

# Associate in Science in Mathematics for Transfer Degree:

## Program Description:

The Associate in Science in Mathematics for Transfer Degree is intended for students who plan to complete a bachelor's degree in Mathematics or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree and transfer requirements.

It is strongly recommended that students consult with a counselor to determine which general education option is most appropriate for their individual educational goals.

**Note:** It is recommended that students intending to transfer to San Diego State University (SDSU) Mathematics, Emphasis in Science major should complete the courses marked with a "#". Students intending to transfer into this major at other CSUs should consult a counselor and visit [www.assist.org](http://www.assist.org) for guidance on appropriate coursework.

\*Course also fulfills general education requirements for the CSU GE or IGETC pattern.

\*\* Both courses must be completed prior to completing the degree to receive credit for SDSU.

# This course fulfills SDSU's lower division preparation for the major in Mathematics under the TMC.

**General Education:** In addition to the courses listed above, students must complete one of the following general education options:

- The IGETC pattern is accepted by all CSU campuses and most UC campuses and majors. It is also accepted by some private/independent or out of state universities.
- The CSU GE pattern is accepted by all CSU campuses and some private/independent or out

of state universities. It is not accepted by the UC system.

## Electives as needed to meet maximum of 60 CSU-transferable units required for the degree.

### Career Options:

Careers related to this field typically require education beyond the associate degree level and some may require a graduate degree.

### Courses Required for the Major:

		Units
MATH 150	Calculus with Analytic Geometry I #*	5
MATH 151	Calculus with Analytic Geometry II #*	4
MATH 252	Calculus with Analytic Geometry III #*	4

### Select one of the following courses:

MATH 254	Introduction to Linear Algebra #*	3
MATH 255	Differential Equations *	3

### Select one of the following courses if not selected

**above:** (It is recommended that students select courses that meet lower division major preparation requirements for their transfer university.)

MATH 107	Introduction to Scientific Programming **	3
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### and

MATH 107L	Introduction to Scientific Programming Lab **	1
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MATH 119	Elementary Statistics #* <b>or</b>	
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PSYC 258	Behavioral Science Statistics *#	3
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MATH 245	Discrete Mathematics **	3
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MATH 254 <sup>1</sup>	Introduction to Linear Algebra * <b>or</b>	
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MATH 255 <sup>1</sup>	Differential Equations *	3
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CISC 186	Visual Basic Programming	4
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CISC 190	Java Programming	4
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CISC 192	C/C++ Programming	4
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PHYS 195	Mechanics *	5
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<sup>1</sup>MATH 254 or MATH 255 if not used in category A above.

**Total Units = 19–21**

### Course Requirements for Transfer Students

Students who plan to transfer to a four year college or university and earn a bachelor's degree in this discipline should consult with a counselor or visit the Transfer/Career Center to determine the appropriate major preparation courses for their specific transfer institution and major. Transfer students may also earn an Associate of Arts degree in Liberal Arts and Sciences with an emphasis. This degree may be individually tailored to each student's specific transfer requirements in order to provide the most efficient path to transfer. More information on transfer programs and procedures is available in the Transfer Programs section of the catalog.