UNIVERSITY OF PITTSBURGH AT BRADFORD

ENGINEERING SCIENCE (AS)

undergraduate program

Consistent with the overall mission of the University of Pittsburgh at Bradford, the Associate of Science degree in Engineering Science includes a liberal arts core curriculum.

Required Skills:

Mathematics
Problem Solving
Research
Communication
(Written & Oral)
Organization
Time Management
Leadership

Employment Opportunities:

Corporations
Industry
Design Firm
Government
Research Firm
Manufacturing Firm
College or University

Engineering is about creating new solutions to existing or future problems. Engineers are problem solvers who employ science, math, analysis and synthesis to design unique and practical solutions to everyday problems. They must accomplish this often under the constraints of time, budgets, and safety and health issues. Engineers also must be concerned about the environmental, political and social impact their answers will create.

Engineering Science majors at Pitt-Bradford complete a two-year program that involves courses in engineering, chemistry, calculus, physics and English composition. After completing the two years students have many options available to further their studies in engineering. An associate degree can also help students enhance and advance in an already existing career or job.

PROFESSIONAL ORGANIZATIONS:

The Institute of Electrical and Electronic Engineering	www.ieee.org
American Society of Civil Engineers	www.asce.org
American Society of Mechanical Engineers	www.asme.org
American Society of Chemical Engineers	www.aiche.org

FIND OUT MORE ABOUT CAREERS IN ENGINEERING AT:

Engineering Jobs, Jobs Source, Technical Jobs	www.engineerjobs.com
Try Engineering	www.tryengineer.org
Occupational Outlook Handbook	www.bls.gov/ocos027.htm
Career Services	www.upb.pitt.edu/career/aspx

University of Pittsburgh
Bradford

Engineering Science (AS) – Curriculum Guide

Student Name: **Advisor:**

GENERAL EDUCATION REQUIREMENTS

COMPETENCIES
(Minimum grade of C- required in all competencies)

Writing
☐ ENG 0101 English Composition I

Mathematics
☐ MATH 0132 Pre-Calculus

ARTS & LETTERS
(Choose ONE Literature, Creative, Fine or Performing Arts, or Language course)
☐

BEHAVIORAL, ECONOMIC, & POLITICAL SCIENCES
(*Choose ONE Behavioral, Economic or Political Science course)*
☐

HISTORY, CULTURES, & PHILOSOPHICAL INQUIRY
(Choose ONE History, Cultures or Philosophical Inquiry course)
☐

ADDITIONAL GE ELECTIVE
(choose ONE General Education Course)
☐

CORE RQUIREMENTS FOR ENGINEERING SCIENCE:
☐ CHEM 0101 General Chemistry I *(4)*
☐ CHEM 0102 General Chemistry II *(4)*
☐ ECE 0031 Linear Circuits I *(4)*
☐ ENGR 0015 Engineering Analysis I *(3)*
☐ ENGR 0016 Engineering Analysis II *(3)*
☐ ENGR 0131 Statics for Civil and Environmental Engineers *(3)* OR
ENGR 0135 Statics and Mechanics of Materials 1 *(3)*
☐ ENGR 0081/0082 Engineering Seminar *(0)*
☐ ENGR Elective
☐ ENGR Elective
☐ MATH 0140 Calculus 1*(4)*
☐ MATH 0150 Calculus 2 *(4)*
☐ MATH 0201 Calculus 3 *(4)* OR
MATH 0202 Ordinary Differential Equations *(3)*
☐ PHYS 0201 Foundations of Physics I *(4)*
☐ PHYS 0202 Foundations of Physics II *(4)*

According to your Degree Progress Report in MY.PITT.EDU upon successful completion of the current term:

You will have EARNED _____ credit hours

You NEED _____ for 60 credit hours required for graduation.

NOTE: This guide is unofficial. Completing the requirements on this sheet does NOT guarantee degree completion. Official degree completion information can be found in **MY.PITT.EDU**. Contact your Faculty Advisor and/or the Registrar's Office with questions or concerns.