

ROSE STATE COLLEGE
Engineering Associate in Science (AS): Mechanical and Aerospace Option

OKLAHOMA STATE UNIVERSITY
Bachelor of Science (BS) in Aerospace Engineering (& Mechanical Engineering)



Year	FIRST SEMESTER			SECOND SEMESTER		
FIRST	Rose State College Class		OSU Equivalent	Rose State College Class		OSU Equivalent
	ENGL 1113	English Comp. I	ENGL 1113	ENGL 1213	English Comp. II	ENGL 1213
	CHEM 1135	Gen. Chemistry I	CHEM 1314 (counts as Basic Science)	CHEM 1145	Gen. Chemistry II	CHEM 1515 or CHEM 1414
	MATH 1914	Calculus I	MATH 2144	MATH 2924	Calculus II	MATH 2153
	ENGR 1213	Intro. to Engineering Humanities	ENGR 1111 Humanities	PHYS 2434	Physics I	PHYS 2014
			PHYS 2401	Gen. Physics Lab I	PHYS 2014	
	RSC Credit Hours: 18		Transfer Hours: 14		RSC Credit Hours: 17	
				Transfer Hours: 14		

Year	FIRST SEMESTER			SECOND SEMESTER		
SECOND	Rose State College Class		OSU Equivalent	Rose State College Class		OSU Equivalent
	HIST 1483 or HIST 1493	US History to 1877 or US History since 1877	HIST 1103	POLS 1113	Am. Fed. Government	POLS 1113
	MATH 2934	Calculus III	MATH 2163	MATH 2173	Differential Equations	MATH 2233
	ENGR 2103	Statics	ENSC 2113	ENGR 2133	Strength of Materials	ENSC 2143
	PHYS 2444	[a] Physics II	PHYS 2114	ENGR 2313	Thermodynamics	ENSC 2213
	PHYS 2411	[a] Gen. Physics Lab II	PHYS 2114		Humanities	Humanities
		Liberal Arts	Social Sciences			
	RSC Credit Hours: 18		Transfer Hours: 16		RSC Credit Hours: 15	
				Transfer Hours: 15		



Year	[b] FIRST SEMESTER		Hours	SECOND SEMESTER		Hours
THIRD	ENGR 1412	Python	2	ENGR 1332	[c] Engineering Design with CAD/Solidworks	2
	ENGR 2421	Data Acquisition Lab	1	ENSC 2123	[c] Dynamics	3
	ENSC 2141	Strengths Lab	1	MAE 3153	Intro. to Mechanical Design	3
	ENSC 2613	[c] Intro. to Electrical Science	3	MAE 3231	Fluids Lab	1
	ENSC 3313	Materials Science	3	MAE 3333	Fundamentals of Fluid Dynamics	3
	MAE 3013	Engineering Analysis & Methods	3	MAE 3403	Computer Methods in Analysis & Design	3
	Credit Hours:		13	Credit Hours:		15

Year	FIRST SEMESTER			Hours	SECOND SEMESTER			Hours
FOURTH	MAE 3293	Fundamentals of Aerospace		3	IEM 3503	Engineering Economic Analysis		3
	MAE 3324	Mechanical Design I		4	MAE 3253			3
	MAE 3724	Systems Analysis		4				
		Technical Elective (or MAE 3233 for dual degree)		3	MAE 3524	(Thermal Fluid Design for dual degree)		(4)
	Credit Hours:			14	Credit Hours:			6/10

Year	FIRST SEMESTER			Hours	SECOND SEMESTER			Hours
FIFTH	MAE 4243	Aerospace Propulsion and Power		3	MAE 4223	Aerospace Engineering Lab		3
	MAE 4283	Stability and Control		3	MAE 4374	Aerospace System Design		4
	MAE 4513	Aerospace Structures		3				
	Credit Hours:			9	Credit Hours:			7

Notes:

At OSU, the I, D and S requirements are waived with the Associates in Science Degree.

[a] PHYS 2444 and 2411 at RSC will count toward the BS degree at OSU.

[b] Must complete 60 credit hours (minimum) at OSU for the BS degree.

[c] Equivalent courses exist at RSC that will count toward the BS degree at OSU.

Because of course sequencing requirements, students will take three years at OSU to complete the Aerospace Engineering Degree, making this a 2 + 3 agreement. However, the student can also complete the Mechanical Engineering Degree in that time (as described in this plan) making this a dual Aerospace-Mechanical degree option.

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.

For OSU Official Use Only:

Transfer Credit Evaluation

 Initials Dec 7, 202 Date

DegreeWorks Review

 Initials Dec 7, 202 Date

RSC OSU

OSU-Stillwater

TRANSFER MAPS



Engineering Associate in Science Degree: Mechanical and Aerospace Option (RSC) to Bachelor of Science in Aerospace Engineering (OSU)

Rose State College (years 1 and 2) – 2020-21

Year One – Rose State College					
Fall Semester			Spring Semester		
RSC Requirement	OSU Equivalent	✓	RSC Requirement	OSU Equivalent	✓
ENGL 1113 – Comp I	ENGL 1113	3	ENGL 1213 – Comp II	ENGL 1213	3
CHEM 1135 – Gen. Chem I	CHEM 1314 (counts as basic science)	3	Eng. Sci. Elective – CHEM 1145 – Gen. Chem II	CHEM 1515 (in place of CHEM 1414)	4
MATH 1914 – Calc I	MATH 2144	4	MATH 2924 – Calc II	MATH 2153	3
ENGR 1213 – Intro Engineering	ENGR 1111	1	PHYS 2434 – Physics I	PHYS 2014	3
Humanities (3)	Humanities (3)	3	PHYS 2401 – Gen. Phys. Lab 1	PHYS 2014	1
RSC Semester Total – 18 hrs	OSU Eng. degree hrs	14	RSC Semester Total - 17	OSU Eng. degree hrs	14

At OSU, CHEM 1135 and CHEM 1145 (combined) substitute for CHEM 1414 – Chemistry for Engineers

Year Two – Rose State College					
Fall Semester			Spring Semester		
RSC Requirement	OSU Equivalent	✓	RSC Requirement	OSU Equivalent	✓
HIST 1483 OR HIST 1493	HIST 1103	3	POLS 1113	POLS 1113	3
MATH 2934 – Calc III	MATH 2163	3	S&R Elec: MATH 2173 – Diff Eq.	MATH 2233	3
Eng. Elec: ENGR 2103 – Statics	ENSC 2113	3	Eng. Elec: ENGR 2133 – Strength of Materials	ENSC 2143	3
PHYS 2444 – Physics II	PHYS 2114	3[a]	Eng. Elec: ENGR 2313 – Thermo	ENSC 2213	3
PHYS 2411 – Gen Phys Lab 2	PHYS 2114	1[a]	Humanities (3)	Humanities (3)	3
Liberal Arts (3)	Social Sciences (3)	3			
RSC Semester Total – 18 hrs	OSU Eng. degree hrs	*16	RSC Semester Total - 15	OSU Eng. degree hrs	15

At OSU, the I, D and S requirements are waived with the Associates in Science Degree.

[a] PHYS 2444 and 2411 at RSC will count toward the BS degree at OSU

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.

[b] OKLAHOMA STATE UNIVERSITY (years 3, 4, and 5) – 2020-21

Year Three – Oklahoma State University			
Fall Semester		Spring Semester	
OSU Requirement	✓	OSU Requirement	✓
ENGR 1412 Intro to Engr Comp Programming (Python)	2	ENGR 1332 Engineering Design with CAD/Solidworks [c]	2
ENGR 2421 Data Acquisition Lab	1	ENSC 2123 Dynamics [c]	3
ENSC 2141 Strengths Lab	1	MAE 3153 Intro to MAE Design	3
ENSC 2613 Intro to Electrical Science (Circuits) [c]	3	MAE 3231 Fluids Lab	1
ENSC 3313 Materials Science	3	MAE 3333 Fundamentals of Fluid Dynamics	3
MAE 3013 Engineering Analysis & Methods	3	MAE 3403 Computer Methods in Analysis & Design	3
Semester Credit Hours at OSU: 13		Semester Credit Hours at OSU: 15	

Year Four – Oklahoma State University			
Fall Semester		Spring Semester	
OSU Requirement	✓	OSU Requirement	✓
MAE 3293 Fundamentals of Aerospace	3	IEM 3503 Engineering Economic Analysis	3
MAE 3324 Mechanical Design 1	4	MAE 3253 Applied Aerodynamics	3
MAE 3724 Systems Analysis	4	(MAE 3524 Thermal Fluid Design - for dual degree)	(4)
Tech Elective (or MAE 3233 for dual degree)	3		
Semester Credit Hours at OSU: 14		Semester Credit Hours at OSU: 6/10	

Year Five – Oklahoma State University			
Fall Semester		Spring Semester	
OSU Requirement	✓	OSU Requirement	✓
MAE 4243 Aerospace Propulsion and Power	3	MAE 4223 Aerospace Engineering Lab	3
MAE 4283 Stability and Control	3	MAE 4374 Aerospace System Design	4
MAE 4513 Aerospace Structures	3		
Semester Credit Hours at OSU: 9		Semester Credit Hours at OSU: 7	

Because of course sequencing requirements, students will take three years at OSU to complete the Aerospace Engineering Degree, making this a 2 + 3 agreement. **However, the student can also complete the Mechanical Engineering Degree in that time (as described in this plan) making this a dual Aerospace-Mechanical degree option.**

[b] Must complete 60 credit hours (minimum) at OSU for the BS degree

[c] Equivalent courses exist at RSC that will count toward the BS degree at OSU

 Nov 1, 2021

Cheryl Kleeman, Director, Transfer & Veterans Services, OSU Date

 Nov 2, 2021

Randy Seitsinger, Associate Dean, College of Engineering, Architecture, Date
and Technology, OSU

 Nov 1, 2021


Dr. Ryan Stoddard, Dean Engineering and Science, Rose State College Date

 Nov 29, 2021

Dr. Paul Tiklasky, Dean, College of Engineering, Architecture, and Date
and Technology, OSU

 Nov 2, 2021

Dr. Daniel Fisher, Department Head, Mechanical and Aerospace Date
Engineering, OSU

 Nov 1, 2021

Dr. Isabelle Billon, Vice President for Academic Affairs, Rose State Date
College

Signature: 
Casey Oldenburg (Dec 7, 2021 09:04 CST)

Email: transfercrediteval@okstate.edu

Signature: 
Tiegan Willoughby (Dec 7, 2021 11:40 CST)

Email: degreeworks@okstate.edu

