Certificate in Introductory Mathematics

The Certificate in Introductory Mathematics meets the required components for the Subject Matter Authorization: Introductory Mathematics. Completion of this program allows individuals who hold a valid California teaching credential to apply for the Subject Matter Authorization: Introductory Mathematics for teaching the content matter up through ninth grade mathematics. This certificate may be earned by regularly matriculated or extended learning students.

Certificates may be earned by regularly matriculated or extended learning students and denote successful completion of a prescribed program of study designed to:

1. impart specified professional/vocational/career competencies; or
2. produce mastery of the content of a sub-field of an academic major (discipline); or
3. provide exposure to the range of materials in a traditional or emerging interdisciplinary field.

Certain certificate programs contain 6000-level courses as requirements and/or electives. These 6000-level courses may not be taken by undergraduate students. Candidates must receive two-thirds of their certificate-applicable credit from the university. The transferring of credit or the substitution of courses may occur only after application to the appropriate campus authority.

Certificate Requirements (32-35 units)

Courses must be completed with a grade of C (2.0) or better.

Core Requirements and Electives (32-35)		**32-35**
Core Requirements		
Select at least one course from each of the following five areas, with no course used to satisfy more than one area:		
A1: Algebra		
MATH 1301	Modeling with Functions	
or MATH 1402	Preparation for Calculus A	
MATH 1401	Accelerated Preparation for Calculus	
or MATH 140(	Preparation for Calculus A	
MATH 1601	Modeling with Calculus	
or MATH 2210	Calculus I	
Note: MATH 1302 and MATH 1303 may substitute for MATH 1301; however, only 3 units will apply towards the total units for the Certificate.		
A2: Advanced Algebra		
MATH 1401	Accelerated Preparation for Calculus	
or MATH 140(	Preparation for Calculus B	
MATH 1601	Modeling with Calculus	
or MATH 2210	Calculus I	
MATH 2220	Calculus II	
MATH 2310	Applied Linear Algebra	
A3 : Geometry		
MATH 1601	Modeling with Calculus	
or MATH 2210	Calculus I	
MATH 2220	Calculus II	
MATH 2320	Multivariable Calculus	
MATH 3013	Mathematical Concepts and Problem Solving for Educators III	
A4: Probability & Statistics		
MATH 1201	Introduction to Statistical Thinking	
or MATH 22(	Statistics with Applications	
A5 : Development of the Real Number System		
MATH 1601	Modeling with Calculus	
or MATH 22:	Calculus I	
MATH 2220	Calculus II	
MATH 3011	Mathematical Concepts and Problem Solving for Educators I	
Electives		
Select an additional 14-17 units from: (1) other courses listed above not already used to meet the required categories (unless courses are restricted between two options in those categories), (2) any mathematics course numbered 2000 to 4000 applicable to the BS in Mathematics - Teaching Mathematics Concentration, or (3) the following courses:		
MATH 1501	Critical Thinking Through Applications of Mathematical Logic	
MATH 2229L	Two-Dimensional Geometry Lab	
MATH 2239L	Three-Dimensional Geometry Lab	
MATH 2720	Discrete Mathematics	
MATH 3012	Mathematical Concepts and Problem Solving for Educators II	
MATH 3510	Topics in Mathematics	
Total Units		**32-35**