

# PRE-ENGINEERING

## (AS.PENG) ASSOCIATE IN SCIENCE DEGREE

This degree is designed for students who do not plan to transfer to the University of Illinois. Students who are planning to transfer to the U of I should see the Engineering (AES.ENGR) degree program.

Upon completion of this course sequence, pre-engineering students will receive an associate in science degree. The association in science degree requires the completion of 64 credit hours. The sample course sequence below includes the required 64 credit hours plus additional courses recommended for this major.

This program follows Math Pathway #4. Math requirements for a specific major may vary from one institution to another. Please consult with an academic counselor or academic advisor to confirm the pathway that is applicable to your major and transfer institution.

### FIRST YEAR

<b>First Semester</b>		<b>Hours</b>
CHM-150	General Chemistry I *	4.0
MAT-241	Analytical Geom-Calc I *	5.0
ENG-120	Composition I *	3.0
ECO-231	Principles of Econ I (Macro)	3.0
TEC-103	Engineering Graphics	3.0
<b>SEMESTER TOTALS</b>		<b>18.0</b>

### Second Semester

CHM-151	General Chemistry II *	4.0
MAT-242	Analytical Geom-Calc II *	4.0
ENG-121	Composition II *	3.0
PHY-140	University Physics I * +++	4.0
	Social/Behavioral Science (IAI S) *	3.0
<b>SEMESTER TOTALS</b>		<b>18.0</b>

### SECOND YEAR

<b>First Semester</b>		<b>Hours</b>
PHY-141	University Physics II * +	4.0
SPE-111	Intro to Speech Communication	3.0
BIO-100	Bio Science I	4.0
MAT-151	C Program W/Engineering Appl * +	3.0
PHY-239	Mechanics I * +	3.0
<b>SEMESTER TOTALS</b>		<b>17.0</b>

### Second Semester

MAT-245	Differential Equations * +++	3.0
PHY-240	Mechanics II * +++	3.0
MAT-243	Analytical Geom-Calc III * +++	4.0
	Humanities and Fine Arts (IAI F)	3.0
	Humanities and Fine Arts (IAI H)	3.0
<b>SEMESTER TOTALS</b>		<b>16.0</b>

**TOTAL PROGRAM HOURS**

**69.00**

This is a sample list of major requirements. University requirements vary by institution. Consult a counselor or academic advisor before registering. Specific graduation requirements are identified through degree audit. Additional courses in reading, English and mathematics may be required based on placement scores.

- \* There are prerequisites, course requisites, or minimum placement test scores for this course.
- \*\* Electives must be approved by the Program Coordinator
- + Course only offered fall semester
- ++ Course only offered spring and summer semester
- +++ Course only offered spring semester
- ++++ Course offered in summer term only
- ^ SOS 050 Human Relations and PSY 271 Introduction to Psychology cannot be used as a social science elective
- ^^ Consult Academic Advisor for appropriate course
- ^^^ Course requires a 30-hour practicum experience in addition to classroom lecture hours
- ^^^^ ECE 120 and ECE 125 must be taken the same semester

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