Engineering

The Engineering program prepares students to transfer to a four-year institution to pursue a Bachelor of Science degree in Engineering. The first four semesters of classes are similar in the various engineering fields. Students must work closely with a success coach or advisor to select the best options for successfully transitioning to the selected four-year institution. An articulation agreement facilitates the transfer of the Associate of Science degree to the bachelor's degree in Biological and Agricultural Engineering at Texas A&M University.

Program Learning Outcomes (PLO)

PLO 1: Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

PLO 2: Communicate effectively with a range of audiences.

PLO 3: Function effectively on a team whose members provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

PLO 4: Conduct appropriate experimentation, analyze and interpret data, and use engineering/science insights to draw conclusions.

PLO 5: Practice new techniques to solve engineering problems.

Courses Measuring the Achievement of Program Learning Outcomes

Course	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5
MATH (all)	X	X			X
PHYS 2425, 2426	X		X	X	X
ENGR 2301, 2302	X			X	X
ENGL 2311		X			
CHEM 1409			X	X	

ENGINEERING RECOMMENDED ACADEMIC PLAN

1ST YEAR, 1ST SEMESTER			Credit Hours	✓
Term 1				
ENGL	1301	Composition I	3	☐
Term 2				
HIST	1301	U.S. History I	3	☐
Full Term				
CHEM	1409	General Chemistry for Engineering Majors	4	☐
MATH	2413	Calculus I	4	☐
1ST YEAR, 2ND SEMESTER				
Term 1				
ENGL	2311	Technical & Business Writing	3	☐
Term 2				
HIST	1302	U.S. History II	3	☐
Full Term				
MATH	2414	Calculus II	4	☐
PHYS	2425	University Physics II	4	☐
2ND YEAR, 1ST SEMESTER				
Term 1				
GOVT	2305	Federal Government	3	☐
Term 2				
ENGL	2322	British Literature I	3	☐
Full Term				
ENGR	2301	Engineering Mechanics I: Statistics	3	☐
MATH	2415	Calculus III	4	☐
PHYS	2426	University Physics II	4	☐
☞ ***Apply for Graduation***				☐
2ND YEAR, 2ND SEMESTER				
Term 1				
GOVT	2306	Texas Government	3	☐
PSYC	2301	General Psychology	3	☐
Term 2				
MUSI	1306	Music Appreciation	3	☐
Full Term				
ENGR	2302	Engineering Mechanics II: Dynamics	3	☐
MATH	2320	Differential Equations	3	☐
✹ ***Earned:***		***Associate of Science in Engineering***	**Total Hours**	**60**