Mathematics AS-T Degree - California State University GE Breadth

This degree is designed to meet common lower-division requirements for a major in mathematics on most California State University (CSU) campuses. Satisfactory completion of the CRC Associate in Science in Mathematics for Transfer (AS-T) degree provides a solid foundation and satisfies the standard prerequisites for upper-division coursework in mathematics at most CSU and other 4-year universities. However, it is highly recommended that students meet with a counselor since major and general education requirements vary.

Total Units: 57

First Year

Semester 1   14 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
MATH 400 Ⓩ Calculus I	5	MATH 370	F, S	CSU Area B4
CSU Area A2-Written Communication Ⓩ	3	Recommend meeting with a counselor	F, S, Su	CSU Area A2
CSU Area A1-Oral Communication Ⓩ	3		F, S, Su	CSU Area A1
CSU Area C1-Arts Ⓩ	3		F, S, Su	CSU Area C1

Ⓩ At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the ZTC page of the college website.

Semester 2   15 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
MATH 401 Ⓩ Calculus II	5	MATH 400	F, S, Su	CSU Area B4
CSU Area A3-Critical Thinking Ⓩ	3		F, S, Su	CSU Area A3
CSU Area B1-Physical Science Ⓩ	3		F, S, Su	CSU Area B1
CSU Area B3-Physical Science Lab Ⓩ	1		F, S, Su	CSU Area B3
CSU Area E-Lifelong Learning & Self-Development Ⓩ	3		F, S, Su	CSU Area E

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Career Options/Outlook:

Mathematicians can pursue careers as research analysts, statisticians, or actuaries. For example, Operations Research Analysts formulate and apply mathematical modeling and other optimizing methods to develop and interpret information that assists management with decision-making, policy formulation, or other managerial functions. May collect and analyze data and develop decision support software, services, or products. May develop and supply optimal time, cost, or logistics networks for program evaluation, review, or implementation. **Career opportunities require more than an associate degree.**

A sample of reported job titles:

Advanced Analytics Associate, Analytical Strategist, Business Analytics Director, Business Insight and Analytics Manager, Decision Analyst, Operations Research Analyst, Operations Research Director, Operations Research Group Manager, Operations Research Manager, Optimization Analyst

Projected job openings in California (2020-2030):

800

Textbook filter to find these courses. Learn more on the .

Year 2

Semester 3   17 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
MATH 402 Ⓩ Calculus III	5	MATH 401	F, S	CSU Area B4
CSU Area B2-Life Science Ⓩ	3		F, S, Su	CSU Area B2
CSU Area D-Social & Behavioral Sciences [1] Ⓩ	3		F, S, Su	CSU Area D
CSU Area C2-Humanities Ⓩ	3		F, S, Su	CSU Area C2
CSU Area C1-Arts or C2-Humaniteis Ⓩ	3		F, S, Su	CSU Area C1 or C2

Ⓩ At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the ZTC page of the college website.

[1] Suggestion-select a course that will also meet the CSU Graduation Requirements.

Semester 4   11 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
MATH 410 Ⓩ Introduction to Linear Algebra	3	MATH 401; Advisory: MATH 402	F, S	CSU Area B4
MATH 420 Ⓩ Differential Equations	4	MATH 401; Advisory: MATH 402	F, S	CSU Area B4
CSU Area D-Social & Behavioral Sciences [1] Ⓩ	3		F, S, Su	CSU Area D
CSY Area F-Ethnic Studies Ⓩ	0		Check Class Schedule for offering	CSU Area F
Any Transferable Elective [2]	1		F, S, Su	

Ⓩ At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the ZTC page of the college website.

Projected growth in California (2020-2030):

32% growth

Median Salary in California with advanced degree (2021):

$84,860/yr

Source:

https://www.onetonline.org/link/summary/15-2031.00

Transfer notes:

Please meet with a counselor for specific transfer course evaluation or transferring to a specific 4-year institution.

General Education (GE):

Non-specified GE courses identified by CRC Area, CSU Area or IGETC Area without pre- or co-requisite can be taken at any semester.

Honors option:

The CRC Honors Program is designed specifically for academically accomplished students and for students with the potential for high achievement. Students who complete 15 units or more in honors-designated courses will earn special recognition as an Honors Scholar, a distinction that may entitle the student to guaranteed transfer and scholarship opportunities at select transfer colleges and universities.

About this program map:

^You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

*(O) = online available (P) = partially online

[1] Suggestion-select a course that will also meet the CSU Graduation Requirements.

[2] Units needed to total 60 units for graduation. Refer to Course Number for the appropriate course level necessary for the degree.

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan customized to meet your needs. This map is not a guarantee of course availability or financial aid applicability.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the Zero Textbook Costs page of the college website.