## FIRST YEAR ENGINEERING MAJORS

# Chemical Engineering, Civil Engineering, Electrical Engineering, Industrial and Systems Engineering, Mechanical Engineering, Manufacturing Engineering

Students should expect to take four or six courses in their first semester. Typically, these will include an English Composition course, engineering courses, a math course and a first year experience course. Some students may be advised to take at least one general education course. Full time is considered 12 semester hours so you may not want to overload your schedule during your first semester.

Students' math placement will determine which math course they will take and also which required engineering courses they may take in their first semester. Students' math placement will determine which math course they will take and also which required engineering courses they may take in their first semester.

Students with a math placement level below 35 will be considered STEM Engineering majors. Students with a math placement level 35 and above will be considered STEM First-Year Engineering majors.

Note: Students who have earned college credit for any of the courses below will work with an advisor at Orientation to identify appropriate courses for the first semester.

Your academic advisor will make every effort to accommodate your schedule preferences; however, course availability will be limited in many cases, and may mean that have to take a course at a time that might not be what you would prefer. It is important to remember that your advisor has your long term goals in mind as you work toward pursuing your degree and career.

#### Math Placement = Level 10

#### **STEM Engineering**

First Semester Courses	Required Degree Area	Credits
English composition (based on placement )	General Education	3-4
ENGR 1500: Engineering Orientation	Major	1
Math 1505: Intermediate Algebra with Applications	Preparation for required math	5
***General Education course	General Education	3
General Education course	General Education	3
		15-16

#### Math Placement = Level 20

#### **STEM Engineering**

First Semester Courses	Required Degree Area	Credits
English composition (based on placement )	General Education	3-4
MATH 1507: Intermediate Algebra or MATH 1510/1510C:	Preparation for required math or	3 or 6
College Algebra with Co-requisite	preparation for required math	
	and General Education	
ENTC 1500: Technical Skill Development	Major	4
ENGR 1500: Engineering Orientation	Major	1
***General Education course	General Education	3

	14-18
	14-10

### Math Placement = Level 35

# **STEM First-Year Engineering**

First Semester Courses	Required Degree Area	Credits
English composition (based on placement )	General Education	3-4
MATH 1510: College Algebra	Preparation for required math and General Education	4
MATH 1511: Trigonometry	Preparation for required math and General Education	3
ENGR 1550: Engineering Concepts	Major	2
ENGR 1500: Engineering Orientation	Major	1
CHEM 1515: General Chemistry I with Lab or Chem 1501 Intro to Chemistry	Major and General Education	4-3
		16-18

# Math placement = Level 45

# **STEM First-Year Engineering**

First Semester Courses	Required Degree Area	Credits
English composition (based on placement )	General Education	3-4
MATH 1513: Algebra and Transcendental Functions	Preparation for required math	5
(Pre-Calculus)	and General Education	
CHEM 1515: General Chemistry I with Lab or Chem 1501	Major and General Education	4-3
Intro to Chemistry		
ENGR 1550: Engineering Concepts	Major	2
ENGR 1500: Engineering Orientation	Major	1
		14-16

### **Math Placement = Level 70**

### **STEM First-Year Engineering**

First Semester Courses	Required Degree Area	Credits
English composition (based on placement )	General Education	3-4
Math 1571: Calculus I	Major and General Education	4
CHEM 1515: General Chemistry I with Lab or Chem 1501	Major and General Education	4-3
Intro to Chemistry		
ENGR 1550: Engineering Concepts	Major	2
ENGR 1500: Engineering Orientation	Major	1
		13-15

<sup>\*</sup> RSS 1510 if required by placement