



Texarkana College

DeKalb 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 _____

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		11, 12 or *EA	
ENGL 1302 OR ENGL 2311	Composition II ¹ OR Technical & Business Writing ¹	3		11, 12 or *EA	
EDUC/PSYC 1300	Learning Frameworks ⁹	3		10, 11, 12 or *EA	
MATH 1316	Plane Trigonometry ⁹	3		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		10, 11, 12 or *EA	
XXXX xxxx	Social & Behavioral Science ⁸	3		12 or *EA	
SPCH 1315 OR SPCH 1321	Public Speaking ⁹ OR Business & Professional Communication ⁹	3		*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		12 or *EA	
GOVT 2305	Federal Government ⁷	3		12 or *EA	
GOVT 2306	Texas Government ⁷	3		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		#	*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. #DC/EA course(s) not used to fulfill degree requirements. Grade levels for DC vary by course.

Explanation for Superscripts

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