

SCIENCE AND MATHEMATICS EDUCATION (SMED), BACHELOR OF SCIENCE (774)

Program Coordinator

Janet L. Tassell, janet.tassell@wku.edu, (270) 745-5306

Students seeking certification in middle grades (5-9) or secondary grades (8-12) must complete both the science and mathematics education program (SMED) and one of the following: the middle school science (MSS) program (reference number 734), the middle grades mathematics (MGM) program (reference number 730), or a teacher certifiable science or mathematics content major. This combination of programs leads to a bachelor's degree with a minimum of two majors. Completion of the two programs, as well as the successful completion of the current requirements to be recommended for certification, will qualify a student for Kentucky middle grades science or mathematics certification (grades 5-9), or secondary certification (grades 8-12) in one of the following approved science or mathematics secondary content fields: biology, chemistry, earth and space science, mathematics, or physics. Students seeking admission to the SMED program must earn a grade of C or higher in SMED 101 and SMED 102 and meet requirements for admission to teacher education.

Students seeking academic advising with regard to preparation as a science or mathematics teacher should contact the SKyTeach office, Kelly Thompson Hall - Office 1011A, (270) 745-3900, or refer to the SKyTeach website: <http://www.wku.edu/skyteach> (<http://www.wku.edu/skyteach/>) for additional information.

Program Requirements (37 hours)

A baccalaureate degree requires a minimum of 120 unduplicated semester hours. More information can be found at www.wku.edu/registrar/degree_certification.php. (https://www.wku.edu/registrar/degree_certification.php)

Students who began WKU in the Fall 2014 and thereafter should review the Colonnade requirements located at: <https://www.wku.edu/colonnade/colonnaderequirements.php>. (<https://www.wku.edu/colonnade/colonnaderequirements.php>)

The science and mathematics education program requires completion of 34 hours of professional education courses. The recommended Colonnade mathematics course is either MATH 117 or MATH 118. The required courses are:

Code	Title	Hours
SMED 101	Step 1: Introduction to Inquiry-Based Approaches to Teaching	3
SMED 102	Step 2: Introduction to Inquiry-Based Lesson Design	3
SMED 310	Knowing and Learning in Mathematics and Science	3
SMED 320	Classroom Interactions	3
SMED 340	Perspectives on Mathematics and Science	3

SMED 360	Research Methods for Math and Science Teachers	3
SMED 470	Project-Based Instruction	3
LTCY 497	Literacy Competencies for Middle and High School Classroom Teachers	0
SMED 489	SMED Student Teaching Seminar	3
MGE/SEC 490	Student Teaching ¹	10
Total Hours		34

¹ MGE 490 for students seeking middle grades certification or SEC 490 for students seeking secondary certification.

Students who wish to be science or mathematics teachers in middle or secondary schools must complete the major in Science and Mathematics Education (SMED), offered in the School of Teacher Education, and at least one content major from the following list (consult the catalog listing for the respective department for information about the requirements for the content majors):

Major/Concentration	Department	Leading to Teacher Certification in Grades
Middle Grades Mathematics	Department of Mathematics	Grades 5-9
Middle School Science	OCSE Dean's Office	Grades 5-9
Biology	Department of Biology	Grades 8-12
Chemistry	Department of Chemistry	Grades 8-12
Mathematics	Department of Mathematics	Grades 8-12
Physics	Department of Physics	Grades 8-12