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## Division of Engineering, Physical Science and PTEC

This degree is offered on NOC Enid and NOC Tonkawa campuses.

Program Requirements 60 Total Credit Hours									
General Education Courses 37 Total Credit Hours					Pro	20 hours			
English Composition Courses				*	PHYS	2014	Engineering Physics I	4 hours	
	ENGL	1113	English Composition I	3 hours		MATH	1613	Plane Trigonometry	3 hours
	ENGL	1213	English Composition II	3 hours	*	MATH	2144	Calculus I	4 hours
History & Government Courses				*	MATH	2154	Calculus II	4 hours	
	HIST	1483	American History to 1877	3 hours	*	MATH	2164	Calculus III	4 hours
or	HIST	1493	American History Since 187	7		PRDV	2321	Professional Development	1 hour
	POLI	1113	American Government	3 hours					
Hur	Humanities Courses								
	Electives 6 hours				Recommended Program Elective Courses			3 hours	
-	One 3 hour course to be chosen from those listed with the				(Combine with Gen Ed. hours to choose 6 hours)				
Inte	International Dimension and 3 hours of humanities electives.					BIOL	1114	General Biology	4 hours
Mathematics Courses					BIOL	1314	General Botany	4 hours	
	MATH	1513	Algebra for STEM	3 hours		BIOL	2124	Microbiology	4 hours
Science Courses					BIOL	1214	Environmental Science	4 hours	
	CHEM	1315	General Chemistry I	5 hours		ENGL	1223	Technical Writing	3 hours
	CHEM	1414	General Chemistry II	4 hours	*	MATH	2613	Differential Equations	3 hours
Computer Science Courses					*	PHYS	2114	Engineering Physics II	4 hours
	BADM	1113	Digital/Financial Literacy	3 hours	Programming Language Course(s)			3 hours	
or Other approved computer course									
Orie	Orientation Course								
	ORNT	1101	Freshman Orientation	1 hour					
Gei	General Education Elective Course 3 hours				*Th	ese progra	m cours	es are typically offered only once	e a year.
Select courses from: Language Arts, Natural Sciences, Foreign Languages, Fine Arts, Humanities, Mathematics, Behavioral or Social Sciences				See course descriptions for fall or spring designations and plan accordingly. Some degrees allow General Physics to substitute for Engineering Physics; check with your advisor.					

The Chemistry/Physics degree option prepares students to transfer to a four-year university to pursue a bachelor's degree. The program is an excellent starting place for students considering careers in research, medicine, or academia.

Students transferring should consult the catalog from the institution to which they are planning to transfer to carefully select courses that will meet requirements to complete their bachelor's degree.

Career Opportunities: Entry-Level Scientist, Biotechnology, High School Science, Teacher, Meteorologist, Geologist, Laboratory Chemist

## Mathematics and Physical Science - Chemistry/Physics Option ERN Associate in Science Degree Life changing. Changing

This suggested curriculum includes degree requirements and courses that are usually completed in the first two years of a four-year curriculum. Consult with the university or college of your choice and its catalog curriculum as you make plans on where to transfer. Be careful to select the courses that will meet all requirements for both the Associate and Baccalaureate degree programs.

Year One							
Fall Semester				Spring Semester			
ENGL	1113	English Composition I	ENGL	1213	English Composition II		
ORNT	1101	Freshman Orientation	PHYS	2014	Engineering Physics I		
**MATH	1513	Algebra for STEM	CHEM	1414	General Chemistry II		
**MATH	1613	Plane Trigonometry	*MATH	2144	Calculus I		
CHEM	1315	General Chemistry I					
HIST	HIST 1483 American History to 1877			*These program courses are typically offered only once a year.			
or		See course descriptions for fall or spring designations and plan					
HIST	1493	American History Since 1877	accordingly.				
Total: 18 credit hours			Total 15 credit hours				

Year Two								
Fall Semester				Spring Semester				
BADM	1113	Digital/Financial Literacy	POLI	1113	American Government			
*MATH	2154	Calculus II		3 hours	Humanities Elective			
		Program/Gen Ed. Elective:	*MATH	2164	Calculus III			
*MATH	2613	Differential Equations		3 hours	Program/Gen Ed. Elective			
or			PRDV	2321	Professional Development			
PHYS	2114	Engineering Physics II						
		(Recommended Elective)		*These program courses are typically offered only once a year. See course descriptions for fall or spring designations and plan accordingly.				
	3 hours	Humanities Elective	I					
Total 13-	Total 13-14 credit hours				Total 14 credit hours			

<sup>\*\*</sup>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.

NOC evaluates students for placement into either foundational or college-level courses, whichever will lead to the greatest possibility of student success. Academic placement is determined either by A.C.T. test scores or by Accuplacer test scores. These tests are administered in the Testing Center at NOC. Based upon the scores, students may be required to take one or more courses for remediation in English, Math, or Reading, either prior to or concurrent with credit courses. See the NOC testing web page by clicking on the following link: <a href="http://www.noc.edu/act">http://www.noc.edu/act</a> for placement guidelines.