



Engineering

AS (60 SCH*)

*Semester Credit Hour 8/2020

First Semester - 17 SCH

ENGL 1301 - Composition I
MATH 2413 - Calculus I
HIST 1301 - United States History I
CHEM 1411 - General Chemistry I
EDUC/PSYC 1300 - Learning Framework

Second Semester - 16 SCH

ENGL 1302 - Composition II
MUSI 1306 - Music Appreciation
HIST 1302 - United States History II
MATH 2414 - Calculus II
COSC 1336 - Programming Fundamentals I

Third Semester - 14 SCH

MATH 2415 - Calculus III
ECON 2301 - Principles of Macroeconomics
GOVT 2305 - Federal Government
PHYS 2425 - University Physics I

Fourth Semester - 13 SCH

MATH 2320 - Differential Equations
HIST 2321 - World Civilization I
GOVT 2306 - Texas Government
PHYS 2426 - University Physics II

Marketable Skills

Critical Thinking Skills: Creative thinking, innovation, inquiry, and analysis, evaluation, and synthesis of information, using technology as appropriate.
Communication Skills: Effective development, interpretation, and expression of ideas through written, oral, and visual communication.
Empirical and Quantitative Skills: Manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
Teamwork: Ability to be flexible and to consider different points of view and to work effectively with others, taking the initiative when appropriate, to support a shared purpose or goal.
Social Responsibility: Intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.
Personal Responsibility: A strong work ethic and the ability to connect choices, actions, and consequences to ethical decision-making.

Program Outcomes

- Demonstrate mastery of the processes of science, the scientific method and established scientific knowledge.
- Demonstrate knowledge of basic terminology and understanding of major physical science concepts.
- Use appropriate laboratory techniques and equipment safely and proficiently.

High School Endorsements

STEM

Transfer Path / Requirements

For Texas A&M Commerce

- A student completing the Paris Junior College curriculum is considered Core complete at Texas A&M - Commerce.
- No more than 60-66 sch from PJC will be applied to a bachelor degree at TAMU-Commerce. Another 60 or more must be completed at TAMU-Commerce.
- For the Engineering major several advanced courses are required by TAMU-Commerce: ENGR 210 (Engineering Mechanics) plus courses in statistics, management, computing, and systems engineering. Many courses will be specific to the engineering track chosen.
- Required support courses include differential equations, linear algebra and calculus 3.

Career Opportunities

Aerospace engineers; Industrial engineers (including health and safety); Agricultural engineers; Marine engineers; Naval architects; Biomedical engineers; Materials engineers; Chemical engineers; Mechanical engineers; Civil engineers; Mining / Geological engineers; Computer hardware engineers; Nuclear engineers; Electrical / Electronics engineers; Petroleum engineers; Environmental engineers; Engineers (all other); Drafters, engineering and mapping technicians.