

# MATHEMATICS ASSOCIATE IN SCIENCE



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## Career Opportunities

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

Accountant<sup>1</sup>  
 Actuary<sup>1</sup>  
 Budget Analyst<sup>1</sup>  
 Data Processing Manager  
 Department Head, College<sup>1</sup>  
 Economist<sup>1</sup>  
 Engineer<sup>1</sup>  
 Financial Planner<sup>1</sup>  
 Insurance Agent / Broker<sup>2</sup>  
 Loan Officer  
 Management Trainee  
 Market Research Analyst<sup>1</sup>  
 Mathematical Biologist, Bioinformatics<sup>1</sup>  
 Operations Research Analyst<sup>1</sup>  
 Mathematician<sup>1</sup>  
 Securities Trader<sup>1</sup>  
 Statistician<sup>1</sup>  
 Surveyor  
 Teacher<sup>1</sup>

<sup>1</sup> Bachelor's Degree or higher required.

<sup>2</sup> 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

Note: All courses must be completed with a letter grade of "C" or higher or "Pass."

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	
<b>Total Units</b>		<b>19-21</b>

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