## Pre-Engineering <br> 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 met by program
SCIENCE One Life Science with lab.................................... 4
Physical Science met by program*
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
ENGR 1113 (FA only)
MATH 1513
MATH 1613

Second Semester
CS 2013
MATH 2215 (SP only)

Third Semester PHYS 2114 (FA only) PHYS 2211 (FA only) MATH 2424 (FA only)

Pre-Engineering - Associate in Science Degree Requirements Checklist 2020-21

A statewide transfer agreement guarantees students transferring to an Oklahoma public fouryear 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 | $3 \mathrm{hrs}$. | Psychology, Soc. Science, World Language, or Fine Arts Elective |
| :---: | :---: | :---: | :---: |
| 6 hrs . | Social Sciences <br> - GOV 1113 American National Government <br> - 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 ART 1123 Drawing I ART 1173 Crafts I |
| 6 hrs . | Language Arts <br> - ENG 1113 Composition I <br> - ENG 1213 Composition II |  | $\square$ ART 1223 Black and White Photography I ART 2123 Ceramics I <br> - ART 2213 Watercolor I |
| 6 hrs . | Humanities <br> Select two of the following: HUM $\qquad$ $\qquad$ HUM $\qquad$ $\qquad$ <br> any course with HUM prefix (list above) or ART 1153 Art History I ART 1163 Art History II ART 1203 Art Appreciation ART 2323 Global Studies in Art ENG 2043 Global Studies in Language Arts and Humanities ENG 2413 Introduction to Literature ENG 2433 World Literature I ENG 2543 British Literature I ENG 2653 British Literature II ENG 2753 American Literature I ENG 2883 American Literature II HIST 2223 Early Western Civilization to 1660 HIST 2233 Modern Western Civilization since 1660 JOUR 1123 Introduction to Mass Communication <br> - MUS 1213 Music Appreciation I |  | - BA 2113 Macroenconomics <br> - BA 2213 Microeconomics <br> $\square$ CJ 1113 Introduction to Criminology <br> $\square$ ENG 2103 Fiction Writing <br> ENG 2113 Creative Writing <br> ENG 2123 Introduction to Poetry <br> ENG 2343 Sign Language I <br> FREN 1125 French I <br> GEOG 1123 World Regional Geography <br> MUS 2303 Performance Techniques <br> NAS 1713 Seminole/Creek Language I <br> PSY 1113 General Psychology <br> RUSS 1113 Elementary Russian <br> SOC 1113 Introduction to Sociology <br> SPAN 1125 Spanish I <br> SPCH 1533 ActingI <br> TOTAL REQUIRED GENERAL EDUCATION HOURS <br> MAJOR FIELD REQUIREMENTS |
|  | $\square$ MUS 1213 Music Appreciation I <br> $\square$ MUS 1223 Music Appreciation II <br> $\square$ SPCH 1523 Introduction to Theatre <br> $\square$ PHIL 1113 Introduction to Philosophy <br> $\square$ SPAN 2103 Global Studies in Spanish <br> Mathematics <br> $\checkmark$ met by program | 29 hrs . | MAJOR FIELD REQUIREMENTS <br> $\square$ ENGR 1113 Introduction to Engineering <br> - MATH 2215 Calculus and Analytic Geometry I <br> - MATH 2424 Calculus and Analytic Geometry II <br> - MATH 2434 Calculus and Analytic Geometry III <br> - MATH 2533 Differential Equations <br> - PHYS 2114 General Physics I |
| 4 hrs . | Life Science <br> Select one of the following: BIOL 1114 General Biology BIOL 1214 Principles of Biology BIOL 1224 General Botany |  | - PHYS 2211 Calculus Based Physics I <br> $\square$ PHYS 2224 General Physics II <br> - PHYS 2231 Calculus Based Physics II |
|  | BIOL 1234 General Zoology <br> Physical Science <br> $\checkmark$ met by program | $5 \mathrm{hrs}$. | Select from the following: <br> - CHEM 1315 General Chemistry I <br> - CS 2013 Programming in C++ |
| 2 hrs . | Health, Physical Education and Recreation <br> $\square$ HPER 1012 Wellness and Human Development or Two HPER Activity Courses |  | - MATH 1513 Pre-Calculus for Eng-Phys-CS <br> - MATH 1613 Plane Trigonometry |
| 2 hrs . | Student Success <br> Required during first semester - STSC 1002 Learning Strategies | 34 hrs. 63 hrs. | TOTAL REQUIRED MAJOR FIELD HOURS MINIMUM TOTAL HOURS REQUIRED FOR ASSOCIATE DEGREE |
|  |  |  | revised 9/2018 |

