ICS 672 : Pattern-Oriented Software Construction

A. Course Description

Credits: 4

Lab Hours/ Weeks: 

Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

Object-oriented design using design patterns. Topics include: Study of creational, structural, and behavioral patterns; Applications of these patterns in the design and implementation of object-oriented systems; complete analysis, design, implementation, and refactoring of online and batch systems.

B. Course Effective Dates: 05/09/2005 - 12/16/2009 12/17/2009 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Use major design patterns in the design and implementation of object-oriented software.
2. Create flexible, modular, reusable, and understandable designs.
3. Identify opportunities for the use of major design patterns.
4. Make appropriate design choices.
5. Apply refactoring techniques to improve solutions.
6. Understand the major architectural patterns useful for the construction of distributed systems.
7. Demonstrate expertise in reading peer-reviewed papers in object-oriented design and explain them in writing.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Note: Graduate Standing. 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.