





**Associate in Science in Mathematical and Physical Sciences Pre-Engineering Option** (NOC) to **Bachelor of Science in Civil Engineering** (OSU)

NORTHERN OKLAHOMA COLLEGE (years 1 and 2) – 2021-2023

Year One –Northern Oklahoma College						
Fall Semester		Spring Semester				
NOC Equivalent or Substitute	OSU Requirement	Н	NOC Equivalent or Substitute	OSU Requirement	Н	
ENGL 1113	ENGL 1113	3	ENGL 1213	ENGL 1213	3	
CHEM 1515	CHEM 1414	5	MATH 2144	MATH 2144	4	
ORNT 1101	1 HR Elective	1	PHYS 2014	PHYS 2014	4	
MATH 1513/1613 *	MATH 1513	3	3 Hours Humanities (H)	3 Hours (H)	3	
ENGR 1111	ENGR 1111	1				
HIST 1483 or 1493	HIST 1483 or 1493	3				
Semester Credit Hours at NOC: 16		Semester Credit Hours at NOC: 14	_			

Year Two – Northern Oklahoma College						
Fall Semester		Spring Semester				
NOC Equivalent or Substitute	OSU Requirement	Н	NOC Equivalent or Substitute	OSU Requirement	Н	
CMSC 1013**	ENGR 1412	3	MATH 2613	MATH 2233	3	
MATH 2154	MATH 2153	4	POLI 1113	POLS 1113	3	
PHYS 2114	PHYS 2114	4	MATH 2164	MATH 2163	4	
3 Hours Humanities (H, I)	3 Hours (H, I)	3	ENGR 2113	ENGR 2113	3	
Semester Credit Hours at NOC: 14		l .	Semester Credit Hours at NOC: 13			

Summer Two – Northern Oklahoma College					
NOC Course			OSU Course		
NOC Equivalent or Substitute	Hours	✓	OSU Requirement	Hours	<b>√</b>
ENGR 2123	3		ENSC 2123	3	

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

\*Students scoring 26 or above on the math subsection of the ACT do not have to take MATH 1513 Algebra for STEM. Students scoring 28 or above on the math subsection of the ACT do not have to take MATH 1613 Plane Trigonometry. Students not taking Algebra & Trigonometry because of ACT scores or CLEP exam results are required to substitute 3-6 hours of credit in appropriate General Education Electives or RECOMMENDED PROGRAM ELECTIVES to complete 60 hours at NOC and maximize their transfer hours to the four-year institution.

Before transferring to OSU, have the NOC 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 NOC associate degree.





<sup>\*\*</sup> CMSC 1013 will substitute for the BSAD 1113 requirement at NOC.

## OKLAHOMA STATE UNIVERSITY (years 3 and 4) - 2023-2026

Year Three – Oklahoma State University					
Fall Semester		Spring Semester			
OSU Requirement		OSU Requirement	✓		
***ENSC 3233 – Fluid Mechanics (summer, online is best)		ENSC 2141 – Strength of Materials Lab			
CIVE 2041 – Civil & Environmental Engineering Seminar		CIVE 3413 – Structural Analysis			
CIVE 2081 – Env Chem for Engr		CIVE 3714 -Geotechnical			
ENSC 2143 - Strengths		CIVE 3813 – Environmental Engineering Science			
ENSC 3231 – Fluids & Hydraulics Lab		ENGR 1322			
STAT 4033 – Engineering Statistics or STAT 4073 –		SPCH 2713 – Intro to Communications			
Engineering Statistics with Design of Experiments					
BIOL 1114					
Semester Credit Hours at OSU: 16 (or 13 with 3 in summer)		Semester Credit Hours at OSU: 16			

Year Four – Oklahoma State University					
Fall Semester		Spring Semester			
OSU Requirement	✓	OSU Requirement	✓		
CIVE 3513 – Structural Steel Design		CIVE 3843 – Hydrology I			
CIVE 3614 - Surveying		CIVE 3833 - Hydraulics			
CIVE 4833 – Unit Operations in Environmental Engineering		CIVE 3523 – Reinforced Concrete Design			
CIVE 3623 - Materials		CIVE 3633 – Transportation Engineering			
3 hours from Controlled Electives		3 hours from Controlled Electives			
Semester Credit Hours at OSU: 16		Semester Credit Hours at OSU: 15			

Year Five – Oklahoma State University				
Fall Semester		Spring Semester		
OSU Requirement	<b>√</b>	OSU Requirement	<b>✓</b>	
CIVE 4043 – Senior Design				
CIVE 4273 – Construction Engr & Project Management				
IEM 3503 – Engineering Economic Analysis				
3 hours from Controlled Electives				
CIVE 4041 – Engineering Practice				
Semester Credit Hours at OSU: 13		Semester Credit Hours at OSU:		

<sup>\*\*\*</sup>Transfer students will benefit significantly by taking ENSC 3233 (online) in the summer prior to their first fall semester at OSU.

This plan is only one example of how a student may successfully complete degree requirements in four years. Students are responsible for completing the requirements as given in the official degree requirements sheet.

The NOC substitutions and equivalencies also apply to the Environmental option under Civil Engineering.

