### SO YOU WANT TO BE AN ENGINEER?

### **HOW IT WORKS**

### Pre-Engineering (2+2)

- Spend two years at FHSU taking the science, math, and general education classes that are required for your engineering degree.
- Choose from a growing list of classes that are guaranteed to transfer within the state of Kansas.
- Transfer your credits earned at FHSU to an engineering school, and complete their program requirements.
- Earn an engineering degree from your engineering school.

### **Dual Degree (3+2)**

- Complete the Pre-Engineering program at FHSU, and stay for another year to take upper-level physics classes.
- Transfer the credits you earn at FHSU to an engineering school, and complete their program requirements.
- Earn an engineering degree from your engineering school,
- Transfer the engineering degree you earn back to FHSU, and recieve a physics degree from FHSU.

### **Physics Degree**

- Stay at FHSU and complete the physics degree in four years.
- With a B.S. in physics, you will be qualified to work in a variety of technical positions, including many with an engineering component.
- You will still have the option to go to graduate school to earn a masters or doctoral degree in engineering.

# PRE-ENGINEERING (2 + 2)

1		YEAR 1		YEAR 2	YEAR 3	YEAR 4
	FALL	<ul> <li>Intro. to Phys. and Eng.</li> <li>Calculus I</li> <li>Freshman Seminar</li> <li>(2) Gen. Ed Courses</li> </ul>	FALL	Physics for Scientists    Calculus     Statics (1) Gen. Ed Course		
	SPRING	<ul> <li>Engineering Physics I</li> <li>Calculus II</li> <li>(2) Gen. Ed. Courses</li> </ul>	SPRING	<ul> <li>Modern Physics</li> <li>Differential Equations</li> <li>University Chemistry I</li> <li>Electronic Circuits</li> <li>(1) Gen. Ed. Course</li> </ul>		

# DUAL-DEGREE (3 + 2)

	YEAR 1		YEAR 2		YEAR 3	YEAR 4	YEAR 5
FALL	Intro. to Phys. and Eng. Calculus I Freshman Seminar (2) Gen. Ed. Courses	FALL	Engineering Physics II     Calculus III     Statics     (1) Gen. Ed. Course	FALL	Analog & Digital Electronics  Math Physics  Electricity & Magnetism  (2) Gen. Ed. Courses		
SPRING	<ul> <li>Engineering Physics I</li> <li>Calculus II</li> <li>(2) Gen. Ed. Courses</li> </ul>	SPRING	<ul> <li>Modern Physics</li> <li>Differential Equations</li> <li>University Chemistry I</li> <li>Electronic Circuits</li> <li>(1) Gen. Ed. Course</li> </ul>	SPRING	Mechanics     Thermal Physics     Advanced Lab I     Projects I     Linear Algebra     Free Elective		

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	YEAR 1	1-1-	YEAR 2		YEAR 3		YEAR 4
FALL	<ul> <li>Intro. to Phys. and Eng.</li> <li>Calculus I</li> <li>Freshman Seminar</li> <li>(2) Gen. Ed. Courses</li> </ul>	FAIL	<ul> <li>Engineering Physics II</li> <li>Calculus III</li> <li>Statics</li> <li>(1) Gen. Ed. Course</li> </ul>	FALL	Analog & Digital Electronics  Math Physics  Electricity & Magnetism  (2) Gen. Ed. Courses	FALL	Advanced Lab II  (3) Gen. Ed. Courses  (2) Free Elective
SPRING	<ul> <li>Engineering Physics I</li> <li>Calculus II</li> <li>(2) Gen. Ed. Courses</li> </ul>	SPRING	<ul> <li>Modern Physics</li> <li>Differential Equations</li> <li>University Chemistry I</li> <li>Electronic Circuits</li> <li>(1) Gen. Ed. Course</li> </ul>	SPRING	Mechanics     Thermal Physics     Advanced Lab I     Projects I     Linear Algebra     Free Elective	SPRING	Optics Seminar I Free Elective (3) Gen. Ed. Courses

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