

INTEGRATED MATHEMATICS MAJOR/SINGLE SUBJECT CREDENTIAL PROGRAM

Units required for Major and Credential: 90

Program Description

Teaching credential candidates must complete the Professional Education Program in addition to other requirements for a teaching credential. Consult the Department credential advisor for details. You may also obtain information about the Professional Education Program from the Teacher Preparation and Credentials Office, Eureka Hall 216, (916) 278-6403.

Students in the Integrated Mathematics Major/Single Subject Credential Program (also called the Blended Program in Mathematics) begin their pedagogical studies while they are completing the mathematics courses required for the Bachelor's degree in Mathematics. The mathematics requirements include all of the courses required for the subject matter program in mathematics (see above), and MATH 198. Students who are interested in being admitted to the Blended Program in Mathematics must plan ahead, and must see their advisor as soon as possible.

Note: Due to continuing policy changes, it is important to consult a credential advisor for current details.

Admission Requirements

Admission requirements for the Blended Program include junior class standing with a minimum overall GPA of 2.67, a grade of "C-" or better in MATH 108, passing the Writing Placement for Juniors Exam (WPJ), spending and documenting at least 45 hours observing classes, tutoring, or teaching in a variety of settings in grades 7-12, taking all three sections of the California Basic Education Skills Test (CBEST), and submitting an application packet to the Department of Mathematics and Statistics. A completed application packet includes:

- an application form;
- an essay outlining reasons for entering a career in teaching;
- two letters of recommendation;
- two sets of transcripts from each college or university attended, *other than Sacramento State*; and
- one complete Sacramento State transcript.

The application packet may be submitted during the semester in which the requirements for admission are being completed, so the application may be submitted during the semester in which enrollment in MATH 108 occurs.

Prerequisite/Corequisite Requirements

There are three courses which are prerequisites or corequisites to the Blended Program and students are encouraged to take these courses prior to formal admission:

Code	Title	Units
EDUC 170	Introduction to Bilingual Education: Policies, Principles, Programs, and Practices	3
EDUC 100A	Educating Students with Disabilities in Inclusive Settings	2

EDUC 100B	Educating Students with Disabilities in Inclusive Settings Lab	1
HLSC 136		2

Program Requirements

Code	Title	Units
Lower Division Core Courses (21 Units)		
MATH 30	Calculus I ¹	4
MATH 31	Calculus II ¹	4
MATH 32	Calculus III	4
MATH 35	Introduction to Linear Algebra	3
MATH 45	Differential Equations for Science and Engineering	3
Select one of the following:		3
CSC 10	Introduction to Programming Logic	
CSC 15	Programming Concepts and Methodology I	
CSC 22	Visual Programming in BASIC	
CSC 25	Introduction to C Programming	
Upper Division Core Courses (15 Units)		
MATH 108	Introduction to Formal Mathematics	3
MATH 110A	Modern Algebra	3
MATH 110B	Modern Algebra	3
MATH 130A	Functions of a Real Variable	3
MATH 130B	Functions of a Real Variable	3
Additional Requirements for Specialized Study (12-18 Units)		
Select an emphasis from the following four options:		12
		-
		18
Emphasis in Pure Mathematics		
Emphasis in Applied Mathematics		
Emphasis in Statistics		
Teacher Preparation Program		
Total Units		48-54

¹ Course also satisfies General Education (GE)/Graduation Requirement.

Emphasis in Teacher Preparation Program

Code	Title	Units
STAT 1	Introduction to Statistics	3
MATH 102	Number Theory	3
MATH 121	College Geometry	3
MATH 190	History Of Mathematics	3
MATH 193	Capstone Course for the Teaching Credential Candidate	3
Total Units		15

In addition, students in the Blended Program take all the courses required for the Subject Matter Program in Mathematics (see above), as well as MATH 198 and the following education classes:

Code	Title	Units
EDTE 372		
EDTE 373		
EDTE 373B		

EDTE 384		
EDTE 386		
EDTE 470A		
EDTE 470B		
MATH 316	The Psychology of Mathematics Instruction	2
MATH 371A	Schools and Community A	2
MATH 371B	Schools and Community B	2
Total Units		6

General Education Requirements¹

Code	Title	Units
Area A: Basic Subjects (9 Units)		
A1 - Oral Communication		3
A2 - Written Communication		3
A3 - Critical Thinking		3
Area B: Physical Universe and Its Life Forms (10 Units)		
B1 - Physical Science		3
B2 - Life Forms		3
B3 - Lab (Note: Lab experience to be taken with one of the following: B1, B2 or B5)		1
B4 - Math Concepts ²		0
B5 - Additional Course (Any B to reach 12 units) - Take upper-division course to complete Area & upper division requirements.		3
Area C: Arts and Humanities (12 Units)		
C1 - Arts		3
C2 - Humanities		3
C1/C2 - Area Course C		3
C1/C2 - Area C Course - Take upper-division course to complete Area & upper division requirements.		3
Area D: The Individual and Society (12 Units)		
Area D Course		3
Area D Course		3
Area D Course		3
Area D Course - Take upper-division course to complete Area & upper division requirements.		3
Area E: Understanding Personal Development (3 Units)		
Area E Course		3
Total Units		46

¹ To help you complete your degree in a timely manner and not take more units than absolutely necessary, there are ways to use single courses to meet more than one requirement (overlap). For further information, please visit the General Education page (<http://catalog.csus.edu/colleges/academic-affairs/general-education/>). **Note:** There is no way to list all possible overlaps so please consult with a professional advisor. The Academic Advising Center can be visited online (<http://www.csus.edu/acad/>), by phone (916) 278-1000, or email (advising@csus.edu).

² Required in Major; also satisfies GE.

Graduation Requirements¹

Code	Title	Units
Graduation Requirements (required by CSU) (9 Units)		
American Institutions: U.S. History		3

American Institutions: U.S. Constitution & CA Government	3
Writing Intensive (WI)	3
Graduation Requirements (required by Sacramento State) (12 Units)	
English Composition II	3
Race and Ethnicity in American Society (RE)	3
Foreign Language Proficiency Requirement ²	6

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² If not satisfied before entering Sacramento State, it may be satisfied in General Education Area C2 (Humanities). "C- or better required." The alternative methods for satisfying the Foreign Language Proficiency Requirement are described here: <https://www.csus.edu/college/arts-letters/world-languages-literatures/foreign-language-requirement.html> (<https://www.csus.edu/college/arts-letters/world-languages-literatures/foreign-language-requirement.html>)