



# UNTS - ENGINEERING CAREER PATHWAY MAP

✓	RECOMMENDED COURSE SEQUENCE	Core Area shown on page 2	SEMESTERS OFFERED	MY PLAN (Semester and Year)	CREDIT HOURS
<input type="checkbox"/>	1. CHEM 1411 Gen. Chemistry I	<a href="#">Core Science #</a>	F, Sp, Su		4
<input type="checkbox"/>	2. ENGL 1301 Comp I	<a href="#">Core Comm !</a>	F, Sp, Su		3
<input type="checkbox"/>	3. ENGR 1201 Intro Engineering		F, Sp		2
<input type="checkbox"/>	4. HIST 1301 US History I	<a href="#">Core History %</a>	F, Sp, Su		3
<input type="checkbox"/>	5. MATH 2413 Calculus I**	<a href="#">Core Math @</a>	F, Sp, Su		4
					16 hours
<input type="checkbox"/>	6. ENGL 1302 OR ENGL 2311	<a href="#">Core Comm !</a>	F, Sp, Su		3
<input type="checkbox"/>	7. HIST 1302 US History II	<a href="#">Core History %</a>	F, Sp, Su		3
<input type="checkbox"/>	8. HIST 2321 OR PHIL 1301*	<a href="#">Core LP&amp;C \$</a>	F, Sp, Su		3
<input type="checkbox"/>	9. GOVT 2305 Federal Govt.	<a href="#">Core Govt ^</a>	F, Sp, Su		3
<input type="checkbox"/>	10. MUSI 1306 OR ARTS 1301*	<a href="#">Core Arts +</a>	F, Sp, Su		3
					31 hours
<input type="checkbox"/>	11. PHYS 2425 Univ. Physics I	<a href="#">Core Science #</a>	F, Sp		4
<input type="checkbox"/>	12. SPCH 1315 Public Speaking	<a href="#">Core Comp 1 &amp;</a>	F, Sp, Su		3
<input type="checkbox"/>	13. MATH 2414 Calculus II	<a href="#">Core Math @</a>	F, Sp		4
<input type="checkbox"/>	14. PHYS 2426 Univ. Physics II	<a href="#">Core Science #</a>	F, Sp		4
					46 hours
<input type="checkbox"/>	15. ECON 2301 OR PSYC 2301*	<a href="#">Core S&amp;B /</a>	F, Sp, Su		3
<input type="checkbox"/>	16. ENGR 2301 Statics***		Sp		3
<input type="checkbox"/>	17. GOVT 2306 Texas Govt.	<a href="#">Core Govt ^</a>	F, Sp, Su		3
<input type="checkbox"/>	18. MATH 2415 Calculus III	<a href="#">Core Comp 2 &lt;</a>	Sp		4
<input type="checkbox"/>	19. MATH 2320 Differential Eq.		Su		3
	**** ASSOCIATE OF SCIENCE DEGREE EARNED ****				62 hours
	NOTE: Check with the Office of Financial Aid as aid may not be available beyond degree completion and/or 60 hours.				
<input type="checkbox"/>	20. ENGR 2302 Dynamics***		varies		3

## READ ALL NOTES CAREFULLY:

- a) Courses in **bold** have a pre-requisite (previous course required). [See Catalog](#)
- b) Courses in *italics* can be taken in any order.
- c) ENGL 1301 and the first MATH class may require a co-requisite and/or developmental course depending on TSI Scores.

\* Refer to Core Curriculum and KC Catalog for all possible course options.

\*\* MATH 1314 and MATH 2412 are pre-requisites for MATH 2413. Approval is needed to begin in MATH 2412.

\*\*\* May not be offered.

## CAREER OPPORTUNITIES

Career Options: <https://educatingengineers.com/career-specialties>

Salary Information: <https://www.payscale.com/college-salary-report/common-jobs-for-majors/engineering>

## ADVANCED DEGREES/CREDENTIAL OPPORTUNITIES

Bachelor's Degree in Engineering, Physics, or Mathematics

## LINKS TO COLLEGES AND PROFESSIONAL ORGANIZATIONS:

Texas A&M University Department of Engineering: <https://engineering.tamu.edu/>

University of Texas at Tyler Department of Engineering: <https://www.uttyler.edu/engineering/>

National Society of Professional Engineers (NSPE): <http://www.nspe.org/>

## CONTACT INFORMATION (Click link for [KC Digital Map](#))

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## Kilgore College Core Curriculum

### ! Communication (6 hours)

[ENGL 1301 \(T\) - Composition I AND](#)  
[ENGL 1302 \(T\) - Composition II OR](#)  
[ENGL 2311 \(T\) - Technical and Business Writing](#)

### @ Mathematics (3 hours)

[MATH 1314 \(T\) - College Algebra](#)  
[MATH 1316 - Plane Trigonometry](#)  
[MATH 1324 \(T\) - Mathematics for Business and Social Sciences](#)  
[MATH 1325 \(T\) - Calculus for Business and Social Sciences](#)  
[MATH 1332 \(T\) - Contemporary Mathematics](#)  
[MATH 1342 \(T\) - Elementary Statistical Methods](#)

[MATH 1350 \(T\) - Mathematics for Teachers I](#)  
[MATH 2412 \(T\) - Pre-Calculus Math](#)  
[MATH 2413 \(T\) - Calculus I](#)  
[MATH 2414 \(T\) - Calculus II](#)  
[MATH 2415 \(T\) - Calculus III](#)

### # Life and Physical Sciences (6 hours)

[BIOL 1406 \(T\) - Biology for Science Majors I](#)  
[BIOL 1407 \(T\) - Biology for Science Majors II](#)  
[BIOL 1408 \(T\) - Biology for Non-Science Majors I](#)  
[BIOL 1409 \(T\) - Biology for Non-Science Majors II](#)  
[BIOL 2401 \(T\) - Human Anatomy and Physiology I](#)  
[BIOL 2402 \(T\) - Human Anatomy and Physiology II](#)  
[BIOL 2404 \(T\) - Anatomy & Physiology](#)  
[BIOL 2406 \(T\) - Environmental Biology](#)  
[ENVR 1401 \(T\) - Environmental Science I](#)  
[CHEM 1405 \(T\) - Introductory Chemistry I](#)  
[CHEM 1406 \(T\) - Introductory Chemistry I \(allied health emphasis\)](#)  
[CHEM 1411 \(T\) - General Chemistry I](#)  
[CHEM 1412 \(T\) - General Chemistry II](#)

[GEOL 1301 \(T\) - Earth Sciences for Non-Science Majors I \(lecture only\)](#)  
[GEOL 1403 \(T\) - Physical Geology](#)  
[GEOL 1404 \(T\) - Historical Geology](#)  
[GEOL 1405 \(T\) - Environmental Science](#)  
[PHYS 1303 \(T\) - Stars and Galaxies \(lecture only\)](#)  
[PHYS 1401 \(T\) - College Physics I](#)  
[PHYS 1402 \(T\) - College Physics II](#)  
[PHYS 1403](#)  
[PHYS 1404 \(T\) - Solar System](#)  
[PHYS 1405 \(T\) - Elementary Physics I](#)  
[PHYS 2425 \(T\) - University Physics I](#)  
[PHYS 2426 \(T\) - University Physics II](#)

### \$ Language, Philosophy & Culture (3 hours)

[ENGL 2322 \(T\) - British Literature I](#)  
[ENGL 2323 \(T\) - British Literature II](#)  
[ENGL 2326 \(T\) - American Literature](#)  
[ENGL 2332 \(T\) - World Literature I](#)  
[ENGL 2333 \(T\) - World Literature II](#)  
[HIST 2311 \(T\) - Western Civilization I](#)  
[HIST 2312 \(T\) - Western Civilization II](#)  
[HIST 2321 \(T\) - World Civilizations I](#)  
[HIST 2322 \(T\) - World Civilizations II](#)  
[PHIL 1301 \(T\) - Introduction to Philosophy](#)  
[PHIL 2306 \(T\) - Introduction to Ethics](#)

### + Creative Arts (3 hours)

[ARTS 1301 \(T\) - Art Appreciation](#)  
[ARTS 1303 \(T\) - Art History I](#)  
[ARTS 1304 \(T\) - Art History II](#)  
[DANC 2303 \(T\) - Dance Appreciation](#)  
[DRAM 1310 \(T\) - Theatre Appreciation](#)  
[DRAM 2362](#)  
[DRAM 2366 \(T\) - Film Appreciation](#)  
[MUSI 1306 \(T\) - Music Appreciation](#)  
[MUSI 1307 \(T\) - Music Literature](#)

### % American History (6 hours)

[HIST 1301 \(T\) - United States History I](#)  
[HIST 1302 \(T\) - United States History II](#)

### ^ Government/Political Science (6 hours)

[GOVT 2305 \(T\) - Federal Government](#)  
[GOVT 2306 \(T\) - Texas Government](#)

### / Social and Behavioral Sciences (3 hours)

[ECON 2301 \(T\) - Principles of Macroeconomics](#)  
[ECON 2302 \(T\) - Principles of Microeconomics](#)  
[GEOG 1303 \(T\) - World Regional Geography](#)  
[PSYC 2301 \(T\) - General Psychology](#)  
[PSYC 2314 \(T\) - Lifespan Growth and Development](#)  
[SOC1 1301 \(T\) - Introductory Sociology](#)  
[SOC1 1306 \(T\) - Social Problems](#)  
[TECA 1354 \(T\) - Child Growth and Development](#)

### & Component Area Option 1 (3 hours)

[SPCH 1315 \(T\) - Public Speaking](#)  
[SPCH 1318 \(T\) - Interpersonal Communication](#)

### < Component Area Option 2 (3 hours)

Any additional course listed in the core curriculum above or [BCIS 1305](#) or [MATH 1351](#) or [EDUC 1300](#)