

Pre-Engineering Associate in Science

Degree Program Mentor

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



Jarrod Tollett
Assistant Professor
405-382-9217
j.tollett@ssocok.edu
Division Office: 405-382-9266

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, and Fine Arts 3

Major Field Requirements 29

ENGR 1113	Introduction to Engineering (FO)
MATH 1613	Plane Trigonometry
MATH 2215	Calculus and Analytic Geometry I (SO)
MATH 2424	Calculus and Analytic Geometry II (FO)
MATH 2434	Calculus and Analytic Geometry III ((SO)
PHYS 2114	General Physics I (FO)
PHYS 2211	Calculus Based Physics I (FO)
PHYS 2224	General Physics II (SO)
PHYS 2231	Calculus Based Physics II (SO)

Major Field Electives and Support..... 5

Select from the following:

CHEM 1315	General Chemistry I
CS 2013	Programming in C++ (FO)
MATH 1513	Pre-Calculus for Eng-Phys-CS
MATH 2533	Differential Equations (SO)

MINIMUM TOTAL HOURS REQUIRED FOR ASSOCIATE DEGREE 63

FO= FALL ONLY FOO= FALL ODD YRS ONLY FEO= FALL EVEN YRS ONLY

SO= SPRING ONLY SOO= SPRING ODD YRS ONLY SEO= SPRING EVEN YRS ONLY



Pre-Engineering - Associate in Science

Degree Requirements Checklist 2024-25

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, 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 (FO) <input type="checkbox"/> ART 1123 Drawing I (SO) <input type="checkbox"/> ART 2123 Ceramics I (FO) <input type="checkbox"/> ART 2213 Watercolor I (SO) <input type="checkbox"/> BA 2113 Macroeconomics <input type="checkbox"/> BA 2213 Microeconomics <input type="checkbox"/> CJ 1113 Introduction to Criminology <input type="checkbox"/> ENG 1313 Technical Writing (SOO) <input type="checkbox"/> ENG 2103 Fiction Writing (FO) <input type="checkbox"/> ENG 2113 Creative Writing (FO) <input type="checkbox"/> ENG 2123 Introduction to Poetry (SO) <input type="checkbox"/> GEOG 1123 World Regional Geography <input type="checkbox"/> NAS 1713 Seminole/Creek Language I <input type="checkbox"/> PSY 1113 General Psychology <input type="checkbox"/> SOC 1113 Introduction to Sociology
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/HUM 1153 Art History I (FO) <input type="checkbox"/> ART/HUM 1163 Art History II (SO) <input type="checkbox"/> ART/HUM 1203 Art Appreciation <input type="checkbox"/> ART 2323 Global Studies in Art (TBD Summer) <input type="checkbox"/> ENG/HUM 2033 Survey of Native American Literature (SEO) <input type="checkbox"/> ENG 2043 Global Studies in Language Arts and Humanities (TBD Summer) <input type="checkbox"/> ENG/HUM 2413 Introduction to Literature (FO) <input type="checkbox"/> ENG/HUM 2433 World Literature I (SO) <input type="checkbox"/> ENG/HUM 2543 British Literature I (FEO) <input type="checkbox"/> ENG/HUM 2653 British Literature II (FOO) <input type="checkbox"/> ENG/HUM 2753 American Literature I (SEO) <input type="checkbox"/> ENG/HUM 2883 American Literature II (SOO) <input type="checkbox"/> HIST/HUM 2223 Early Western Civilization to 1660 <input type="checkbox"/> HIST/HUM 2233 Modern Western Civilization since 1660 <input type="checkbox"/> MUS/HUM 1213 Music Appreciation I <input type="checkbox"/> MUS/HUM 1223 Music Appreciation II <input type="checkbox"/> PHIL 1113 Introduction to Philosophy (FO) <input type="checkbox"/> SOC 2433 Global Studies in Culture and Diversity (TBD Summer) <input type="checkbox"/> SPCH/HUM 1523 Introduction to Theatre (FO)	29 hrs.	TOTAL REQUIRED GENERAL EDUCATION HOURS
		29 hrs.	MAJOR FIELD REQUIREMENTS
		5 hrs.	<input type="checkbox"/> ENGR 1113 Introduction to Engineering (FO) <input type="checkbox"/> MATH 1613 Trigonometry <input type="checkbox"/> MATH 2215 Calculus and Analytic Geometry I (SO) <input type="checkbox"/> MATH 2424 Calculus and Analytic Geometry II (FO) <input type="checkbox"/> MATH 2434 Calculus and Analytic Geometry III (SO) <input type="checkbox"/> PHYS 2114 General Physics I (FO) <input type="checkbox"/> PHYS 2211 Calculus Based Physics I (FO) <input type="checkbox"/> PHYS 2224 General Physics II (SO) <input type="checkbox"/> PHYS 2231 Calculus Based Physics II (SO)
4 hrs.	Mathematics <input checked="" type="checkbox"/> met by program (MATH 1513 recommended)		MAJOR FIELD ELECTIVES AND SUPPORT
	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	34 hrs.	TOTAL REQUIRED MAJOR FIELD HOURS
2 hrs.	Physical Science <input checked="" type="checkbox"/> met by program	63 hrs.	MINIMUM TOTAL HOURS REQUIRED FOR ASSOCIATE DEGREE
2 hrs.	Health, Physical Education and Recreation <input type="checkbox"/> HPER 1012 Wellness and Human Development or Two HPER Activity Courses		revised 01/2024
2 hrs.	Student Success Required during first semester <input type="checkbox"/> STSC 1002 Learning Strategies		

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Semester by Semester Suggested Degree Plan*

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COURSE NUMBER- COURSE DESCRIPTION	HOURS
FRESHMAN YEAR, 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 (FO)	3
<input type="checkbox"/> HIST 1483/1493 AMERICAN HISTORY SURVEY TO 1877 OR SINCE 1877	3
<input type="checkbox"/> MAJOR FIELD ELECTIVE (MATH 1513 SUGGESTED)	3
<input type="checkbox"/> HUM	3
TOTAL:	17
FRESHMAN YEAR, SPRING	
<input type="checkbox"/> ENG 1213 COMPOSITION II	3
<input type="checkbox"/> MATH 1613	3
<input type="checkbox"/> MATH 2215 CALCULUS AND ANALYTIC GEOMETRY I (SO)	5
<input type="checkbox"/> GOV 1113 AMERICAN NATIONAL GOVERNMENT	3
<input type="checkbox"/> LIFE SCIENCE**	4
TOTAL:	18
SOPHOMORE YEAR, FALL	
<input type="checkbox"/> HUM	3
<input type="checkbox"/> PHYS 2114 GENERAL PHYSICS I (FO)	4
<input type="checkbox"/> PHYS 2211 CALCULUS BASED PHYSICS (FO)	1
<input type="checkbox"/> MATH 2424 CALCULUS AND ANALYTIC GEOMETRY II (FO)	4
<input type="checkbox"/> MAJOR FIELD ELECTIVE	2
TOTAL:	14
SOPHOMORE YEAR, SPRING	
<input type="checkbox"/> PHYS 2224 GENERAL PHYSICS II (SO)	4
<input type="checkbox"/> PHYS 2231 CALCULUS BASED PHYSICS II (SO)	1
<input type="checkbox"/> MATH 2434 CALCULUS AND ANALYTIC GEOMETRY III (SO)	4
<input type="checkbox"/> ELECTIVE***	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, OR FINE ARTS

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