COLLEGEWIDE COURSE OUTLINE OF RECORD

ENGT 120, ENGINEERING CONCEPTS IN TECHNOLOGY

COURSE TITLE: Engineering Concepts in Technology
COURSE NUMBER: ENGT 120
PREREQUISITES: None.
SCHOOL: Applied Science and Engineering Technology
PROGRAM: Engineering Technology
CREDIT HOURS: 3
CONTACT HOURS: Lecture: 3
DATE OF LAST REVISION: Fall, 2014
EFFECTIVE DATE OF THIS REVISION: Fall, 2015

CATALOG DESCRIPTION: This entry-level course will develop a student's perspective and enhance their skills in living and working in a technological society. The course explores the design process, problem solving, technical communication, ethics, the impact of technology, and technology grand challenges facing the global society.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1.   Implement the design process in context.
2.   Identify technology's impact on the global society.
3.   Illustrate the technologist's value and responsibility in the global society.
4.   Introduce the infrastructure of computer networks.
5.   Define various career pathways in engineering technology.
6.   Demonstrate understanding and application of basic organizational and management concepts.
7.   Form teams and work in collaboration to solve engineering technology problems using both face-to-face and virtual communication.
8.   Prepare a laboratory report using proper format and data presentation techniques.
9.   Understand how to set up a laboratory experiment, gather and analyze data, and present the results in a proper format.
10.   Utilize computer graphics software to analyze and explain engineering problems.
11.   Utilize spreadsheets for engineering calculations, data analysis, and data presentation.
12.   Perform dimensional analysis on engineering equations.

COURSE CONTENT: Topical areas of study include -

Engineering technology careers   Design process
Problem solving methodology   Computer Applications and usage
Working in Teams   Working with Virtual Teams
Computer networks   Organizational concepts

HOW TO ACCESS THE IVY TECH COMMUNITY COLLEGE LIBRARY:

The Ivy Tech Library is available to students on- and off-campus, offering full text journals and books and other resources essential for course assignments. Go to http://www.ivytech.edu/library/ and choose the link for your campus.

ACADEMIC HONESTY STATEMENT:

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

COPYRIGHT STATEMENT:

Students shall adhere to the laws governing the use of copyrighted materials. They must insure that their activities comply with fair use and in no way infringe on the copyright or other proprietary rights of others and that the materials used and developed at Ivy Tech Community College contain nothing unlawful, unethical, or libelous and do not constitute any violation of any right of privacy.

ADA STATEMENT:

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services.

If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.