



TRANSFER MAPS

Engineering Associate in Science, Mechanical/Aerospace Option (Rose State College) to Bachelor of Science in Mechanical Engineering (OSU)

Available in Stillwater and Tulsa

Rose State College (years 1 and 2) – 2024-25

Year One – Rose State College

Fall

RSC Equivalent or Substitute	OSU Requirement	✓
ENGR 1213 – Intro Engineering Practices	UNIV 1111 + 2 hours Elective	
*CHEM 1225 – Chemistry for Engineers	CHEM 1414 (LN) + 1 hour elective	
ENGL 1113 – Composition I	ENGL 1113	
*MATH 1914 – Differential & Integral Calculus I	MATH 2144 (A)	
HIST 1483 – US History to 1877 or HIST 1493 – US History since 1877	HIST 1483 (H) or HIST 1493 (DH)	
Semester Credit Hours: 18		

Spring

RSC Equivalent or Substitute	OSU Requirement	✓
ENGR 2013 – Graphics & Design	ENGR 1332 + 1 Hour Elective	
ENGL 1213 – Composition II	ENGL 1213	
PHYS 2434 – Physics I – E/S and PHYS 2401 Gen Physics Lab I	PHYS 2014 (LN) + 1 hour elective	
MATH 2924 – Differential & Integral Calculus II	MATH 2153 (A) + 1 hour elective	
3 hours Social & Behavioral Sciences	3 hrs (S)	
Semester Credit Hours: 18		

*Students may meet prerequisite requirements for CHEM 1135, CHEM 1225 and MATH 1914 through high school coursework, entrance exams, or placement exams or by completing the prerequisite courses.

**The (I) and (D) requirements are waived with completion of the AS degree.

Year Two – Rose State College

Fall

RSC Equivalent or Substitute	OSU Requirement	✓
ENGR 2103 Statics	ENSC 2113	
ENGR 2313 Engineering Thermodynamics	ENSC 2213	
PHYS 2444 – Physics II- E/S and PHYS 2411 Gen Physics Lab II	PHYS 2114 (LN) + 1 hour elective	
MATH 2934 – Differential & Integral Calculus III	MATH 2163 + 1 hour elective	
3 hours Humanities (with I or D)	3 hours Humanities	
Semester Credit Hours: 17		

Spring

RSC Equivalent or Substitute	OSU Requirement	✓
ENGR 2113 – Dynamics	ENSC 2123	
ENGR 2213 - Electrical Science	ENSC 2613	
MATH 2973 – Differential Equations	MATH 2233	
POLS 1113 – American Federal Government	POLS 1113	
3 hours Humanities (with I or D)	3 hours Humanities	
Semester Credit Hours: 16		

Before transferring to OSU, have the RSC Registrar send an official transcript to the OSU Admissions Office with any degrees earned noted on the transcript. If you have not completed the requirements for an associate degree, talk with your OSU Academic Advisor about Reverse Transfer options to use OSU coursework to complete your RSC associate degree.

Oklahoma State University (years 3 and 4) – 2023-24

Year Three – Oklahoma State University

Fall

OSU Requirement	✓
ENSC 2143 – Strength of Materials	✓
MAE 3333 – Fundamental Fluid Dynamics	✓
MAE 3153 Introduction to MAE Design	✓
MAE 3013 – Engineering Analysis	✓
#ENGR 2421 Engineering Data Acquisition Controls Lab and two from the following labs: ENSC 2141 Strength of Materials, ENSC 2411 Electrical Science, ENSC 2611 Electrical Fabrication, ENSC 3231 Fluids & Hydraulics, ENSC 3311 Materials Science, ENSC 3431 Thermodynamics and Heat Transfer	✓
ENGR 1412 Intro Engr Computer Programming	✓
Semester Credit Hours at OSU: 17	

Spring

OSU Requirement	✓
MAE 3233 – Heat Transfer	✓
MAE 3724 – Dynamic Systems Analysis & Controls	✓
MAE 3403 – Computer Methods	✓
ENSC 3313 – Material Science	✓
Semester Credit Hours at OSU: 16	

Year Four – Oklahoma State University

Fall

OSU Requirement	✓
MAE 3324 – Mechanical Design I	✓
MAE 3524 – Thermal Fluids Design	✓
3 Hrs Technical Elective (Varies)	✓
3 Hrs MAE Elective (Varies)	✓
IEM 3503 – Engineering Economics	✓
Semester Credit Hours at OSU: 17	

Spring

OSU Requirement	✓
MAE CAT I Elective (3 Hrs)	✓
MAE CAT II Elective (4 Hrs)	✓
3 Hrs MAE Elective (Varies)	✓
3 Hrs from Natural Science course options	✓
Semester Credit Hours at OSU: 13	

Work with an advisor to determine timing of the Lab courses to coincide with appropriate courses.

This plan is only one example of how a student may successfully complete degree requirements in four years. Course rotations may vary between the Stillwater and Tulsa campuses. Students are responsible for completing the requirements as given in the official degree requirements sheet.

