THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Introduction to Computer-Assisted Problem Solving for Construction Systems Management

CSE 1112

Credit Hours:
3.00

Course Levels:
Undergraduate (1000-5000 level)

Course Components:
Lecture
Lab

Course Description:
Using productivity software, especially spreadsheets and databases, to solve problems for construction management; relative/absolute cell referencing, logic, functions; relational databases, querying, project integration.

Course Goals / Objectives:
- Be familiar with computer basics: hardware, software, OS, and communications, including how the internet works
- Be familiar with designing and testing spreadsheets to aid in estimating all aspects of construction costs by using spreadsheet features including relative/absolute cell referencing, boolean logic, reference functions, and financial functions
- Be familiar with basic concepts of a relational database, with setting up a basic relational database including input and output forms, with writing queries to obtain needed information, and with developing reports
- Be familiar with linking of spreadsheets, databases, word processing, and presentation software to automate the development of reports and presentations

Course Topics:
- Computer basics
- Excel - writing formulas using simple functions and relative/absolute cell addressing; boolean functions; LOOKUP function; financial functions; charts
- Access; database features of Excel
- Powerpoint; object linking; Word, including mail merge
- How the internet works and how to create a simple webpage

Designation:
Elective