



Texarkana College

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

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

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|-----------|--|-----------|---|
| 1 | Communication Block (010): Complete each of the following: ENGL 1301 and ENGL 1302 or 2311 | 2 | Mathematics Block (020): Complete one of the following: MATH 1314, 1316, 1324, 1325, 1332, 1350, 1442, 2412, or 2413 |
| 3 | Life & Physical Sciences Block (030): 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 | 4 | Language, Philosophy, & Culture Block (040): Complete one of the following: ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2341; HIST 2321, 2322; PHIL 2306 |
| 5 | Creative Arts Block (050): Complete one of the following: ARTS 1301, 1310; DRAM 1310, 2366; MUSI 1306 | 6 | American History Block (060): Complete each of the following: HIST 1301 and 1302 |
| 7 | Government/Political Science Block (070): Complete each of the following: GOVT 2305 and 2306 | 8 | Social & Behavioral Sciences Block (080): Complete one of the following: COMM 1307; ECON 2301, 2302; GEOG 1303; PSYC 2301, 2308, 2314; SOCI 1301 |
| 9 | Component Area Option Block (090): 9A: Choose one from the following: SPCH 1315; SPCH 1318; SPCH 1321 OR 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. AND 9B: Choose one from the following: BCIS 1305; MATH 2413; PSYC/EDUC 1300 | 10 | Lab Science Course 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 |
| 11 | Elective Option: Choose any college level course | 12 | Degree Requirement 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/>

TC does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Human Resources Director, 2500 N. Robison Rd., Texarkana, TX, 75599, (903) 823-3017, human.resources@texarkanacollege.edu