COLLEGEWIDE COURSE OUTLINE OF RECORD

ENGR 140, ENGINEERING SOFTWARE TOOLS I

COURSE TITLE: Engineering Software Tools I
COURSE NUMBER: ENGR 140
PREREQUISITES: MATH 136 College Algebra and MATH 137 Trigonometry with Analytic Geometry.
SCHOOL: Applied Science and Engineering Technology
PROGRAM: Pre-Engineering
CREDIT HOURS: 3
CONTACT HOURS: Lecture: 2   Lab: 2
DATE OF LAST REVISION: Fall, 2014
EFFECTIVE DATE OF THIS REVISION: Fall, 2015

CATALOG DESCRIPTION: This course introduces the students to the engineering profession, and to computer programming. The programming techniques will be introduced which is applicable to all computer languages. The C++ programming language will be introduced. Examples and engineering applications will be used to illustrate programming concepts.

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

1.   Demonstrate the programming concept.
2.   Explain high level language programming structures.
3.   Explain pre-processor directives.
4.   Explain algorithm development.
5.   Describe the usefulness of objects in a programming context.
6.   Apply C++ program to solve simple engineering problems.
7.   Describe modularization C++ program solutions.

COURSE CONTENT: Topical areas of study include –

Functions
Variables
Arithmetic operations
Input/output
Loops
Function varieties

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http://www.ivytech.edu/library/ and choose the link for your campus.

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