

## Transfer Agreement

Oklahoma City Community College: AS - Computer Science  
And  
University of Central Oklahoma: BS- Software Engineering

To comply with this agreement, students must complete the associate’s degree with the major listed above and include the specific courses listed below.

**Courses listed here are required for the agreement. Credited courses completed as part of the AA or AS that do not apply to the general education at OCCC or the UCO major transfer to UCO as electives.**

### OCCC

- General Education requirements
- ^CS 1143 Beginning Programming
- ^MATH 1533 Pre-Calculus
- ^MATH 1613 Trigonometry
- CS 2163 JAVA
- CS 2363 C++
- MATH 2104 Calculus and Analytic Geometry I
- MATH 2214 Calculus and Analytic Geometry II

### UCO

- University Core completed with AA or AS
- ^CMSC 1513 Beginning Programming
- ^MATH 1533 Algebra for STEM (sub)
- ^MATH 1593 Plane Trigonometry
- CMSC 1613 Programming I
- CMSC 2613 Programming II
- MATH 2313 Calculus 1
- MATH 2323 Calculus 2

^UCO lists the following for this program: Students majoring in Software Engineering are encouraged to complete the following courses in high school: Advanced Placement High School Programming Course **OR** CMSC 1513 Beginning Programming. MATH 1533 Algebra for STEM **OR** Placement Score **AND** MATH 1593 Plane Trigonometry **OR** Placement Score.

\*For physical science requirements in the OCCC degree, consult the UCO list on page 2 of this agreement and note appropriate course selections offered at OCCC that meet the requirements at UCO: CHEM 1115, CHEM 1215, PHYS 1114, PHYS 1214, PHYS 2014, PHYS 2114.

**This degree requires additional course work, including the general education, as stated in the OCCC Catalog. Other OCCC courses may or may not apply to the UCO major. That specific information can be found on the UCO website under Transfer Students, Online Transfer Guides.**

**Total at Oklahoma City Community College.....61-64**

**To be taken at the University of Central Oklahoma.....65**

**(May be taken at OCCC.) This signifies that a UCO course requirement can be met with the equivalent OCCC course (found on the UCO website). To take this course at OCCC, the student should confirm that it will fit into the associate’s degree without exceeding the requirements. A minimum of 60 hours must be taken at a baccalaureate granting institution, so exceeding 64 credit hours at the community college means the student will exceed the minimum of 124 credit hour total. A minimum of 40 hours of 3/4000 level courses are required for the baccalaureate. Courses from community colleges are 1/2000 level.**

Major Requirements

Software Engineering .....65

Required..... 41

- ^CMSC 1621 Programming I Laboratory
- ^CMSC 2123 Discrete Structures
- ^CMSC 2833 Computer Organization I
- ^SE 3103 Object Oriented Software Design and Construction
- ^CMSC 3613 Data Structures and Algorithms
- ^CMSC 4003 Applications of Database Management Systems
- ^SE 4283 Software Engineering I
- ^CMSC 4323 Computer and Network Security
- ^CMSC 4401 Ethics in Computing
- ^SE 4423 Software Engineering II
- ^SE 4433 Software Architecture and Design
- ^SE 4513 Software Engineering Senior Project \*
- ^MATH 2333 Calculus 3 (**May be taken at OCCC.**)
- ^MATH 3143 Linear Algebra
- ^STAT 2113 Statistical Methods OR (**May be taken at OCCC.**)
  - ^STAT 2103 Introduction to Statistics for Sciences OR
  - ^STAT 4113 Mathematical Statistics I

^ A grade of 'C' or better must be earned in all required CMSC, SE, MATH and STAT courses.

\* SE 4513 is recommended to be taken in the last semester prior to graduation.

Elective Science/Math courses.....**9-12 (May be taken at OCCC.)**

Select a minimum of nine (9) hours including at least one of the CHEM or PHY lab courses:

- CHEM 1103 General Chemistry I
- CHEM 1112 General Chemistry I Recitation/Laboratory
- CHEM 1223 General Chemistry II
- CHEM 1232 General Chemistry II Recitation/Laboratory
- PHY 1114 General Physics I and Laboratory
- PHY 1214 General Physics II and Laboratory
- PHY 2014 Physics for Science & Engineering I and Lab
- PHY 2114 Physics for Science & Engineering II and Lab

Any non-required 2/3/4000 level MATH or STAT courses with the following exceptions: MATH 2013, 2053, 2113, 2123, 2133, 2153, 2743, 3323, or 4843.

Elective Courses..... 9

Choose nine (9) hours from one of the two application areas:

Application Development

- CMSC 3413 Enterprise Programming
- CMSC 4133 Concepts of Artificial Intelligence
- CMSC 4303 Mobile Apps Programming
- CMSC 4373 Web Server Programming

System Development

- CMSC 4023 Programming Languages
- CMSC 4063 Networks
- CMSC 4153 Operating Systems
- CMSC 4173 Translator Design
- CMSC 4193 Introduction to Robotics

Elective CMSC or SE Courses..... 6

Any 3/4000 level CMSC or SE courses except CMSC 4513

Any programming labs (CMSC 2621 and 3621)

No more than three (3) hours of Internship and Individual Study combined may be used to satisfy the CMSC or SE elective requirement.

Credit cannot be received for both CMSC 3303 and SE 4283.

**Electives to bring total to.....124**

Average in (a) all college course work, (b) course work at UCO, and (c) major courses..... 2.00

Students must meet all bachelor degree requirements at UCO to include minimums of:

40 hours of upper division coursework

30 hours in residence at UCO

15 of the last 30 hours must be taken in residence at UCO

60 hours from baccalaureate granting institutions

**Program-to-Program Transfer policies are available in the Introduction for Program-to-Program Agreements on the UCO website at the top of the list of agreements. Links to the agreements can be found on the Academic Affairs or Transfer Student Support web pages.**