



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Introduction to Computer-Assisted Problem Solving

CSE 1111

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Lab

Course Description:

Problem solving techniques using productivity software; spreadsheets, formulas, conditional logic; relational databases, relational algebra; word processing; data presentation; graphics.

Course Goals / Objectives:

- Be familiar with computer basics - hardware, software, OS, and communications
 - Be familiar with using spreadsheets to solve problems - including relative/absolute cell referencing, Boolean logic, reference functions, and financial functions
 - Be familiar with basic concepts of a relational database and use querying tools to obtain needed data
 - Be familiar with using and integrating word processing and presentation graphics tools
 - Be familiar with basic concepts about how the internet works
 - Be familiar with applying computational skills to problems involving algebra and geometry in practical situations (i.e., direct contribution to the learning goals and objectives in the GE quantitative and logical skills category)
-

Course Topics:

- Computer basics
 - Excel - writing formulas using simple functions and relative/absolute cell addressing
 - Excel - using Boolean logical functions - AND,OR, NOT, IF
 - Excel - Solving problems using multiple worksheets
 - Excel - using a LOOKUP function, using financial functions, charts.
 - Understanding relational database concepts; Access;
 - Powerpoint, object linking; Word, mail merge;
 - How the Internet works; simple webpages.
-

Designation:

Elective

General Education Course