ICS 370 : Software Design Models

A. Course Description

Credits: 4

Prerequisites: ICS 141 Programming with Objects AND MATH 215 Discrete Mathematics

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

The course focuses on how to design and build process, object and event models that are translatable into project specifications and design. Topics include an overview of systems analysis and design; a framework for systems architecture; design and development using data modeling; object modeling, entities, relationships, attributes, scope rules and influences; and event models, messaging and application activation.


C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Use analysis techniques to discover and specify objects/classes.
2. Use design techniques to place methods in the appropriate classes.
3. Make use of the most popular design patterns.
4. Implement user interface code at appropriate times in Unified Process.
5. Use principles of the agile methodology by following the Unified Process.
6. Use the Unified Modeling Language to document his/her work.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Note: Students are responsible to both be aware of and abide by prerequisites for ICS courses for which they enroll, and will be administratively dropped from a course if they have not met prerequisites.