The Bachelor of Science in Secondary Education, with an Emphasis in Physics

Teach students to understand the nature of the universe.

High school physics teachers help students learn how to solve problems and think critically using calculus and other forms of higher math that are integral to understanding the principles of physics. They help their students explore the complex interplay of mass, energy and gravity. Physics teachers must have a high level mastery of math and a deep understanding of scientific principles to communicate both to their students.

The Bachelor of Science in Secondary Education, with an Emphasis in Physics

The BS in Secondary Education, with an emphasis in Physics, prepares students to teach in secondary school settings, grades 9-12. This program requires the selection and completion of required coursework in physics and includes field and practicum experiences in high school settings, culminating in Missouri teacher certification.

This program coordinates with the Department of Physics where you’ll be exposed to research and teaching laboratories and a wide variety of modern research instrumentation. Much of the discipline-specific coursework parallels the BA or BS degree in Physics; however, the Missouri Department of Elementary and Secondary Education (DESE) requires specific coursework for teacher certification.

Upon completion of the program, graduates will be able to improve and enhance student learning; integrate technology to create meaningful student learning; create authentic and deep learning experiences; use learning science principles to design, implement and evaluate curriculum; foster effective working relationships; design and establish a safe, inclusive and respectful learning environment; and use equitable frameworks and inclusive practices to create a variety of instructional and assessment opportunities adapted to diverse learners to encourage all students’ critical thinking, problem solving and performance skills.

B.A. or B.S. in Physics with Master’s Level Coursework for Secondary Teacher Certification

In addition to the BS in Education, students may opt to complete a BA or BS degree in Physics as an undergraduate, followed by admission to the Graduate School for master’s level teaching certification. The College of Education has a one-year accelerated program for post-graduate certification called Teach in 12, or students can choose a traditional path to certification. Graduate coursework for certification can apply towards a master’s degree in secondary education with additional coursework.
Fully accredited.
The Bachelor of Science in Secondary Education at UMSL is earned through our fully accredited College of Education which provides Missouri Department of Elementary and Secondary Education certifications. Additionally, our counseling programs are accredited by the Council for Accreditation of Counseling and Related Educational Programs and our school psychology program the National Association for School Psychology.

Preparing for an ever-changing world.
The College of Education offers a variety of programs that lead to exciting and rewarding career opportunities. Our faculty, staff and community partners are committed to providing experiences to build the knowledge and skills needed for individuals to be successful in multiple educational settings and occupations. These careers include teachers, principals, and district superintendents; teachers and administrators for informal education organizations like museums, zoos and nature centers; counselors and mental health professionals for schools, hospitals, corporate employee assistance programs, clinics and private settings; and postsecondary leaders and instructors for community colleges, career technical schools, and four-year colleges and universities.

The college hosts many centers and initiatives that enhance student experiences in our programs and work with more than 36 different public, private and charter schools throughout the region. We also sponsor eight charter schools.

Serious education. Serious value.
The BS in Secondary Education is designed to provide specialized knowledge, skills and training in a flexible format. You’ll learn from highly qualified educators and researchers who hold terminal degrees from some of the world’s most prestigious academic institutions.

The University of Missouri–St. Louis provides the knowledge, resources, tools, skills and support students need to be successful in our programs. Our comprehensive student support services include workshops, tutoring and career services to help you develop skills and strategies to be successful in the classroom and beyond. UMSL welcomes transfer students and our transfer specialists will assist you with getting the most transfer credits possible. We’re also committed to increasing access to higher education, and as such, UMSL is consistently ranked number one in affordability in the St. Louis region.

Learn more at coe.umsl.edu

Career Opportunities
Classroom Physics Teacher, High School
Lab Worker

College of Education
1 University Blvd.
116 South Campus Classroom Building
St. Louis, MO 63121
314-516-5939
oasis@umsl.edu
coe.umsl.edu/advising

Office of Admissions
1 University Blvd.
351 Millennium Student Center
St. Louis, MO 63121
314-516-5451
admissions@umsl.edu
admissions.umsl.edu

The University of Missouri–St. Louis is the largest public research university located in Missouri’s most populous and economically important region. UMSL provides high-quality, affordable education to one of the most diverse student bodies in the state. No university is better connected to the surrounding region than UMSL. Seventy-three percent of our graduates stay in St. Louis. The region needs a workforce well-equipped to teach the region’s population and UMSL is prepared to help you meet that need. Choose the University of Missouri–St. Louis for education.