



## Associate Degree for Transfer<sup>SM</sup>

# MATHEMATICS FOR TRANSFER 2.0 (AS-T)



In support of the established SB 1440, the Student Transfer Achievement Reform (STAR) Act, and the college's mission, vision and values, Grossmont College has created the **Associate in Science in Math for Transfer, 2.0** degree. Students earning this Associate Degree for Transfer (ADT) will have fulfilled the lower-division major preparation requirements for a degree considered similar at a participating California State University (CSU) campus.

The study of mathematics is a gateway to a career in STEM. Our program emphasizes the development of mathematical skills, encouraging students to enhance their critical thinking, problem-solving abilities, and numerical literacy while fostering an inclusive environment that values diversity, equity, and inclusion. 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 students for transfer to four-year institutions. Students should consult the catalog of the transfer school being considered for its specific requirements.

The following is required for an Associate Degree for Transfer:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or higher or "Pass" in all courses required for the major.
5. Certified completion of the California General Education Transfer Curriculum (Cal-Getc) pattern; see Degree Requirements and Transfer Information section for more information.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Apply appropriate theorems, formulas, and algorithms to solve problems in algebra, trigonometry, calculus and geometry.
2. Use appropriate technology to solve problems requiring mathematics.
3. Formulate, analyze, and interpret mathematical functions using numerical, graphical and symbolic representations, and transition between these forms.
4. Clearly communicate mathematical reasoning and evaluate the validity of solutions.

## Associate in Science for Transfer Degree Requirements

| Code                                                                                                                                                                                                                       | Title                              | Units        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------|
| <b>Required Core</b>                                                                                                                                                                                                       |                                    | <b>19</b>    |
| MATH-C2210                                                                                                                                                                                                                 | Calculus I: Early Transcendentals  |              |
| MATH-C2220                                                                                                                                                                                                                 | Calculus II: Early Transcendentals |              |
| MATH-281                                                                                                                                                                                                                   | Multivariable Calculus             |              |
| MATH-284                                                                                                                                                                                                                   | Linear Algebra                     |              |
| MATH-285                                                                                                                                                                                                                   | Differential Equations             |              |
| <b>List A</b>                                                                                                                                                                                                              |                                    | <b>4-5</b>   |
| Select one of the following:                                                                                                                                                                                               |                                    |              |
| CSIS-250                                                                                                                                                                                                                   | Introduction to Python Programming |              |
| CSIS-293                                                                                                                                                                                                                   | Introduction to Java Programming   |              |
| CSIS-296                                                                                                                                                                                                                   | Introduction to C++ Programming    |              |
| PHYC-201                                                                                                                                                                                                                   | Mechanics and Waves                |              |
| <b>Units in the major</b>                                                                                                                                                                                                  |                                    | <b>23-24</b> |
| Plus General Education Requirements (Cal-GETC) ( <a href="https://catalog.gcccd.edu/cuyamaca/degree-requirements-transfer-information/">https://catalog.gcccd.edu/cuyamaca/degree-requirements-transfer-information/</a> ) |                                    |              |
| <b>Total Units</b>                                                                                                                                                                                                         |                                    | <b>60</b>    |

Complete transferable units as needed to reach 60.

### Additional Information:

SDSU accepts AS-T degrees in Mathematics for the Mathematics, emphasis in Science and requires letter grades for major preparation courses. The major requires a minimum of 2.00 Cumulative G.P.A. Check with a Counselor for applicability to other CSU's.

Students applying with the AS-T in Mathematics will receive priority in the admissions process but are not guaranteed admittance into the CSU of their choice. Admission is highly competitive for most CSU's. Students are strongly advised to go above and beyond minimum G.P.A requirements and apply for admission at multiple campuses.

\*Every effort has been made to ensure this information is accurate. However, the official document the San Diego State Catalog. For additional information specific to SDSU visit the following SDSU website: <https://admissions.sdsu.edu/transfers>.