

**Transfer  
with  
Ease**

# Articulation Agreement

## BACHELOR OF SCIENCE: PHYSICS

Catalog Year 2020 - 2021

### Eastern Oklahoma State College

### East Central University

#### Associate of Science - Physical Science

#### Bachelor of Science—Physics

- ENGL 1113 Freshman Composition I
- MATH 1513 College Algebra\*
- MATH 1613 Trigonometry\*
- OLS 1111 Orientation and Library Science
- POL SC 1113 American Federal Government
- —4 hrs. Life Science Elective 17 hrs.
  
- CHEM 1315 General College Chemistry I\*
- ENGL 1213 Freshman Composition II
- HIST 1483 American History to 1877 OR HIST 1493 American History since 1877
- MATH 2235 Calculus I\* 16 hrs.
  
- CIS 1113 Computer Applications
- MATH 2245 Calculus II\*
- PHY 2014 Engineering Physics I\*
- —3 Humanities (VI A) 15 hrs.
  
- PHY 2114 Engineering Physics II\*
- CHEM 1415 Chemistry II\*
- SPCH 1113 Fundamentals of Speech OR SPCH 2233 Business & Professional Speaking
- —3 hrs. Social Science Elective (PSY 1113, SOC 1113, GEOG 2723, ECON 2113 or 2123)
- —3 hrs. Humanities (VI B) 18 hrs.

- MATH 3033 Calculus & Analytic Geometry III
- PHYS 3013 Modern Physics
- PHYS 3813 Optics
- PHYS 4113 Electricity & Magnetism-Field Theory
- —3 hrs. Elective 15 hrs.
  
- CMPSC 1113 Computer Programming I
- MATH 4113 Differential Equations
- PHYS 3113 Mechanics I
- PHYS 3412 Junior Physics Laboratory
- —3 hrs. Elective
- —2 hrs. Elective 16 hrs.
  
- PHYS 4513 Quantum Mechanics
- —2 hrs. Required Physics Upper Level Elective
- —3 hrs. Upper Level Elective
- —3 hrs. Upper Level Elective
- —3 hrs. Elective 14 hrs.
  
- PHYS 4313 Intro to Nuclear Physics
- PHYS 3713 Thermodynamics
- —3 hrs. Upper Level Elective
- —3 hrs. Elective
- —3 hrs. Elective 15 hrs.

**Total Credit Hours** 66 hrs.

**Total Credit Hours** 60 hrs.

\*Please see chart on second page for course equivalencies



**YOUR FUTURE - YOUR CHOICE**



# Course Equivalency Table

Eastern Oklahoma State College	East Central University
CHEM 1315 General College Chemistry I	CHEM 1114 General Chemistry I
CHEM 1415 General College Chemistry II	CHEM 1214 General Chemistry II
MATH 1513 College Algebra	MATH 1513 College Algebra
MATH 1613 Trigonometry	MATH 1713 Trigonometry
MATH 2235 Calculus I	MATH 2825 Calculus & Analytic Geometry I
Math 2245 Calculus II <	MATH 3025 Calculus & Analytic Geometry II
PHY 2014 Engineering Physics I	PHYS 2115 Engineering Physics I
PHY 2114 Engineering Physics II	PHYS 2225 Engineering Physics II

< Will transfer as course content but not for upper level credit: Student should meet with an ECU advisor for more information.

## NOTES:

- ⇒ Articulated using EOSC's A.S. for Life Science and without a Minor. A Minor is not required.
- ⇒ A student transferring with an Associate degree in Arts or Science from EOSC fulfills ECU's general education requirement by transferring his or her credit to East Central University. Transferring credit for general education does not eliminate or otherwise affect any of the following ECU requirements: (1) prerequisites; (2) specific requirements in majors, minors, or related work in these areas; or (3) the requirements for teacher certification. General Education equivalencies can be found by referring to either the Oklahoma State Regents Transfer Matrix or the ECU Transfer Matrix. Both matrices can be found at [www.ecok.edu](http://www.ecok.edu) by clicking on *Admissions* and scrolling down to *Course Transfer Matrix*.
- ⇒ A student must earn at least 40 semester hours in upper-division courses (numbered 3000 or higher). A course taught at EOSC may equate in content to an ECU 3000-4000 level course, but it will not be counted as part of the 40 hours of upper level courses.
- ⇒ A student must earn at least 60 semester hours, excluding physical activity courses, at a baccalaureate degree granting institution.
- ⇒ A Student must earn at least 124 credit hours that apply to an ECU Bachelor's degree.