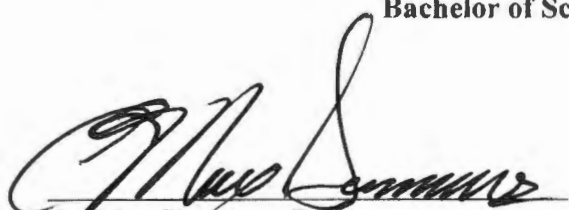# Transfer Agreement
Between
Oklahoma City Community College
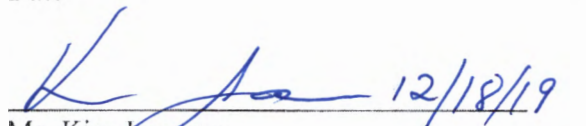## And
University of Central Oklahoma

Effective Academic Year: 2019-2020

Associate of Science-Mathematics
To
Bachelor of Science-Math
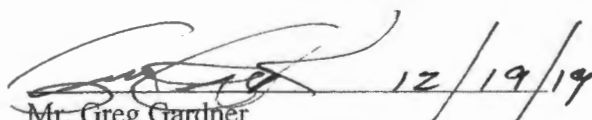**Bachelor of Science-Math-Actuarial Science**
Bachelor of Science-Math-Statistics

Dr. Max Simmons, Dean
Science, Engineering, and Mathematics

12/18/19
Date
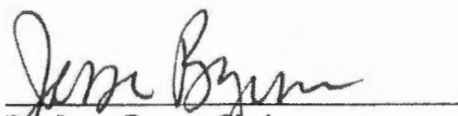
Ms. Kim Jameson
Associate Vice President for Academic Affairs

12/18/19

Mr. Greg Gardner
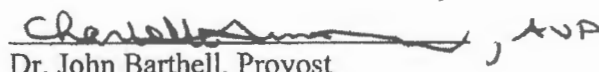Vice President for Academic Affairs

12/19/19
Date

Dr. Jesse Byrne, Chair
Department of Mathematics and Statistics

12/3/2019
Date

Dec. 6, 2019
Dr. Wei Chen, Dean
College of Mathematics and Science

Dr. John Barthell, Provost
Vice President for Academic Affairs

12-9-19
Date

Transfer Agreement
Oklahoma City Community College: AS - Mathematics
And
University of Central Oklahoma: BS - Actuarial 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
*MATH 2104 Calculus and Analytic Geometry I	
MATH 2214 Calculus and Analytic Geometry II	MATH 2313, 2323, 2333, and 2343 Calculus 1
MATH 2314 Calculus and Analytic Geometry III	through Calculus 4
^MATH 1533 Pre-Calculus and Analytic Geometry	^MATH1533 Precalculus-Algebra
^MATH 1613 Trigonometry	^MATH 1593 Plane Trig.
MATH 2013 Introduction to Statistics	STAT 2113 Statistical Methods
ECON 2123 Principles of Microeconomics	ECON 2103 Principles of Microeconomics
ECON 2143 Principles of Macroeconomics	ECON 2203 Principles of Macroeconomics

* In General Education Courses section of degree at OCCC

^(If needed) UCO lists the following prerequisites in program: MATH 1533 Precalculus-Algebra 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 the Online Transfer Guides.

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

To be taken at the University of Central Oklahoma.......................................60-63

Actuarial Science...45
Mathematics Core.. 6
Required courses:
MATH 2753 Technology for Professional Math and Statistics
MATH 3143 Linear Algebra

Actuarial Core.. 12
Required courses:
MATH 3133 Theory of Interest 1
MATH 4133 Theory of Interest 2
MATH 4223 Mathematics of Life Contingencies 1
MATH 4233 Mathematics of Life Contingencies 2
Statistics Core.. 12
Required courses:
STAT 4113 Mathematical Statistics 1
STAT 4123 Mathematical Statistics 2
* STAT 4213 Applied Regression Analysis
# STAT 4533 Data Mining & Statistical Learning
Finance and Insurance Electives... 9
Select from the following:
* ACCT 2113 Accounting 1
FIN 3523 Foundations of Insurance and Risk Management
FIN 3553 Property and Liability Insurance for the Firm
FIN 3563 Fundamentals of Business Finance
FIN 3613 Life and Health Insurance
* FIN 4253 Intermediate Business Finance
FIN 4213 Investments
Area of Application... 6
Select from the following:
MATH 3103 Differential Equations
MATH 4113 Operations Research 1
MATH 4123 Operations Research 2
MATH 4263 Numerical Linear Algebra
MATH 4363 Applied Numerical Analysis
MATH 4950 Internship (3 hours)
STAT 4103 Applied Experimental Design
STAT 4313 Nonparametric Statistics

* These courses are accredited by the Society of Actuaries to earn Validation by Educational Experience (VEE) credits.
# These courses will help prepare students for the professional examinations administered by the Society of Actuaries. See the Director of Actuarial Studies in MCS 108 for more details.

Electives to bring total to..124
Minimum Grade Requirements

1. Average in (a) all college course work, (b) course work at UCO, and (c) major courses....2.50
2. A minimum grade of "C" must be earned in all courses in the major to count toward meeting degree requirements.

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

Specific major degree requirements can be found in the UCO Undergraduate Catalog on the UCO website.
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 - Mathematics
And
University of Central Oklahoma: BS - Mathematics-Statistics

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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OCCC

General Education requirements
*MATH 2104 Calculus and Analytic Geometry I
MATH 2214 Calculus and Analytic Geometry II
MATH 2314 Calculus and Analytic Geometry III
^MATH 1533 Pre-Calculus and Analytic Geometry
^MATH 1613 Trigonometry
MATH 2013 Introduction to Statistics

UCO

University Core completed with AA or AS

MATH 2313, 2323, 2333, and 2343 Calculus 1
through Calculus 4
^MATH 1533 Precalculus-Algebra
^MATH 1593 Plane Trigonometry
STAT 2113 Statistical Methods

* In General Education Courses section of degree at OCCC
^(If needed) UCO lists the following prerequisites in program: MATH 1533 Precalculus-Algebra 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

Major Requirements

Mathematics – Statistics...39
Mathematics...15
   MATH 2753 Technology for Professional Math and Statistics
   MATH 3103 Differential Equations
   MATH 3113 Foundations of Advanced Math
   MATH 3143 Linear Algebra
   MATH   3183   Introduction to Modern Algebra **OR**
    MATH   4143   Introduction to Analysis 1

Statistics 24
  Required Courses 15
   STAT   4103   Applied Experimental Design
   STAT   4113   Mathematical Statistics 1

STAT 4123 Mathematical Statistics 2
STAT 4213 Applied Regression Analysis
STAT 4513 Statistical Consulting
Electives..9
Selected from the following:
STAT 3213 Fundamentals of Data Science
STAT 4253 Computer Applications in Statistics
STAT 4313 Nonparametric Statistics
STAT 4533 Data Mining and Statistical Learning
STAT 4413 Data Visualization and Exploration

Electives to bring total to...124

Minimum Grade Requirements
1 Average in (a) all college course work, (b) course work at UCO, and (c) major courses.. 2.50
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Transfer Agreement

Oklahoma City Community College: AS - Mathematics
And
University of Central Oklahoma: BS - Mathematics

To comply with this agreement, students must complete the associate 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
*MATH 2104 Calculus and Analytic Geometry I
MATH 2214 Calculus and Analytic Geometry II
MATH 2314 Calculus and Analytic Geometry III
^MATH 1533 Pre-Calculus and Analytic Geometry
^MATH 1613 Trigonometry

UCO

University Core completed with AA or AS

MATH 2313, 2323, 2333, and 2343 Calculus 1
through Calculus 4
^1533 Precalculus-Algebra
^MATH 1593 Plane Trig.

* In General Education Courses section of degree at OCCC

^(If needed) UCO lists the following prerequisites in program: MATH 1533 Precalculus-Algebra 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

Mathematics 35
Required..18
    MATH 2753   Technology for Professional Math and Statistics
    MATH 3113   Foundations of Advanced Math
    MATH 3143   Linear Algebra
    MATH 3183   Introduction to Modern Algebra
    MATH 4143   Introduction to Analysis I
    STAT 4113   Mathematical Statistics I
Electives...17
At least nine (9) hours must be selected from the following:
    MATH 3103   Differential Equations
    MATH 3163   Elementary Number Theory
    MATH 4153   Introduction to Analysis 2
    MATH 4483   History of Mathematics

STAT   4123   Mathematical Statistics 2
All other elective courses must be selected from 3000 and 4000 level
  MATH courses (including those MATH courses listed above).

It is strongly recommended that PHY 1114 General Physics I and Lab be taken in the general education pattern. (May be taken at OCCC.)

Electives to bring total to...124
Minimum Grade Requirements

1. Average in (a) all college course work, (b) course work at UCO, and (c) major courses....2.50
2. A minimum grade of "C" must be earned in all courses in the major to count toward meeting degree requirements.

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