

## Transfer Agreement

Oklahoma City Community College: A.S. in Engineering  
and

University of Central Oklahoma: B. S. in Biomedical Engineering (Pre-Med concentration)

Major Code: 6220

### Oklahoma City Community College Courses

ENGL 1113 English Composition I  
ENGL 1213 English Composition II  
COM 2213 Introduction to Public Speaking  
HIST 1483 U.S. History to the Civil War **or**  
HIST 1493 U.S. History since the Civil War  
POLSC 1113 American Federal Government  
HUM 2213 Humanity-Classical & Medieval **or**  
HUM 2223 Humanities-Modern  
ECON 1113 Economic Development of the U.S.  
ENGR 2002 Professional Development

BIO 1214 Biology I (Majors)  
CHEM 1115 General College Chemistry I

CHEM 1215 General College Chemistry II

MATH 2104 Calculus and Analytic Geometry I  
MATH 2214 Calculus and Analytic Geometry II  
MATH 2314 Calculus and Analytic Geometry III

PHYS 2014 Engineering Physics I

PHYS 2114 Engineering Physics II

ENGR 2133 Rigid Body Mechanics or  
ENGR 2243 Statics  
CS 2363 C++ (FA Support)  
ENGR 2613 Electrical Science (FA ENG)  
ENGR 2523 Dynamics

**Total 69 hours**

### UCO requirement

ENG 1113 English Composition  
ENG 1213 English Composition and Research  
MCOM 1113 Fundamental of Speech  
HIST 1483 History of U.S. to 1877 **or**  
HIST 1493 History of U.S. since 1877  
POL 1113 American National Government  
HUM 2113 General Humanities Anc-Med **or**  
HUM 2223 General Humanities Ren-Modern  
ECON 1103 Introduction to Economics  
Elective

BIO 1204 Biology I for Majors  
CHEM 1103 General Chemistry I **and**  
CHEM 1112 General Chemistry I - Recitation/Lab  
CHEM 1223 General Chemistry II **and**  
CHEM1232 General Chemistry II- Recitation/Lab

MATH 2313, 2323, 2333, 2343 Calculus 1 to 4

**The OCCC A.S. degree completes the UCO  
University Core requirements.**

PHY 2014 Physics for Scientist and Engineers I  
and Lab  
PHY 2114 Physics for Scientist and Engineers I  
and Lab

ENGR 2033 Statics

\*ENGR 1213 Engineering Computing &Lab  
ENGR 2303 Electrical Science  
ENGR 2043 Dynamics

**To be taken at the University of Central Oklahoma.....61**

**Support Courses..... 6**

- FMKT 2323 Global Protocol and Diversity  
(or Foreign Language)
- PHIL 1123 Contemporary Moral Problems (See advisor for substitution.)

**Biomedical Engineering – Pre-Medicine ..... 55**

**Chemistry ..... 6**

Required courses:

- CHEM 3303 Organic Chemistry I
- CHEM 3323 Organic Chemistry II

**Biology..... 7**

Required courses

- BIO 2203 Cell Biology
- BIO 2604 Human Physiology and Lab

**Engineering..... 36**

Required courses:

Required courses:

- ENGR 1112 Introduction to Engineering and Laboratory
- ENGR 1311 Introduction to Biomedical Engineering
- ENGR 2311 Electrical Science Laboratory
- ENGR 3043 Biomaterials
- ENGR 3113 Principles of Biomedical Engineering
- ENGR 3222 Digital Logic Design and Laboratory
- ENGR 3302 Engineering Statistics and Experimentation
- ENGR 3323 Signals and Systems & Laboratory
- ENGR 3404 Analog Electronics and Laboratory
- ENGR 4132 Biomedical Engineering Laboratory
- ENGR 4223 Biomedical Imaging
- ENGR 4233 Biomedical Instrumentation
- ENGR 4343 Biomechanics
- ENGR 4882 Senior Engineering Design I
- ENGR 4892 Senior Engineering Design II

**Mathematics ..... 3**

Required courses:

- MATH 3103 Differential Equations

Biomedical Engineering Elective..... 3

Any 3000/4000 level PHY or ENGR course with the following exceptions: PHY 3014, 3044, 3054 or 3503.

The following courses are strongly recommended electives:

- ENGR 4243 Modeling and Analysis of Biomedical Systems
- CHEM 3403 Biochemistry I
- ENGR 3443 Fluid Mechanics

**The number of credits needed to meet degree requirements exceeds 124 hours and will vary according to course selection.**

**Total hours at OCCO.....69**

**Total hours at UCO.....61**

### **Minimum Grade Requirements**

- 1. Average in (a) all college course work, and (b) course work at UCO.....2.00**
- 2. A minimum grade of “C” must be earned in all courses in the major to count toward meeting degree requirements.**

This program requires admission to the Upper Division with special requirements.

See the 2015-2016 catalog for selective admission criteria.