CSC 4110
Software Engineering

Credit Hours: 4 Credit Hours (Lct: 3; Lab:1)

Course Coordinator: Prof. Vaclav Rajlich


Other Supplemental Materials: Microsoft Visual Studio 2013 Professional or Ultimate, Qt 5 (GUI Framework), CMake (Multi-Platform build system), StarUML (Drawing UML diagrams), Tortoise SVN (Version Control System)

Course Description: Software life cycle; software requirement analysis; software system design; software implementation and testing; software main-tenance; team programming; ethics and programmers.

Prerequisite: CSC 2200 and CSC 2201, each with grade of C or better
Co-requisite: CSC 4111.

Student Outcomes:
1. Describe the need for a professional approach to software development and evolution. b
2. Describe the software life cycle and give examples of software process models. b,c
3. Produce software code of acceptable quality. c,I,k
4. Distinguish between various forms of evolutionary software development, including agile development. C,I,k
5. Identify professional ethics in software development. E,g,h
6. Apply accepted software engineering techniques to system development and apply appropriate metrics. C,I,k

Brief list of topics to be covered:
   Software life cycle; history of software engineering; software technologies; software models; concept location; impact analysis; refactoring; verification; software processes; team programming; ethics and programmers