

Bachelor of Arts in Mathematics – Single Subject Teaching Credential Undergraduate Planning

Mission Statement

The purpose of the SDSU Single Subject content preparation program is to promote the development of highly effective mathematics teachers who embrace the challenge of engaging students from diverse cultural backgrounds in the pursuit and enjoyment of mathematics. In our view, a highly effective mathematics teacher is one who is a reflective learner and an effective communicator.

This program includes mainstream courses in mathematics, as well as specialized courses for prospective secondary teachers. There is a critical and growing shortage of qualified secondary school teachers of mathematics. Many students find this to be an extremely rewarding career. Candidates for a teaching credential must complete all requirements as outlined in the catalog under Policy Studies or Teacher Education. For students completing the single subject teaching credential program, no more than 48 units in mathematics courses can apply to the degree. This major may be used by students in teacher education as an undergraduate major for the B.A. degree in liberal arts and sciences.

Preparation for the Major

Three semesters of Calculus (Math 150, 151 and 252), Math Software Workshop (Math 241), Discrete Mathematics (Math 245), Linear Algebra (Math 254) and Intro to Computer Programming (CS 107), a total of 23 units. Recommended: Principles of Physics (Physics 195, 195L, 196, 196L, 197, 197L).

Foreign Language Requirement

Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language as part of the preparation for the major. Refer to the section of the general catalog on “Graduation Requirements.”

Upper Division Writing Requirement

Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major

A minimum of 24 upper division units in mathematics to include Transition to Higher Mathematics (Math 302), Abstract Algebra (Math 521A), Advanced Calculus (Math 534A), Probability and Statistics (Stat 357), and a capstone course (Math 414); an upper division course in geometry; and six units of electives in mathematics approved by the credential adviser are also required. Student must complete an outline for major and file a copy signed by the adviser with the Office of the Registrar.