

**Transfer
with
Ease**

Articulation Agreement

BACHELOR OF SCIENCE: PHYSICS

Catalog Year 2019–2020

Oklahoma City Community College

East Central University

Associate in Science—Physics

Bachelor of Science—Physics

- CHEM 1115 General Chemistry I*
- ENGL 1113 English Composition I
- MATH 2104 Calculus and Analytic Geometry I*
- –3 hrs. Gen. Ed. Humanities Elective
- SCL 1001 Success in College and Life **16 hrs.**

- CHEM 1215 General Chemistry II*
- ENGL 1213 English Composition II
- MATH 2214 Calculus and Analytic Geometry II*
- PHYS 2014 Engineering Physics I* **16 hrs.**

- POLSC 1113 American Federal Government
- PHYS 2114 Engineering Physics II*
- MATH 2314 Calculus and Analytic Geometry III*
- BIO 1124 General Biology I (Majors)* **15 hrs.**

- HIST 1483 U.S. History to 1877 OR HIST 1493
U.S. History 1877 to Present
- CS 1143 Beginning Programming
- –3 hrs. Gen. Ed. Social Science Elective
- –3 hrs. Gen. Ed. Humanities Elective
- –2 hrs. Gen. Ed. Elective **14 hrs.**

Total Credit Hours 61 hrs.

- MATH 4113 Differential Equations
- PHYS 3813 Optics
- PHYS 3013 Modern Physics
- PHYS 4113 Electricity & Magnetism—Field Theory
- –4 hrs. Elective **16 hrs.**

- CMPSC 1113 Computer Programming I
- PHYS 3113 Mechanics I
- PHYS 3411 Junior Physics Laboratory
- –3 hrs. Upper Level Elective
- –6 hrs. Elective **16 hrs.**

- PHYS 4513 Quantum Mechanics
- –3 hrs. Required Upper Level PHYS Elective
- –3 hrs. Upper Level Elective
- –3 hrs. Upper Level Elective
- –4 hrs. Elective **16 hrs.**

- PHYS 4313 Intro to Nuclear Physics
- –3 hrs. Upper Level Elective
- –3 hrs. Upper Level Elective
- –3 hrs. Elective
- –4 hrs. Elective **16 hrs.**

Total Credit Hours 64 hrs.

* Please see chart on second page for course equivalencies

Students are encouraged to check 4 year degree plan for course sequences and offerings.



YOUR FUTURE - YOUR CHOICE



Course Equivalency Table

Oklahoma City Community College	East Central University
BIO 1124 General Biology I (For Majors)	BIOL 1114 General Biology
CHEM 1115 General Chemistry I	CHEM 1114 General Chemistry I
CHEM 1215 General Chemistry II	CHEM 1214 General Chemistry II
ENGR 2333 Thermodynamics**	PHYS 3713 Thermodynamics
MATH 1483 Functions and Modeling	MATH 1614 College Algebra W/ Business Applications
MATH 1613 Trigonometry	Math 1713 Trigonometry
MATH 2104 Calculus and Analytic Geometry I	MATH 2825 Calculus and Analytic Geometry I
MATH 2214 Calculus and Analytic Geometry II**	MATH 3025 Calculus and Analytic Geometry II
MATH 2314 Calculus and Analytic Geometry III**	MATH 3033 Calculus and Analytic Geometry III
PHYS 2114 Engineering Physics II	PHYS 2225 Engineering Physics II
PHYS 2014 Engineering Physics I	PHYS 2115 Engineering Physics I

NOTES:

- ⇒ Articulated using OCCC's A.S. in Physics.
- ⇒ Articulated without a minor. A minor is not required, if a minor is desired, please see an advisor for appropriate courses.
- ⇒ **Will transfer as course content but not for upper level credit: Student should meet with an ECU advisor for more information.
- ⇒ A student transferring with an Associate degree in Arts or Science from OCCC 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 by clicking on *Academics* 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 OCCC 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.