

COURSES:

PHYSICS MAJOR:

12.75 course units, including:

- PHYS 2115 University Physics I
- PHYS 2125 University Physics II
- PHYS 2154 Special Relativity
- PHYS 2164 Modern Physics
- PHYS 2404 Optics
- PHYS 3014 Classical Mechanics
- PHYS 3054 Electricity and Magnetism
- PHYS 3101 Research in Physics
- PHYS 4064 Quantum Mechanics
- PHYS 4102 Senior Research in Physics

Plus 4 allied courses:

- MATH 1304 Calculus I
- MATH 1324 Calculus II
- MATH 2084 Differential Equations
- MATH 2144 Calculus III

To become certified to teach physics, students must complete the following:

- Physics Major
- Education Minor

PHYSICS MINOR

8 course units, including:

- PHYS 2115 University Physics I
- PHYS 2125 University Physics II
- PHYS 2154 Special Relativity

2 electives

Plus 3 Allied Courses:

- MATH 1304 Calculus I
- MATH 1324 Calculus II
- MATH 2144 Calculus III

TRANSYLVANIA
UNIVERSITY

Office of Admissions

300 North Broadway
Lexington, KY 40508
(800) 872-6798
transy.edu



TRANSYLVANIA
UNIVERSITY

ABOUT THE MAJOR:

Transylvania's physics program teaches students to describe nature mathematically by solving problems related to the physical world.

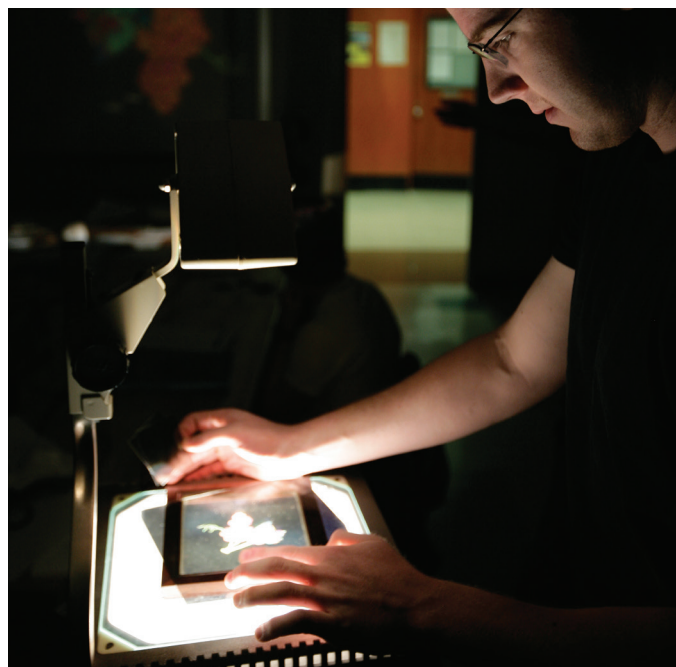
Studying physics at Transylvania offers decided advantages. Our students get one-on-one attention from professors, who set up and teach the student labs. The program also offers on-site research opportunities for all of our majors.

As a physics major, you will conduct a research project as part of a senior capstone experience. Preparation for this begins in your sophomore or junior year, when you will be paired with a senior in one of our labs. You will also be encouraged to participate in a summer research project at an outside lab.

If your goal is to work in an engineering field, Transylvania offers two tracks to prepare for a career:

In the 3-2 arrangement, students earn a B.A. in physics or liberal studies from Transylvania in three years and a B.S. in engineering from the University of Kentucky or Vanderbilt University in two years.

If you prefer to stay on Transylvania's campus all four years, you can take up to six engineering courses at the University of Kentucky College of Engineering as part of your undergraduate study and be fully prepared to enter a master's or doctoral engineering program at the institution of your choice upon graduation. With this plan, it's possible to complete a bachelor's degree and a master's degree in six years.



OPPORTUNITIES IN THE MAJOR:

Society of Physics Students
Sigma Pi Sigma (national honor society)

COURSES OF SPECIAL INTEREST:

Classical Mechanics
Electricity and Magnetism
Measuring the Universe
Optics
Research in Physics
Special Relativity

POSSIBLE CAREER OPTIONS:

Astronomer
Engineer
Professor
Research scientist

WHERE OUR GRADUATES HAVE STUDIED:

Boston University
Duke University
Georgia Institute of Technology
Penn State University
University of Michigan
Vanderbilt University

POSITIONS OUR GRADUATES HAVE HELD:

President and CEO, Westinghouse Electric Company
Manager, Western Electric Company
Physicist, NASA/Marshall Space Flight Center
Professor, Wright State University
Medical Physicist, Saint Joseph Health System

FACULTY:

James Day, Program Director
Professor of Physics
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Stephen Johnson, Assistant Professor of Physics
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"A lot of our students have the upper hand once they get to graduate school because they've already been in the lab. At larger schools, most students wouldn't have had a chance to do this type of research."

Jamie Day, professor of physics