

MATHEMATICS ASSOCIATE IN SCIENCE



The mathematics major offers a foundation for further study in mathematics and other mathematics-related fields. The emphasis of the program is to prepare the students for transfer to four-year institutions.

Career Opportunities

<https://www.grossmont.edu/student-support/career-center/resources.php>

Accountant¹
 Actuary¹
 Budget Analyst¹
 Data Processing Manager
 Department Head, College¹
 Economist¹
 Engineer¹
 Financial Planner¹
 Insurance Agent / Broker²
 Loan Officer
 Management Trainee
 Market Research Analyst¹
 Mathematical Biologist, Bioinformatics¹
 Operations Research Analyst¹
 Mathematician¹
 Securities Trader¹
 Statistician¹
 Surveyor
 Teacher¹

¹ Bachelor's Degree or higher required.

² Bachelor Degree normally recommended.

The Associate in Science degree in Mathematics offers a solid foundation for further study in mathematics and other mathematics related fields. The primary emphasis of the mathematics major program is to prepare the students for transfer to four-year institutions. Students should consult the catalog of the transfer school being considered for specific requirements.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree / certificate requirements in this program. Students will:

1. Use appropriate theorems, formulas, and algorithms to solve mathematical problems from algebra, trigonometry, calculus and geometry.
2. Use appropriate technology to solve problems requiring mathematics.
3. Formulate, analyze, and differentiate mathematical functions numerically, graphically and symbolically and transition between these representations.
4. Communicate the mathematical process and assess the validity of the solution.

Associate Degree Major Requirements

Code	Title	Units
MATH-180	Analytic Geometry and Calculus I	5
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
MATH-284	Linear Algebra	3
Select one of the following:		3-5
MATH-160	Elementary Statistics	
MATH-245	Discrete Mathematics	
MATH-285	Differential Equations	
PHYC-201	Mechanics and Waves	
CSIS-293	Introduction to Java Programming	
CSIS-296	Introduction to C++ Programming	
Total Units		19-21

Plus General Education (<https://catalog.gcccd.edu/grossmont/admission-information/general-education-transfer/>) and Elective Requirements