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@sscok.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	Educat	ion Requi	rements	29
	GOV	1113	American National Government	
]	HIST	1483	American History to 1877 or	
]	HIST	1493	American History since 1877	
]	ENG	1113	Composition I	
]	ENG	1213	Composition II	
]	HUM		Any class designated as Humanities	
]	MATH		met by program	
1	SCIENC	ЪE	One Life Science with lab4	
			Physical Science met by program*	
]	HPER	1012	Wellness and Human Development or	
			Two HPER Activity Courses2	
	STSC	1002	Learning Strategies2	
]	ELECTI	VE	Select from Psychology, Social	
			Sciences, World Languages, and Fine Arts3	

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 fr

ct 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)

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 Science Degree Requirements Checklist 2022-23	e in	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	3 hrs.	Psychology, Soc. Science, World Language, or Fine Arts Elective
6 hrs.	Social Sciences GOV 1113 American National Government HIST 1483 American History Survey to 1877 or HIST 1493 American History Survey since 1877	_	Select one of the following: ANTH 1113 General Anthropology ART 1103 Fundamentals of Art I (FO) ART 1123 Drawing I (FO) ART 2123 Ceramics I (FO)
6 hrs.	Language Arts ENG 1113 Composition I ENG 1213 Composition II 		□ ART 2213 Watercolor I (SO) □ ASL 2343 Sign Language I (FO) □ BA 2113 Macroeconomics
6 hrs.	Humanities Select two of the following: HUM HUM HUM any course with HUM prefix (list above) <u>or</u> ART 1153 Art History I (FO) ART 1163 Art History II (SO) ART 1203 Art Appreciation	-	 BA 2213 Microeconomics CJ 1113 Introduction to Criminology ENG 1313 Technical Writing (SOO) ENG 2103 Fiction Writing (FO) ENG 2113 Creative Writing (FO) ENG 2123 Introduction to Poetry (SO) GEOG 1123 World Regional Geography NAS 1713 Seminole/Creek Language I PSY 1113 General Psychology
	 ART 2323 Global Studies in Art (TBD Summer) ENG 2403 Global Studies in Language Arts and Humanities (TBD Summer) 		 SOC 1113 Introduction to Sociology SPAN 1125 Spanish I (FO)
	 ENG 2413 Introduction to Literature (FO) ENG 2433 World Literature I (SO) ENG 2543 British Literature I (FEO) ENG 2653 British Literature II (FOO) 	29 hrs.	TOTAL REQUIRED GENERAL EDUCATION HOURS
	 ENG 2753 American Literature I (SEO) ENG 2883 American Literature II (SOO) HIST 2223 Early Western Civilization to 1660 HIST 2233 Modern Western Civilization since 1660 MUS 1213 Music Appreciation I MUS 1223 Music Appreciation II PHIL 1113 Introduction to Philosophy (FO) SOC 2433 Global Studies in Culture and Diversity (TBD Summer) SPCH 1523 Introduction to Theatre (FO) SPAN 2103 Global Studies in Spanish (FO) 	29 hrs.	MAJOR FIELD REQUIREMENTS□ ENGR 1113 Introduction to Engineering (FO)□ MATH 1613 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)
	Mathematics <u>✓ met by program</u> Life Science	5 hrs.	MAJOR FIELD ELECTIVES AND SUPPORT Select from the following:
4 hrs.	Select one of the following: BIOL 1114 General Biology BIOL 1214 Principles of Biology BIOL 1224 General Botany BIOL 1234 General Zoology		 CHEM 1315 General Chemistry I MATH 1513 Pre-Calculus for Eng-Phys-CS CS 2013 Programming in C++ (FO) MATH 2533 Differential Equations
	Physical Science ✓ met by program	34 hrs.	TOTAL REQUIRED MAJOR FIELD HOURS
2 hrs.	Health, Physical Education and Recreation HPER 1012 Wellness and Human Development or Two HPER Activity Courses 	63 hrs.	MINIMUM TOTAL HOURS REQUIRED FOR ASSOCIATE DEGREE revised 9/20
2 hrs.	Student Success Required during first semester STSC 1002 Learning Strategies		



Semester by Semester Suggested Degree Plan* Pre-Engineering - Associate in Science

COURSE NUMBER- COURSE DESCRIPTION	Hours				
FRESHMAN YEAR, FALL					
□ STSC 1002 LEARNING STRATEGIES		2			
□ ENG 1113 COMPOSITION I		3			
□ ENGR 1113 INTRODUCTION TO ENGINEERING (FO)		3			
□ HIST 1483/1493 AMERICAN HISTORY SURVEY TO 1877 OR SINCE 1877		3			
□ MAJOR FIELD ELECTIVE (MATH 1513 SUGGESTED)		3			
□ HUM		3			
	TOTAL:	17			
FRESHMAN YEAR, SPRING					
□ ENG 1213 COMPOSITION II		3			
□ MATH 1613		3			
\square MATH 2215 CALCULUS AND ANALYTIC GEOMETRY I (SO)		5			
□ GOV 1113 AMERICAN NATIONAL GOVERNMENT		3			
□ LIFE SCIENCE**		4			
	TOTAL:	18			
SOPHOMORE YEAR, FALL					
□ HUM		3			
□ PHYS 2114 GENERAL PHYSICS I (FO)		4			
□ PHYS 2211 CALCULUS BASED PHYSICS (FO)		1			
□ MATH 2424 CALCULUS AND ANALYTIC GEOMETRY II (FO)		4 2			
□ MAJOR FIELD ELECTIVE		2 14			
	TOTAL:	14			
SOPHOMORE YEAR, SPRING		,			
□ PHYS 2224 GENERAL PHYSICS II (SO)		4			
□ PHYS 2231 CALCULUS BASED PHYSICS II (SO)		1			
□ MATH 2434 CALCULUS AND ANALYTIC GEOMETRY III (SO)		4 3			
□ ELECTIVE***		3 2			
□ HPER 1012 Wellness and Human Development	-	14			
	TOTAL:				
	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

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