



Sample an Engineering Class for a Day!

Fall 2008 – August 25th to December 5th

Honors Freshman Engineering Courses

<u>Course</u>	<u>Time/Day(s)</u>	<u>Location</u>	<u>Instructor</u>
ENGR 0711 Honors Engineering Analysis and Computing	4:00pm to 5:50pm MW	GSCC 138	Dr. Dan Budny
PHYS0475 Honors Introduction to Physics Science & Engr	11:00am to 11:50am MWF	THAW 104	Dr. Alec Stewart
CHEM760 Honors General Chemistry for Engineers	Lecture 9:00am to 9:50am MWF	CHVRN 12B	Dr. Peter Siska
	Recitations 8:00am to 8:50am Th	CHVRN 306	Dr. Peter Siska
	9:00am to 9:50am Th	CHVRN 306	Dr. Peter Siska
	10:00am to 10:50am Th	CHVRN 306	Dr. Peter Siska

Freshman Engineering Courses

<u>Course</u>	<u>Time/Day(s)</u>	<u>Location</u>	<u>Instructor</u>
ENGR 0011 Intro to Engineering Analysis	10:00am to 11:50am TuTh	BENDM 621	Dr. Dan Budny
	10:00am to 11:50am TuTh	GSCC 138	Dr. Dan Budny
	2:00pm to 3:50pm TuTh	BENDM 621	TBA
	2:00pm to 3:50pm TuTh	GSCC 138	TBA
	4:00pm to 5:50pm TuTh	GSCC 138	Prof. Peter Miller
PHYS 0174 Basic Physics for Science & Engineers	2:00pm to 2:50pm MWF	ALUM 343	Dr. Koehler
	3:00pm to 3:50pm MWF	ALUM 343	Dr. Clark
CHEM0960 General Chemistry for Engineers	9:00am to 9:50am MW	GSCC 138	Dr. Kogut
	8:00am to 9:15am Th	CHVRN 012	Dr. Kogut
	10:00am to 10:50am MW	BENDM 621	Dr. Maleckar
	8:00am to 9:15am Th	CHVRN 012	Dr. Maleckar
	11:00am to 11:50am MW	GSCC 138	Dr. Kogut
ENGR0081 Freshman Engineering Seminar	8:00am to 9:15am Tu	CHVRN 012	Dr. Kogut
	1:00pm to 1:50pm TuTh	Public HealthG23	Jill Harvey

Upper-Level Engineering Courses (Specific to Major)

<u>Course</u>	<u>Time/Day(s)</u>	<u>Location</u>	<u>Instructor</u>
IE1040 Engineering Economic Analysis (<i>Industrial Engineer</i>)	6:00pm to 8:30pm M	BENDM 722	Dr. Bursic
IE 1054 Productivity Analysis (<i>Industrial Engineer</i>)	11:00am to 12:15am MW	BENDM 1022	Dr. Norman
CEE 1402 Fluid Mechanics (<i>Civil Engineer</i>)	1:00pm to 2:15pm MW	BENDM 720	Dr. Dan Budny
CEE 1503 Intro to Environmental Engr (<i>Civil Engineer</i>)	11:00am to 11:50am MWF	BENDM 921	Dr. Leonard Casson
CHE0100 Foundations of Chemical Engineering (<i>ChE Engr</i>)	8:00am to 9:50am MWF	BENDM 1221	Dr. McCarthy
ECE 0031 Linear Circuits & Systems (<i>Electrical/Comp Eng</i>)	3:00pm to 4:15pm MW	BENDM 426	Dr. Hoelzeman
ECE 0132 Digital Logic (Electrical & Computer Engineering)	2:30pm to 3:45pm TuTh	BENDM 426	Prof. Peter Miller
BIOE 1070 Introduction to Cell Biology (Bioengineering)	11:00am to 12:15pm MW	BENDM 525	Dr. Partha Roy
CHEM 0310 Organic Chemistry I (Bioengineering/PreMed)	1:00pm to 1:50pm MWF	CHVRN 12B	Dr. George Bandik
ME 1041 Mechanical Measurement 1 (Mech. Engr)	3:00pm to 3:50pm MW	BENDM 525	TBA
ME 1057 Micro/Nano Manufacturing (Mechanical Engr)	9:00am to 9:50am MWF	BENDM 820	TBA

ENGR0711 Honors Engineering Analysis- This is an accelerated course in computer fundamentals and engineering applications. It introduces students to basic topics in engineering, the role of the computer in engineering, ill-structured problem solving and report writing. Includes material on the use of UNIX, HTML, spreadsheets, MATLAB, and C++.

PHYS0475 Honors Introduction to Physics Science & Engr- This is the first of a two term honors version of the Physics sequence for engineers. This terms deals with mechanics, waves, and thermodynamics.

CHEM760 Honors General Chemistry for Engineers – Comprise of a two term introduction to the fundamental properties of matter. Emphasizes the fundamental principles of chemistry as exemplified by applications to industrial and environmental chemistry. This courses covers stoichiometry, electronic structure of atoms and molecules, periodic behavior, theories of bonding and spectroscopy.

ENGR 0011 Intro to Engineering Analysis-Introduces students to the basic topics of engineering, the role of the computer in engineering, ill-structured problem solving and report writing. Introduces fundamentals of what engineering is, what engineers do, why a diverse work force is needed and what values come with working in a group environment.

PHYS 0174 Basic Physics for Science & Engineers-Introduces students to the basic principles of mechanics. The theory of waves and the kinetic theory of gases will be discussed.

CHEM0960 General Chemistry for Engineers-Introduction to the fundamental properties of matter. The courses emphasize applications to industrial and environmental chemistry and biochemistry.

ENGR0081 Freshman Engineering Seminar-An in-depth orientation in the various areas of engineering and the related field of employment. Includes small group meetings with departmental representatives.

IE1040 Engineering Economic Analysis (Industrial Engineer)-Time value of money, interest rate calculations, economic equivalence concepts, cost of capital, comparison of alternate investments, evaluating economic life and replacement alternatives, inflation, depreciation, depletion, impact of taxes on engineering economic decisions.

IE 1054 Productivity Analysis (Industrial Engineer) –Introduction to industrial engineering concepts and thought processes including the manufacturing processes; design-product and process considerations.

CEE 1402 Fluid Mechanics (Civil Engineer) - A first course in fluid mechanics discussing basic principles and methods for studying static and dynamic behaviors of fluids.

CEE 1503 Intro to Environmental Engr (Civil Engineer)-Fundamentals of environmental science and engineering as applied to water and wastewater treatment, air quality control, and solid and hazardous waste management.

CHE0100 Foundations of Chemical Engineering (Chemical Engr)-Combines the elements of mass and energy balances, thermodynamics, separations, and product design in order to set the foundation for the chemical engineering curriculum.

ECE 0031 Linear Circuits & Systems (Electrical & Computer Eng)-Electric variables and circuit elements, mesh and node equations; first and second order circuits; time domain analysis.

ECE 0132 Digital Logic (Electrical & Computer Engineering)-Introduction to digital systems, Boolean algebra, minimization of logic functions, combinational and sequential circuit design.

BIOE 1070 Introduction to Cell Biology (Bioengineering)-This courses offers an introduction to cell biology, biochemistry, and genetics.

CHEM 0310 Organic Chemistry I (Bioengineering) – An introduction to theory and practice of organic chemistry through study of structural principles, reaction mechanisms, and synthesis leading to end of second term, when complex molecules of biological interest are discussed.

ME 1041 Mechanical Measurement 1 (Mech. Engr)-Fundamentals of mechanical measurement including steady state of measurement but stressing dynamic signal inputs, detector-transducer elements, signal conditioning, and readout systems. Standards, instrument calibration, data treatment, error analysis.

ME 1057 Micro/Nano Manufacturing (Mechanical Engr)- This course explores knowledge of the different micro/nano manufacturing options, familiarity with all material choices, and an understanding of a variety of applications.