

# ADT IN MATHEMATICS

The purpose of this program is to prepare students for a career in mathematics. The problem solving skills taught in mathematics prepare students for a great number of job opportunities. A four-year degree could lead to employment in academics, a government agency, or an insurance agency. This major can also serve as a basis for careers in engineering, science, data processing, actuarial science, and as dispensing opticians. The degree prepares students for transfer into the junior year of a baccalaureate degree program in mathematics or related areas such as statistical or actuarial fields.

Students who complete this degree will be guaranteed admission with junior status to the California State University system, though not to a specific campus or major, and will be given priority admission to our local CSU campus.

## Learning Outcomes

### A.S.-Transfer Degree Level Student Learning Outcomes

Students completing the Mathematics A.S.-Transfer Degree will:

1. Develop an understanding of how to use proper vocabulary and notation when describing mathematical concepts, including the ability to read books and documents and extract quantitative information.
2. Develop appropriate computational skills including numeric calculation, evaluation of expressions, analysis of data, and application of concepts.
3. Develop an understanding of the physical world, which will include the formulation of analytical skills that will aid in the process of devising questions and proposing quantitative solutions.
4. Demonstrate computational skills and an understanding of mathematical reasoning that will increase self-esteem and set each student on the path of lifelong learning.
5. Demonstrate an understanding of how to use instructional software found by navigating the Web and found in the Windows' environment.
6. Demonstrate competency at levels appropriate to a particular course, which will prepare students for the workforce, subsequent courses, and transfer to other educational institutions.

## Requirements

Students receiving this transfer degree must meet the following requirements:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - a. The California General Education Transfer Curriculum (Cal-GETC) (<https://catalog.citruscollege.edu/programs-study/graduation-requirements-associate-degree/general-education-requirements-transfer-calgetc-option-ii/>).
  - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0.
3. Meet the 12-unit residency requirement.

ADTs also require that students must earn a "C" (or "P") or better in all courses required for the major or area of emphasis.

Code	Title	Units
<b>Required courses:</b>		
MATH 190	Calculus with Analytic Geometry I <sup>1</sup>	5
MATH 191	Calculus with Analytic Geometry II	5
MATH 210	Calculus with Analytic Geometry III	5
<b>Select two (2) of the following courses:</b>		
MATH 211	Differential Equations	5
MATH 212	Introduction to Linear Algebra	4
PHYS 201	Physics A: Mechanics	5
<b>Total Units</b>		<b>24-25</b>

<sup>1</sup> MATH 190 is degree applicable with or without MATH 090. If taken with MATH 090, only the units for MATH 190 will be counted towards the degree.

## Career Information

### Career Opportunities

There are a variety of careers you can do with this major.

To explore more about this major, schedule an appointment (<https://www.citruscollege.edu/stdntsrvc/center/Pages/ApptSchedule.aspx>) with a career counselor.