



Physical Sciences - Physics

COLLEGE OF HEALTH & SCIENCES



Careers With a Physics Degree:

- Astronomer
- Computer Programmer
- Consultant
- Doctor
- Engineer
- Entrepreneur
- Geophysicist
- Lawyer
- Mathematician
- Medical Physicist
- Military Fighter Pilot
- NASA Subcontractor
- Physicist
- Power Plant Operator
- Professor
- Science Teacher
- Scientist
- ...and so much more!

Physics is one of the most fundamental and all-inclusive of the sciences. It is an attempt to understand the foundations of our universe through the study of the phenomena of motion, force, energy, sound, electricity, magnetism, thermodynamics, heat, light and quantum mechanics. Physics students use advanced mathematics to solve challenging experimental or theoretical problems, so they often major in Mathematics as well. The ability to analyze a problem and find the best possible solution is vital to success in many fields. As a result, Physics graduates often work in such seemingly non-related areas as medicine, law, biology, business or military science, as well as in engineering, mathematics, computer science or industry.

> Degree Amenities

Physics is housed in the Physical and Environmental Sciences building with access to modern computers, the OU Supercomputer and equipment, a Physics ultrasound laboratory, as well as an advanced Nuclear and X-Ray spectroscopy. A 14-inch telescope and several other telescopes are located at the ECU observatory on campus. Small classes and ready access to caring professors help students succeed. With the McNair Scholars Program, the NASA Space grant and the OK-LSAMP Program, students are able to earn money and valuable experience doing research.



\$how Me the Money!

Graduates with a Physics degree typically earn between \$42,000 and \$77,000 for entry-level jobs. As a college graduate, you can earn an average of 75% more than those with only a high school degree, per *The Chicago Tribune!*

(NACE 2021 Salary Report)

> Scholarships for Physics Majors

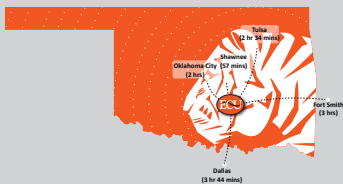
The Physics department makes scholarships and other financial aid available to qualified students through the following programs:

- Brown Mackin Scholarship
- 1950s Science Fund
- Shelby Jane Bays Memorial Scholarship
- Carlock Scholarship
- Stringfield Scholarship
- Physics Department Scholarship
- Bulman Scholarship
- Higginbotham Scholarship
- Doug Williams Memorial Scholarship
- Briles Scholarship

East Central University
1100 E. 14th St.
Ada, Oklahoma 74820

www.ecok.edu/Physics
580-559-5394

Campus Tours:
ecok.edu/take-a-tour
580-559-5628
ecutiger@ecok.edu



Department of Physical Sciences - Physics

> Degree Options

Physics

The Bachelor of Science in Physics prepares students for employment in a wide range of fields or for graduate school in Physics or related areas including Engineering, Medicine, Mathematics and Astronomy.

Physics Teacher Certification

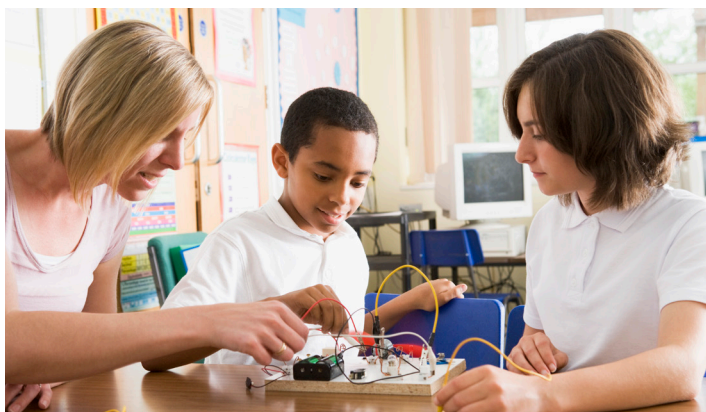
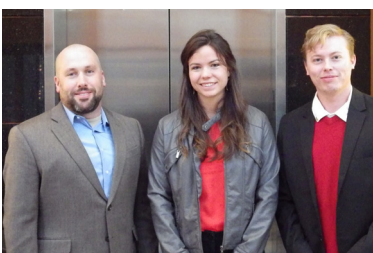
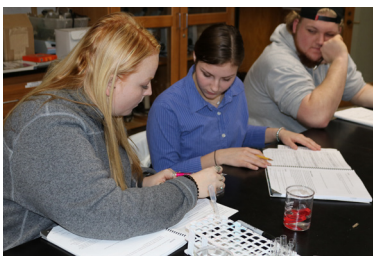
The Bachelor of Science in Physics with a concentration in Teacher Certification provides the physics content and pedagogy through education courses for licensure and a career in secondary science education. Graduates may also be ready to pass certification exams in Mathematics, Biology and Chemistry.

Medical Physics

The purpose of this degree is to best prepare students for entry into a master's program in Medical Physics. There are CAMPEP-accredited institutions in the U.S. and Canada. The University of Oklahoma Health Science Center grants Master of Science in Medical Physics. The B.S. degree option in Medical Physics was designed to allow the student to have the courses necessary to attend any of the accredited schools. Some students attend in Biophysics M.S. programs. ECU has the only Bachelor of Science in Medical Physics program in Oklahoma.

Pre-Engineering Program

The Pre-Engineering program is managed by the Physics department. This is a 2- or 3-year program which gives students the fundamentals of Physics, Chemistry, Math, etc. that are needed to prepare a student to transfer to a university that offers an Engineering degree. Some students also transfer to an Engineering Technology program. Many students complete a Physics degree at ECU and then transfer to an Engineering school to obtain a master's degree.



Department of Physical Sciences

Dean: Dr. Ken Andrews,
College of Health & Sciences

Director: Dr. Randall Maples

Degree: Bachelor of Science

Concentrations: 4

Minor: 1

Faculty: 3 full-time & 1 part-time

Organizations: 2

Scholarships: 10

Location: 244 PES Building



ECU at a Glance

Undergraduate Enrollment: 3,000

Undergraduate Majors: 70+

Student to Faculty Ratio: 13 to 1

Average Class Size: 22

Faculty with PhDs: 65%

States Represented: 28

Countries Represented: 30+

Year Founded: 1909

Campus Size: 140 Acres

Area Location: Ada, Oklahoma



Tiger Spirit

Mascot: Roary the Tiger

School Colors: Orange & Black

Student Organizations: 60+

Athletics: NCAA Division II

Men's: **Football** **Cross Country**
Baseball **Track & Field**
Basketball

Women's: **Basketball** **Soccer**
Volleyball **Cross Country**
Softball **Track & Field**

We educate and empower students to understand and transform our world.

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