

# PHYSICS EDUCATION 6-12 MAJOR (B.ED.)

## Purpose

The Bachelor of Education in Physics Education major is designed for those candidates who desire a four-year bachelor's degree in education that meets the competencies for teacher candidates. The emphasis for this major is on the content for the field, as defined by the federal guidelines, state guidelines of the Virginia Department of Education, and national accreditation. The guidelines for this major are subject to change in federal and state regulations or national accreditation for the licensure of specified subjects in grades 6-12. This program leads to a Virginia license and is intended to prepare teachers to serve in Physics classrooms.

## Program Learning Outcomes

The student will be able to:

- Formulate knowledge of learner development, learning difference, and learning environment.
- Demonstrate knowledge of the discipline area and the application of content to connect concepts and engage learners.
- Plan instruction using multiple methods of assessment and instructional strategies to develop a deep understanding of the content for all learners.
- Develop a Biblical worldview and professional responsibility through ongoing reflection and professional development experiences where opportunities are provided for leadership and collaboration with stakeholders.
- Understand fundamental physics principles as well as foundational concepts within its branches of mechanics, electromagnetism, thermodynamics, and quantum mechanics.

## Earth Science Concentration

- The student will be able to understand fundamental earth science principles as well as foundational concepts within its branches of structural geology, paleontology, petrology, oceanography, meteorology, and astronomy/space science.

## Admission Requirements

1. **Gate 3 Application Requirements\*:**
  - a. Deadline for Submission
    - i. Fall Student Teaching (ST) Semester: January 15
    - ii. Spring Student Teaching (ST) Semester: August 15
2. Degree Completion Plan Audit
  - a. 3.0 GPA
  - b. Gate 2 Acceptance (Program Status Check/Background Check)
3. Content Competency Evaluation Completion
4. Licensure Exams (Official Score Reports with PASSING Scores)
  - a. Praxis Subject Assessment(s) (Specific to endorsement(s))
5. Full Background Clearances
  - a. Criminal Background
  - b. Virginia Child Abuse Recognition and Intervention Training
  - c. FBI Fingerprints
6. Placement Request

7. Professional Liability Insurance (Christian Educators Association International)
  - a. Coverage dates must be valid through end of ST semester
8. Tuberculosis (TB) Results
  - a. Results are valid for one year and must be valid through end of ST semester

After completion of the required program coursework (including student teaching), content competencies (if applicable), and the passing of licensure tests, the graduate of this program would be eligible for a Virginia state teaching license.

## Special Arrangements for Transfer Policies

The following required courses may be fulfilled by transfer credits: EDUC 201 Introduction to Education and Classroom Technology (3 c.h.), EDUC 350 Behavior and Individual Differences (3 c.h.), EDUC 360 Foundations of Education (3 c.h.).

Transfer credits submitted by students requesting to fulfill any required B.Ed. courses other than those listed above will undergo departmental review. This departmental review will allow for confirmation that transfer credits into the B.Ed. sufficiently meet licensure competency requirements as outlined by the Virginia Department of Education.

## Degree Requirements

### Online Students

The Physics Education program will require three 0-credit hour practicums (EDUC 188, EDUC 288, and EDUC 388 that are 16-weeks with a minimum of 30 required hours in a K12 classroom with a qualified instructor and have a co-requisite with a corresponding content course. Students will be placed in these practicums through the SOE field placement office and will require a background check clearance prior to enrollment.

### Student Teaching

Students will also complete a combined 9-12 credit hours (EDST 475, and EDST 460 or EDST 461 or EDST 464 or EDST 465 or EDST 466 or EDST 467) of students teaching, after passing Gate 3 and necessary licensure exams, over one semester (their final semester in the program) for a total of 16-weeks and minimum of 150 direct instruction clock hours in the classroom. Students will be placed in their student teaching through the SOE field placement office.

## Programs of Study

### Delivery Format: Online Only

- Physics Education 6-12 (B.Ed.) - Earth Science - Online
- Physics Education 6-12 (B.Ed.) - Online

## Career Opportunities

- Physics Teacher