



Texarkana College

McLeod 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 | | 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 | | *EA | |
| XXXX xxxx | Social & Behavioral Science ⁸ | 3 | | 9,10,11,12 or *EA | Grade level pending course |
| SPCH 1315 OR SPCH 1321 | Public Speaking ⁹ OR Business & Professional Communication ⁹ | 3 | | 10,11,12 or *EA | |
| 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 | | *EA | |
| GOVT 2305 | Federal Government ⁷ | 3 | | 11,12 or *EA | |
| GOVT 2306 | Texas Government ⁷ | 3 | | 11,12 or *EA | |
| CHEM 1311 | General Chemistry I Lecture ¹² | 3 | | *EA | |
| CHEM 1111 | General Chemistry I Lab ¹² | 1 | | *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 | | *EA | *1 SCH Free Elective Required only if a 3 SCH MATH course is selected in final semester |
| 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.

Explanation for Superscripts

| | | | |
|-----------|--|-----------|---|
| 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/>