



# Mathematics

AS (60 SCH\*)

\*Semester Credit Hour 8/2020

## First Semester - 16 SCH

**MATH 2312 - Pre-Calculus Math**  
**ENGL 1301 - Composition I**  
**HIST 1301 - United States History I**  
**EDUC/PSYC 1100 - Learning Framework**  
**COSC 1301 - Introduction to Computing**  
**COMM 1307 - Introduction to Mass Communication**

## Second Semester - 16 SCH

**MATH 2413 - Calculus I**  
**ENGL 1302 - Composition II**  
**HIST 1302 - United States History II**  
**MUSI 1306 - Music Appreciation**  
**ECON 2301 - Principles of Macroeconomics**

## Third Semester - 14 SCH

**MATH 2414 - Calculus II**  
**GOVT 2305 - Federal Government**  
**PHYS 2425 - University Physics I**  
**COSC 1336 - Programming Fundamentals I**

## Fourth Semester - 14 SCH

**MATH 2415 - Calculus III**  
**GOVT 2306 - Texas Government**  
**PHYS 2426 - University Physics II**  
**COSC 1337 - Programming Fundamentals 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

- Apply algebraic, analytic, geometric, or statistical reasoning to solve abstract and applied problems appropriate to an individual discipline.
- Interpret mathematical, quantitative or symbolic models such as formulas, graphs and tables, and draw inferences from them.
- Construct and interpret mathematical models using numerical, graphical, symbolic, and verbal representations with the help of technology in order to draw conclusions or make predictions.

## Transfer Path / Requirements

For Texas A&M Commerce

- A student completing the PJC 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 Mathematics major, eight advanced math courses are required by TAMU-Commerce after the Calculus sequence.
- Students who are considering teaching in high schools or middle schools must follow guidelines set for teacher certification.
- Students should refer to the catalog of the institution to which he/she plans to transfer for degree requirements.

## High School Endorsements

STEM

## Career Opportunities

Actuary; Computer scientist; Animator; Cryptanalyst; Architect; Economist; Biologist; Electrical engineer; Budget analyst; Forensic analyst; Cartographer; Geographer; Chemical engineer; Hydrologist; Climatologist; Market research analyst; College professor.