

MATHEMATICS FOR SECONDARY EDUCATION BACHELOR OF SCIENCE

Program Overview

The goal of the Mathematics for Secondary Education program is to equip students with the needed mathematical knowledge, instructional strategies, foundational awareness of education, and teaching experiences to become successful teachers of middle or high school mathematics. Students who are interested in teaching in community college settings or at universities are also encouraged to pursue this degree.

Students majoring in Mathematics for Secondary Education receive a Bachelor's of Science degree from the Department of Mathematics and Computer Science in addition to a Bachelor's of Science degree from the School of Education. This dual-degree program gives graduates a competitive advantage, as students can demonstrate deep mathematical knowledge and comprehensive preparation for teaching.

B.S. Requirements

This major is designed to furnish students with the mathematics content necessary for secondary certification in mathematics. To teach secondary mathematics, students also will need to complete the secondary education major offered in the School of Education.

Students must complete the following mathematics and related courses. All programs should be planned in careful consultation with a faculty mentor.

To be endorsed by Drake University for licensure in an endorsement, students must obtain at least a "C" in all courses listed below.

Code	Title	Hours
Required Courses		
CS 065	INTRODUCTION TO COMPUTER SCIENCE I	3
MATH 050	CALCULUS I	3
MATH 054	DISCRETE MATHEMATICS	3
MATH 061	GEOMETRY FOR 6-12TH GRADE TEACHERS	3
MATH 063	ALGEBRA/MODELING FOR 6-12TH GRADE TEACHERS	3
MATH 070	CALCULUS II	3
MATH 080	LINEAR ALGEBRA	3
MATH 100	CALCULUS III	3
MATH 101	MATHEMATICS REASONING	3
MATH 144	TOPICS IN MATHEMATICS AND COMPUTER SCIENCE EDUCATION	3
MATH 145	METHODS OF TEACHING SECONDARY MATHEMATICS	3
MATH 192	MATHEMATICS SECONDARY EDUCATION CAPSTONE	1
Select one of the following:		3-3.5
ACTS/MATH 131	INTRODUCTION TO PROBABILITY I	

MATH 062	STATISTICS AND PROBABILITY FOR 6-12TH GRADE TEACHERS (Recommended)	
STAT 071	STATISTICS I	
Select two of the following:		6
MATH 153	MODERN GEOMETRY	
MATH 155	ABSTRACT ALGEBRA I	
MATH 157	HISTORY OF MATHEMATICS	
MATH 184	INTRODUCTION TO REAL ANALYTICAL MATHEMATICS I	
MATH 187	COMPLEX ANALYSIS	
Strongly recommended additional courses		
MATH 064	TUTORING IN MATHEMATICS & COMPUTER SCIENCE	
MATH 125	MATHEMATICS MODELING	
Total Hours		43-43.5

In addition to programmatic requirements, students are responsible for satisfying all requirements of the Drake Curriculum (<https://catalog.drake.edu/archive/2024-2025/undergraduate/academic-information/drake-curriculum/>), including Areas of Inquiry (AOI)

Student must also satisfy university graduation requirements (<https://catalog.drake.edu/archive/2024-2025/undergraduate/academic-information/graduation-requirements/>) for all undergraduate students..