

Transfer Agreement

Rose State College: AS – Engineering Mechanical-Aerospace Option
 And
 University of Central Oklahoma: BS - Mechanical Engineering

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

RSC	UCO
<p>An Associate in Science (AS) or Associate in Art (AA) degree from an accredited Oklahoma institution that includes the OSRHE minimum requirements will satisfy the UCO University Core.</p> <p>See the program requirements for the associate degree on the RSC website. Credited courses completed as part of the A.A. or A.S. that do not apply to the general education at RSC or the UCO major transfer to UCO as electives.</p>	<ul style="list-style-type: none"> • Written and Oral Communication • Quantitative Reasoning/Scientific Method with Lab • Critical Inquiry and Aesthetic Analysis • American Historical and Political Analysis • Cultural and Language Analysis • Social and Behavioral Analysis • Life Skills
<p>Hours required for the AS or AA degree/major at RSC63</p>	<p>Remaining hours in UCO University Core.....0</p>

PHIL 2303 Introduction to Ethics (HUM)
 ECON 1103 Principles of Microeconomics
 CHEM 1135 General College Chemistry I

 CHEM 1145 General College Chemistry II

 MATH 2173 Intro to Ord Differential Equations
 ENGR 2313 Engineering Thermodynamics
 ENGR 2103 Statics
 ENGR 2113 Dynamics
 MATH 1914 Differential & Integral Calculus I and
 MATH 2924 Differential & Integral Calculus II and
 MATH 2934 Differential & Integral Calculus III
 PHYS 2401 General Physics Lab I and
 PHYS 2434 Physics I Engineering Science Majors
 PHYS 2411 General Physics Lab II and (ES elective)
 PHYS 2444 Physics II for Engineering Science Majors

PHIL 1123 Contemporary Moral Problems
 ECON 1103 Introduction to Economics
 CHEM 1103 General College Chemistry I
 CHEM 1112 General Chemistry I Rec/Lab
 CHEM 1223 General Chemistry II
 CHEM 1232 General Chemistry II Rec/Lab
 MATH 3103 Differential Equations
 ENGR 2203 Thermodynamics
 ENGR 2033 Statics
 ENGR 2043 Dynamics

 MATH 2313, 2323, 2333, and 2343 Calculus 1 through Calculus 4

 PHY 2014 Physics for Science/Engr. I and Lab

 PHY 2114 Physics for Science/Engr. II and Lab

Total at Rose State College.....65

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

Support Courses.....3

- ~~PHIL 1123 Contemporary Moral Problems~~
- ~~ECON 1103 Introduction to Economics~~
- FMKT 2323 Global Protocol and Diversity
(or Foreign Language)

Successful completion of the courses listed in the above table satisfies the requirement for the following Support Courses.

- ~~*MATH 1533 Algebra for STEM AND~~
- ~~*MATH 1593 Plane Trigonometry~~
- One year of high school physics OR
- ~~PHY 1003 Introduction to Physics~~

Courses with strikethrough have been taken at RSC.

Mechanical Engineering.....57

Physics 3

Required courses:

- ~~PHY 2014 Physics for Science and Engineering I and Lab~~
- ~~PHY 2114 Physics for Science and Engineering II and Lab~~
- PHY 3883 Mathematical Physics I

Engineering..... 48

Required courses:

- ENGR 1112 Introduction to Engineering and Laboratory
- ENGR 1213 Engineering Computing and Laboratory
- ~~ENGR 2033 Statics~~
- ~~ENGR 2043 Dynamics~~
- ENGR 2143 Strength of Materials
- ENGR 2151 Strength of Materials Lab
- ~~ENGR 2203 Thermodynamics~~
- ENGR 2303 Electrical Science
- ENGR 2311 Electrical Science Laboratory
- ENGR 3211 Thermal Engineering Laboratory
- ENGR 3303 Engineering Probability and Statistics
- #ENGR 3323 Signals and Systems
- ENGR 3331 Signals and Systems Laboratory
- #ENGR 3363 Mechanical Engineering Design
- #ENGR 3413 Materials Science
- #ENGR 3443 Fluid Mechanics
- #ENGR 3451 Fluid Mechanics Lab
- ENGR 3703 Computational Methods in Engineering
- #ENGR 4123 Heat Transfer
- #ENGR 4141 Heat Transfer Lab
- #ENGR 4533 Thermal Systems Design
- #ENGR 4803 Mechatronics & Laboratory
- #ENGR 4862 ME Senior Engineering Design I
- #ENGR 4892 Senior Engineering Design II

Mathematics..... 0

Required courses:

- ~~MATH 2313 Calculus 1~~
- ~~MATH 2323 Calculus 2~~
- ~~MATH 2333 Calculus 3~~
- ~~MATH 2343 Calculus 4~~
- ~~MATH 3103 Differential Equations~~

11-10-21

Chemistry..... 0

Required courses:

- CHEM 1315 Chemistry for Engineering and Lab **OR**
- ~~CHEM 1103 General Chemistry I **AND**~~
- ~~CHEM 1112 General Chemistry I Recitation/Laboratory **AND**~~
- ~~CHEM 1223 General Chemistry II **AND**~~
- ~~CHEM 1232 General Chemistry II Recitation/Laboratory~~

Guided Physics or Engineering Electives..... 6

Selected from the following:

- ENGR 3153 Machine Dynamics
- ENGR 3223 Digital Logic Design and Laboratory
- ENGR 3803 Electrical Power Systems
- ENGR 4103 Finite Element Analysis
- ENGR 4153 Vibration
- ENGR 4203 Refrigeration and Air Conditioning
- ENGR 4303 Control Systems
- ENGR 4313 Introduction to Computational Fluid Dynamics
- BME 4343 Biomechanics
- PHY 4163 Analytical Mechanics

Admission into Engineering and Physics Upper Division is required.

Total hours required for this major may exceed the minimum 124 credit hour institutional requirement and will vary according to course selection. It is recommended students complete high school algebra II, trigonometry, physics, and two years of a second language in high school.

Total hours remaining at UCO in this major and support courses60

Minimum Hours required (**Minimum of 60 hours from UCO**) 124

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.