineering-engineering-physics/>

University of Arkansas College of Engineering: <https://engineering.uark.edu/>

National Society of Professional Engineers: <https://www.nspe.org/>