THE FIVE-YEAR COMBINED B.S. IN MATHEMATICS, M.S. IN SECONDARY MATHEMATICS EDUCATION OPTION

Program Director
• Dr. Berezovski

This program offers students the opportunity to complete an undergraduate major in mathematics, receive Commonwealth of Pennsylvania Secondary Teacher Certification in mathematics, and earn a M.S. in Secondary Mathematics Education. This curriculum emphasizes the unique character of mathematics learning theory, technology, and techniques for effective teaching in the discipline. The program strengthens the traditional certification programs by incorporating modern teaching/learning strategies and an opportunity to participate in research in the field.

Undergraduate mathematics majors at Saint Joseph’s University who apply for the five-year combined B.S./M.S. program will be evaluated for acceptance into the program after the completion of the first semester of their junior year. A cumulative grade point average of 3.0 or better is normally required. For more information, contact the Department of Mathematics or the Graduate Arts and Sciences office. Requirements of the program and course offerings are listed in the Graduate Catalog under Mathematics Education. Courses in mathematics education are designated by MED and may be taken for undergraduate credit with the approval of advisor and chair.

Students interested in the five year program should speak to the Program Director as early in their academic careers as possible.

Learning Goals and Objectives for the Five-year BS/MS in Mathematics and Mathematics Education

Students in the Five-year BS/MS in Mathematics and Mathematics Education Program complete all requirements of the undergraduate Mathematics major in the first four years and all requirements of the Secondary Education major by the end of the fifth year. In addition to the goals and objectives for those two programs, students in the 5-Yr Math and Math Education program will meet the following.

Learning Goal 1: Students will demonstrate knowledge of the mathematical content required for teaching secondary mathematics.

Objective 1.1: Students will know how to solve mathematical problems using multiple representations and using multiple mathematical approaches.

Objective 1.2: Students will understand the nature of proof and the sequence of observing examples, making conjectures and proving or disproving mathematical statements in a variety of mathematical disciplines.

Goal 2: Students will be able to plan and align curriculum and assessment according to Pennsylvania State standards, Common Core State Standards and the standards put forth by the National Council of Teachers of Mathematics.

Objective 2.1: Students will be aware of current issues in and the evolving nature of mathematics education including the use of technology.

Objective 2.2: Students will be able to draw on a variety of resources including the research literature in mathematics education to enhance their teaching and examine curricular change.