

ASSOCIATE OF SCIENCE DEGREE

Pre-Engineering

The Associate in Science (A.S.) Pre-Engineering degree is a cooperative program between Crowder College and the School of Engineering at the Missouri University of Science & Technology. In addition, similar cooperative programs have been developed with the University of Missouri - Columbia and the University of Arkansas. Although not specifically designed for transfer to other engineering schools, the A.S. program does incorporate the essential course work for the first two years of study in any engineering field at other universities. Some of the course requirements vary with the engineering departments cooperating in this program. Those requirements are marked with a (†). In such cases, students will need to consult with the adviser as to the appropriate class for a particular engineering major.

Crowder College and the School of Engineering at Missouri University of Science & Technology have instituted an advisement and counseling program for pre-engineering majors. Students enrolling at Crowder can be simultaneously enrolled at S&T's Transfer Assistance Program. This allows for a smoother transition between the two institutions. Students are also allowed to participate in special pre-registration programs on the S&T campus.

Crowder College offers two degree programs in pre-engineering. The A.S. Pre-Engineering degree is designed for those students who plan to enter into traditional engineering fields such as Mechanical, Electrical, Civil, etc. The A.S. Pre-Engineering Alternative Energy Option degree is designed for those students who wish to pursue a career in alternative energies. Grades below a "C" are not allowed.

Program of Study

Orientation	1 hour
COLL 101	
Communications †	6 hours
ENGL 101* (3) ENGL 102* (3) OR SPCH 101* (3)	ENGL 104* (3)
Humanities, Social and Behavioral Science †	12 hours
Missouri Constitution (3 hours)	Economics (3 hours):
PLSC 103*, 104* HIST 106*	ECON 201*, 202*
Humanities (3 hours)	Additional (3 hours) or another humanities
ART 101 ASL 101, 102* ENGL 109, 120, 125 HIST 101 MUSC 101 PHIL 101*, 110*, 121, 201*, 202* SPAN 101 SWK 219 TA 205	ECON 201*, 202* GEOG 101* HIST 101*, 102*, 106*, 107* PHIL 110*, 121 PLSC 103*, 104* PSYC 101 SOC 101
Mathematics	18 hours
MATH 150* MATH 160* MATH 201*	MATH 202* MATH 210*
Science	18 hours
PHYS 190* PHYS 210*	PHYS 250* CHEM 111
Computer Science	4 hours
COMP 111*	
Technical Electives	6 hours
CHEM 112* CHEM 201* Alternative Energy Courses	DRFT 101 DRFT 115

Suggested Plan of Study

FIRST YEAR

Fall Semester	Hours
CHEM 111 General Chemistry I	5
COLL 101 College Orientation	1
COMP 111 Introduction to Programming	4
ENGL 101 English Composition I	3
MATH 150 Calculus I, Part 1	2
Total	15

Spring Semester	Hours
ECON 201 – OR – ECON 202	3
MATH 160 Calculus I, Part 2	3
PHYS 190 General Physics I	5
Approved Communications Course	3
Approved Humanities Course	3
Total	17

SECOND YEAR

Fall Semester	Hours
HIST 106 US History – OR – PLSC 103	3
MATH 201 Calculus II	5
PHYS 210 General Physics II	5
Approved Soc & Behavioral Science Course	3
Total	16

Spring Semester	Hours
MATH 202 Calculus III	5
MATH 210 Differential Equations	3
PHYS 250 Statics	3
Approved Technical Electives	6
Total	17

TOTAL HOURS REQUIRED 65

*Prerequisite requirement

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.