



# ENGINEERING CAREER PATHWAY MAP

✓	RECOMMENDED COURSE SEQUENCE	SEMESTERS OFFERED	CREDIT HOURS
<input type="checkbox"/>	1. <i>CHEM 1411 General Chemistry I</i> **	F, Sp, Su	4
<input type="checkbox"/>	2. <i>ENGL 1301 Composition I</i>	F, Sp, Su	3
<input type="checkbox"/>	3. ENGR 1201 Intro to Engineering	F, Sp	2
<input type="checkbox"/>	4. <i>HIST 1301 US History I</i>	F, Sp, Su	3
<input type="checkbox"/>	5. <b>MATH 2412 Pre-Calculus I</b>	F, Sp	4
			16 hours
<input type="checkbox"/>	6. <i>BCIS 1305 Business Computer Applications+</i>	F, Sp, Su	3
<input type="checkbox"/>	7. <b>ENGL 1302 Composition II*</b>	F, Sp, Su	3
<input type="checkbox"/>	8. <i>HIST 1302 US History II</i>	F, Sp, Su	3
<input type="checkbox"/>	9. <i>MUSI 1306 Music Appreciation*</i>	F, Sp, Su	3
<input type="checkbox"/>	10. <b>MATH 2413 Calculus I</b>	F, Sp, Su	4
			32 hours
<input type="checkbox"/>	11. <b>PHYS 2425 University Physics I</b> **	F, Sp, Su	4
<input type="checkbox"/>	12. <b>PHYS 2426 University Physics II</b> **	F, Sp, Su	4
			40 hours
<input type="checkbox"/>	13. <b>ENGR 2401 Statics</b>	F	4
<input type="checkbox"/>	14. <i>GOVT 2305 Federal Government</i>	F, Sp, Su	3
<input type="checkbox"/>	15. <b>MATH 2414 Calculus II</b>	F, Sp	4
	16. <i>PHIL 1301 Intro to Philosophy*</i>	F, Sp, Su	3
<input type="checkbox"/>	17. <i>SPCH 1315 Public Speaking*</i>	F, Sp, Su	3
			57 hours
<input type="checkbox"/>	18. <i>ECON 2301 Principles of Macroeconomics*</i>	F, Sp, Su	3
<input type="checkbox"/>	19. <b>ENGR 2402 Dynamics</b>	Sp	4
<input type="checkbox"/>	20. <i>GOVT 2306 Texas Government</i>	F, Sp, Su	3
<input type="checkbox"/>	21. <b>MATH 2415 Calculus III</b>	Sp	4
	*** ASSOCIATE OF SCIENCE DEGREE EARNED *** NOTE: Check with the Office of Financial Aid as aid may not be available beyond degree completion and/or 60 hours.		71 hours
<input type="checkbox"/>	22. <b>MATH 2320 Differential Equations (Optional)</b>	Su	3
			74 hours

## READ ALL NOTES CAREFULLY:

- \* Refer to Core Curriculum and KC Catalog for all possible course options.
- \*\* [Chemistry and Physics courses have co-requisite laboratory classes]
- + Computer Competency Requirement must be met in order to earn an AS Degree. [Click Here For Computer Competency Information](#)
- ! MATH 1314 (College Algebra) is a pre-requisite for this course. Approval is needed to begin in MATH 2412.
- a) Courses in **bold** have a pre-requisite (previous course required).
- 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.
- d) Refer to KC Catalog for AS Degree Requirements.

## CAREER OPPORTUNITIES

Aerospace Engineering, Chemical Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, and Petroleum Engineering

## ADVANCED DEGREE/CREDENTIAL OPPORTUNITIES

Bachelor of Science in Engineering, Physics, or Mathematics

## LINKS TO COLLEGES AND PROFESSIONAL ORGANIZATIONS:

Univ. of Texas at Tyler Department of Engineering: <http://www.uttyler.edu/academics/undergraduate-majors/index.php>  
 Texas A&M Department of Engineering: <http://www.tamu.edu/academics/index.html>  
 National Society of Professional Engineers (NSPE): <http://www.nspe.org/>  
 Accreditation Board for Eng. and Tech. (ABET): <http://www.abet.org/>  
 Amer. Soc for Eng. Education (ASEE): <https://www.asee.org/>

## CONTACT INFORMATION

Dann McDonald  
 Lead Engineering Instructor  
 Room: CANTR 336  
 Phone: 903-983-8244  
 Email: [dmcdonald@kilgore.edu](mailto:dmcdonald@kilgore.edu)

Brandon Walker  
 Chair, Math, Engineering, and Physics  
 Room: CANTR 209  
 Phone: 903-988-7509  
 E-mail: [bwalker@kilgore.edu](mailto:bwalker@kilgore.edu)

Alexander Knox  
 Advisor, Mathematical Sciences  
 Room: OM 148  
 Phone: 903-983-8185  
 E-mail: [aknox@kilgore.edu](mailto:aknox@kilgore.edu)

