Transfer Agreement
Between
Oklahoma City Community College
And
University of Central Oklahoma

Effective Academic Year: 2017-2018

Associate in Science-Computer Science-Computer Science
To
Bachelor of Science-Computer Science
Bachelor of Science-Computer Science-Applied
Bachelor of Science-Computer Science-Information Science
Bachelor of Science-Software Engineering

Mr. John Claybon, Dean
Business and Information Technology

Dr. Gang Qian, Chair
Department of Computer Science

7/23/2018
Date

Date

Ms. Kim Jameson
Associate Vice President for Academic Affairs

Dr. Wei Chen, Dean
College of Mathematics and Science

7/23/18
Date

July 5, 2018
Date

Mr. Greg Gardner
Vice President for Academic Affairs

Dr. John Barthell, Provost
Vice President for Academic Affairs

7/24/18
Date

7-10-18
Date

Transfer Agreement
Oklahoma City Community College: AS - Computer Science
And
University of Central Oklahoma: BS - Computer Science

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	UCO
General Education requirements	University Core completed with AA or AS
^CS 1143 Beginning Programming	^CMSC 1513 Beginning Programming
^MATH 1533 Pre-Calculus	^MATH 1533 Algebra for STEM (sub)
^MATH 1613 Trigonometry	^MATH 1593 Plane Trigonometry
CS 2163 JAVA	CMSC 1613 Programming I
CS 2363 C++	CMSC 2613 Programming II
MATH 2104 Calculus and Analytic Geometry I	MATH 2313 Calculus 1
MATH 2214 Calculus and Analytic Geometry II	MATH 2323 Calculus 2
CHEM 1115 General Chemistry I **OR**	CHEM 1103 General Chem I and CHEM 1112 **OI**
PHYS 1114 College Physics I **OR**	PHY 1114 General Physics I and Laboratory **OR**
PHYS 2014 Engineering Physics I	PHY 2014 Engineering Physics I and Laboratory
Support Course: CHEM 1215, PHYS 1214, **OR** PHYS 2114	Elective Science: CHEM 1223 and 1232, PHY 1214, **OR** PHY 2114

^UCO lists the following for this program: Students majoring in Computer Science 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.

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......................................60-63

(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

Computer Science 60
Required...44
^ CMSC   1621   Programming I Laboratory
^ CMSC   2123   Discrete Structures
^ CMSC   2833   Computer Organization I
^ SE   3103   Object Oriented Software Design and Construction
^ CMSC   3833   Computer Organization II
^ CMSC   3613   Data Structures and Algorithms
^CMSC   4003   Applications of Database Management
^ CMSC   4023   Programming Languages **OR**
    ^CMSC   4173   Translator Design
^ CMSC   4153   Operating Systems
^ CMSC   4273   Theory of Computing
^ SE   4283   Software Engineering I
^ CMSC   4401   Ethics in Computing
^*CMSC   4513   Software Design and Development
^ 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 1

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

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

Elective CMSC or SE courses...16
(OCCC CS 2453 may be applied in this area. OCCC CS 2563, 2553, or 2463 also may be applied.)
  Select from the following:
    CMSC   2621   Programming II Laboratory
    CMSC   3621   Data Structures/Algorithms Laboratory
    Any 3/4000 level CMSC or SE courses

SE 4513 may not be used to satisfy the CMSC or SE elective requirement.

No more than four (4) 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

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

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.

Transfer Agreement
Oklahoma City Community College: AS - Computer Science
And
University of Central Oklahoma: BS - Computer Science – Applied

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	UCO
General Education requirements	University Core completed with AA or AS
^CS 1143 Beginning Programming	^CMSC 1513 Beginning Programming
^MATH 1533 Pre-calculus	^MATH 1533 Algebra for STEM (sub)
^MATH 1613 Trigonometry	^MATH 1593 Plane Trigonometry
MATH 2104 Calculus and Analytic Geometry I	MATH 2313 Calculus 1
MATH 2214 Calculus and Analytic Geometry II	MATH 2323 Calculus 2
CS 2163 JAVA	CMSC 1613 Programming I
CS 2453 Visual Basic	CMSC 2413 Visual Programming
CS 2363 C++	CMSC 2613 Programming II

^UCO lists the following for this program: Students majoring in Computer Science-Applied 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.

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...61-64

(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

Computer Science – Applied..43
Required..31
^ CMSC   1621   Programming I Laboratory
^ CMSC   2123   Discrete Structures
^ CMSC   2833   Computer Organization I
^ SE   3103   Object Oriented Software Design and Construction
^ CMSC   3303   Systems Analysis and Design **OR**
  ^ SE   4283   Software Engineering I
^ CMSC   3613   Data Structures and Algorithms
^ CMSC   4003   Applications of Database Management
^ CMSC   4023   Programming Languages **OR**
    ^CMSC   4173   Translator Design
^ CMSC   4153   Operating Systems
^*CMSC   4513   Software Design and Development
^ STAT   2113   Statistical Methods **OR (May be taken at OCCC.)**
    ^ STAT 2103   Introduction to Statistics for Sciences **OR**
    ^ STAT 4113   Mathematical Statistics 1

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

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

Elective CMSC or SE courses.. 12
    Any 3/4000 level CMSC or SE courses except SE 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.

Applied Area of Study.......................................18

Minor
The student will complete a minor; if the student is completing a second Bachelor's degree, the first degree's major will satisfy the requirements for the minor.

OR

Second Major
The student will complete a second major.

OR

Associate degree or comparable concentration in an information technology-related discipline transferred from a regionally accredited two- or four-year college or international equivalent with the approval of the Computer Science Department.

If less than 18 hours are transferred under this category, the student should take 2/3/4000 level CMSC electives to make up the difference. A student may take additional CMSC 3/4000 electives to bring the total hours of upper-division courses to 40.

Electives to bring total to...124

Minimum Grade Requirements

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

* A student may take additional CMSC 3/4000 courses to bring the total hours of upper-division courses to 40.

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

For other regulations pertaining to graduation, see the UCO Undergraduate Catalog.

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.

Transfer Agreement
Oklahoma City Community College: AS - Computer Science
And
University of Central Oklahoma: BS- Computer Science – Information Science

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	UCO
General Education requirements	University Core completed with AA or AS
^CS 1103 Introduction to Computers and Applications	^CMSC 1053 Prof Comp App and Prob Solving
^CS 1143 Beginning Programming	^CMSC 1513 Beginning Programing
^MATH 1533 Pre-calculus	^MATH 1533 Algebra for STEM (sub)
^MATH 1613 Trigonometry	^MATH 1593 Plane Trigonometry
MATH 2104 Calculus and Analytic Geometry I	MATH 2313 Calculus 1
MATH 2214 Calculus and Analytic Geometry II	MATH 2323 Calculus 2
CS 2163 JAVA	CMSC 1613 Programming I
CS 2453 Visual Basic	CMSC 2413 Visual Programming
CS 2363 C++	CMSC 2613 Programming II

^ UCO lists the following for this program: Students majoring in Computer Science-Information Science are encouraged to complete the following courses in high school: A high school computer technology course using a word processor, spreadsheet, e-mail, browser, and search engines **OR** CMSC 1053 Professional Computer Applications and Problem Solving. 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.

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......................................64

(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

Computer Science - Information Science...64
Required...49
^ CMSC 1621 Programming I Laboratory
^ CMSC 2123 Discrete Structures
^ CMSC 2833 Computer Organization I
^ SE   3103 Object Oriented Software Design and Construction
^ CMSC 3303 Systems Analysis and Design
^ CMSC 3413 Enterprise Programming
^ CMSC 3613 Data Structures and Algorithms
^ CMSC 4003 Applications of Database Management Systems
^ CMSC 4063 Networks
^ CMSC 4153 Operating Systems
^ CMSC 4323 Computer and Network Security
^* CMSC 4513 Software Design and Development
^ STAT 2113 Statistical Methods **OR (May be taken at OCCC.)**
   ^ STAT 2103 Introduction to Statistics for Sciences **OR**
   ^ STAT 4113 Mathematical Statistics 1
  ACCT 2113 Accounting I **(May be taken at OCCC.)**
  ACCT 2133 Accounting II **(May be taken at OCCC.)**
  MGMT 3103 Principles of Management
  ISOM 3263 Management Information Systems

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

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

Elective CMSC or SE courses...9
  Any 3/4000 level CMSC or SE courses except SE 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.

Other areas of application...6
  Selected from the following:
  ACCT 3113 Managerial Accounting
  FIN   3563 Fundamentals of Business Finance
  ISOM 3323 Business Analytics
  ISOM 4063 Computer Simulation
  ISOM 4283 Developing Decision Support Systems
  ISOM 4363 Information Systems Management
  ISOM 4513 Virtualization

Electives to bring total to..124

Minimum Grade Requirements

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

* A student may take additional CMSC 3/4000 courses to bring the total hours of upper-division courses to 40.

For other regulations pertaining to graduation, see the UCO Undergraduate Catalog.

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.

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.

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^MATH 1533 Pre-Calculus	^MATH 1533 Algebra for STEM (sub)
^MATH 1613 Trigonometry	^MATH 1593 Plane Trigonometry
CS 2163 JAVA	CMSC 1613 Programming I
CS 2363 C++	CMSC 2613 Programming II
MATH 2104 Calculus and Analytic Geometry I	MATH 2313 Calculus 1
MATH 2214 Calculus and Analytic Geometry II	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 1 Laboratory
   ^CMSC 2123   Discrete Structures
   ^CMSC 2833   Computer Organization 1
   ^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 1
^ 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

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