

Pre-Engineering Associate in Science

Degree Program Mentor

For additional information regarding this degree, contact the Degree Program Mentor.



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Program Objective

The objective of the Pre-Engineering Associate in Science is to prepare students for transfer to a bachelor's degree granting institution to major in engineering.

Requirements for Graduation

1. Sixty-three designated semester credit hours.
2. Grade of "C" or better required in all Major Field Requirement courses.
3. Grade Point Average of 2.0 or better.
4. Fifteen semester credit hours in attendance at SSC.
5. Completion of Graduate Exit Survey.

Please Note: Consult with advisor for specific transfer requirements. General Education and Major Field requirements vary between universities.

Transfer Note: A statewide transfer agreement guarantees students transferring to an Oklahoma public four-year university **with an associate in arts or associate in science degree** will satisfy all freshman and sophomore general education requirements at the four-year university.

General Education Requirements 29

GOV 1113	American National Government	3
HIST 1483	American History to 1877 or	
HIST 1493	American History since 1877.....	3
ENG 1113	Composition I	3
ENG 1213	Composition II	3
HUM	Any class designated as Humanities	6
MATH	<i>met by program</i>	
SCIENCE	One Life Science with lab	4
	<i>Physical Science met by program*</i>	
HPER 1012	Wellness and Human Development or	
	Two HPER Activity Courses	2
STSC 1002	Learning Strategies	2
ELECTIVE	Select from Psychology, Social Sciences, World Languages, and Fine Arts.....	3

Major Field Requirements 29

ENGR 1113	Introduction to Engineering	
MATH 2215	Calculus and Analytic Geometry I	
MATH 2424	Calculus and Analytic Geometry II	
MATH 2434	Calculus and Analytic Geometry III	
MATH 2533	Differential Equations	
PHYS 2114	General Physics I	
PHYS 2211	Calculus Based Physics I	
PHYS 2224	General Physics II	
PHYS 2231	Calculus Based Physics II	

Major Field Electives and Support..... 5

Select from the following:

CHEM 1315	General Chemistry I	
CS 2013	Programming in C++	
MATH 1513	Pre-Calculus for Eng-Phys-CS	
MATH 1613	Plane Trigonometry	

MINIMUM TOTAL HOURS REQUIRED FOR ASSOCIATE DEGREE 63

Suggested Sequence of Major Field Courses

First Semester	Second Semester	Third Semester	Fourth Semester
ENGR 1113 (FA only)	CS 2013	PHYS 2114 (FA only)	PHYS 2224 (SP only)
MATH 1513	MATH 2215 (SP only)	PHYS 2211 (FA only)	PHYS 2231 (SP only)
MATH 1613		MATH 2424 (FA only)	MATH 2434 (SP only)
			MATH 2533 (sp only)



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Degree Requirements Checklist 2021-22

A statewide transfer agreement guarantees students transferring to an Oklahoma public four-year university **with an associate in arts or associate in science degree** will satisfy all freshman and sophomore general education requirements at the four-year university.

	GENERAL EDUCATION REQUIREMENTS				
6 hrs.	Social Sciences <input type="checkbox"/> GOV 1113 American National Government <input type="checkbox"/> HIST 1483 American History Survey to 1877 or <input type="checkbox"/> HIST 1493 American History Survey since 1877	3 hrs.		Psychology, Soc. Science, World Language, or Fine Arts Elective <i>Select one of the following:</i>	<input type="checkbox"/> ANTH 1113 General Anthropology <input type="checkbox"/> ART 1103 Fundamentals of Art I <input type="checkbox"/> ART 1123 Drawing I <input type="checkbox"/> ART 1173 Crafts I <input type="checkbox"/> ART 1223 Black and White Photography I <input type="checkbox"/> ART 2123 Ceramics I <input type="checkbox"/> ART 2213 Watercolor I <input type="checkbox"/> BA 2113 Macroeconomics <input type="checkbox"/> BA 2213 Microeconomics <input type="checkbox"/> CJ 1113 Introduction to Criminology <input type="checkbox"/> ENG 2103 Fiction Writing <input type="checkbox"/> ENG 2113 Creative Writing <input type="checkbox"/> ENG 2123 Introduction to Poetry <input type="checkbox"/> ENG 2343 Sign Language I <input type="checkbox"/> FREN 1125 French I <input type="checkbox"/> GEOG 1123 World Regional Geography <input type="checkbox"/> MUS 2303 Performance Techniques <input type="checkbox"/> NAS 1713 Seminole/Creek Language I <input type="checkbox"/> PSY 1113 General Psychology <input type="checkbox"/> RUSS 1113 Elementary Russian <input type="checkbox"/> SOC 1113 Introduction to Sociology <input type="checkbox"/> SPAN 1125 Spanish I <input type="checkbox"/> SPCH 1533 Acting I
6 hrs.	Language Arts <input type="checkbox"/> ENG 1113 Composition I <input type="checkbox"/> ENG 1213 Composition II				
6 hrs.	Humanities <i>Select two of the following:</i> <input type="checkbox"/> HUM _____ <input type="checkbox"/> HUM _____ any course with HUM prefix (list above) or <input type="checkbox"/> ART 1153 Art History I <input type="checkbox"/> ART 1163 Art History II <input type="checkbox"/> ART 1203 Art Appreciation <input type="checkbox"/> ART 2323 Global Studies in Art <input type="checkbox"/> ENG 2043 Global Studies in Language Arts and Humanities <input type="checkbox"/> ENG 2413 Introduction to Literature <input type="checkbox"/> ENG 2433 World Literature I <input type="checkbox"/> ENG 2543 British Literature I <input type="checkbox"/> ENG 2653 British Literature II <input type="checkbox"/> ENG 2753 American Literature I <input type="checkbox"/> ENG 2883 American Literature II <input type="checkbox"/> HIST 2223 Early Western Civilization to 1660 <input type="checkbox"/> HIST 2233 Modern Western Civilization since 1660 <input type="checkbox"/> JOUR 1123 Introduction to Mass Communication <input type="checkbox"/> MUS 1213 Music Appreciation I <input type="checkbox"/> MUS 1223 Music Appreciation II <input type="checkbox"/> SPCH 1523 Introduction to Theatre <input type="checkbox"/> PHIL 1113 Introduction to Philosophy <input type="checkbox"/> SPAN 2103 Global Studies in Spanish	29 hrs.	TOTAL REQUIRED GENERAL EDUCATION HOURS		
	Mathematics <input checked="" type="checkbox"/> met by program				
4 hrs.	Life Science <i>Select one of the following:</i> <input type="checkbox"/> BIOL 1114 General Biology <input type="checkbox"/> BIOL 1214 Principles of Biology <input type="checkbox"/> BIOL 1224 General Botany <input type="checkbox"/> BIOL 1234 General Zoology	29 hrs.		MAJOR FIELD REQUIREMENTS	<input type="checkbox"/> ENGR 1113 Introduction to Engineering <input type="checkbox"/> MATH 2215 Calculus and Analytic Geometry I <input type="checkbox"/> MATH 2424 Calculus and Analytic Geometry II <input type="checkbox"/> MATH 2434 Calculus and Analytic Geometry III <input type="checkbox"/> MATH 2533 Differential Equations <input type="checkbox"/> PHYS 2114 General Physics I <input type="checkbox"/> PHYS 2211 Calculus Based Physics I <input type="checkbox"/> PHYS 2224 General Physics II <input type="checkbox"/> PHYS 2231 Calculus Based Physics II
	Physical Science <input checked="" type="checkbox"/> met by program				
2 hrs.	Health, Physical Education and Recreation <input type="checkbox"/> HPER 1012 Wellness and Human Development or Two HPER Activity Courses	5 hrs.		MAJOR FIELD ELECTIVES AND SUPPORT	<i>Select from the following:</i> <input type="checkbox"/> CHEM 1315 General Chemistry I <input type="checkbox"/> CS 2013 Programming in C++ <input type="checkbox"/> MATH 1513 Pre-Calculus for Eng-Phys-CS <input type="checkbox"/> MATH 1613 Plane Trigonometry
2 hrs.	Student Success Required during first semester <input type="checkbox"/> STSC 1002 Learning Strategies	34 hrs.		TOTAL REQUIRED MAJOR FIELD HOURS	
		63 hrs.		MINIMUM TOTAL HOURS REQUIRED FOR ASSOCIATE DEGREE	

revised 9/2018



Semester by Semester Suggested Degree Plan*

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COURSE NUMBER- COURSE DESCRIPTION	HOURS
FRESHMAN YEAR, 1ST SEMESTER, FALL	
<input type="checkbox"/> STSC 1002 LEARNING STRATEGIES	2
<input type="checkbox"/> ENG 1113 COMPOSITION I	3
<input type="checkbox"/> ENGR 1113 INTRODUCTION TO ENGINEERING	3
<input type="checkbox"/> HIST 1483/1493 AMERICAN HISTORY SURVEY TO 1877 OR SINCE 1877	3
<input type="checkbox"/> MAJOR FIELD ELECTIVE	3
<input type="checkbox"/> HUM	3
TOTAL:	17
FRESHMAN YEAR, 2ND SEMESTER, SPRING	
<input type="checkbox"/> ENG 1213 COMPOSITION II	3
<input type="checkbox"/> MAJOR FIELD ELECTIVE	2
<input type="checkbox"/> MATH 2215 CALCULUS AND ANALYTIC GEOMETRY I	5
<input type="checkbox"/> GOV 1113 AMERICAN NATIONAL GOVERNMENT	3
<input type="checkbox"/> LIFE SCIENCE**	4
TOTAL:	17
SOPHOMORE YEAR, 1ST SEMESTER, FALL	
<input type="checkbox"/> HUM	3
<input type="checkbox"/> PHYS 2114 GENERAL PHYSICS I	4
<input type="checkbox"/> PHYS 2211 CALCULUS BASED PHYSICS I	1
<input type="checkbox"/> MATH 2424 CALCULUS AND ANALYTIC GEOMETRY II	4
<input type="checkbox"/> ELECTIVE***	3
TOTAL:	15
SOPHOMORE YEAR, 1ST SEMESTER, SPRING	
<input type="checkbox"/> PHYS 2224 GENERAL PHYSICS II	4
<input type="checkbox"/> PHYS 2231 CALCULUS BASED PHYSICS II	1
<input type="checkbox"/> MATH 2434 CALCULUS AND ANALYTIC GEOMETRY III	4
<input type="checkbox"/> MATH 2533 DIFFERENTIAL EQUATIONS	3
<input type="checkbox"/> HPER 1012 WELLNESS AND HUMAN DEVELOPMENT	2
TOTAL:	14
TOTAL HOURS:	63

*THIS IS A GUIDE TO HELP STUDENTS WITH PLANNING. A STUDY OF THE COURSE SCHEDULE AND A VISIT WITH YOUR ACADEMIC ADVISOR IS CRUCIAL FOR SUCCESS IN COMPLETING YOUR DEGREE.

**LIFE SCIENCE = AGRI 1104, 1204, BIOL 1114, 1214, 1224, OR 1234

***ELECTIVE = SELECT FROM PSYCHOLOGY, SOCIAL SCIENCES, WORLD LANGUAGES, AND FINE ARTS