

Software Engineering at UK

Expand your skills and knowledge, meet other Lexington professionals and graduate students, and possibly pursue an MS or PhD. In January 2016, we will offer a course on **Software Design** (CS 618) on **Tuesday and Thursdays at lunchtime (1230 – 145 pm)**. The course will be taught by Dr. Jane Hayes of the University of Kentucky.

The course:

This course provides an overview of the software design field: software design overview, software design process, a survey of software design methods (such as structured design methods, object-oriented design methods, concurrent design methods), and design reviews. The course will address object-oriented programming, refactoring, and design patterns. The course will cover architectural as well as detailed design. Testing and validation techniques will be emphasized throughout the course. Program designs will be developed and validated throughout the course. Readings and summaries of current and seminal journal papers and texts will be required.

The book:

None required to be purchased, plan to use these books: Larman - Applying UML and Patterns, Evans - Domain Driven Design, Fowler - UML Distilled

A tentative list of course topics:

Design principles	User interface design
Domain modeling	Traceability
GRASP	Architectural tactics
State modeling	Refactoring
Design patterns	Concurrent OO design
Design metrics	Aspect oriented programming
Design evaluation	

The instructor:

Dr. Hayes has over 17 years of industry experience in software verification and validation, including evaluation of software requirements/designs. Her research interests include requirements engineering, verification and validation, and software maintenance. She is a co-founder and current elected Executive Director of the Center of Excellence for Software and Systems Traceability (COEST), an international organization of researchers and practitioners.

Registering to take a few graduate courses at UK is easy:.....as a Post-Baccalaureate Student. “Students who hold a baccalaureate degree from a fully accredited institution of higher learning and who wish to pursue graduate study without a degree objective may apply for admission as post-baccalaureate graduate students. An application for admission to the Graduate School as a post-baccalaureate graduate student should be filed in the Admissions Office at least two weeks in advance of the registration date for the term in which the student plans to enroll. A maximum of nine semester hours or twenty-five percent of the credits required for the degree concerned, whichever is greater, may later be transferred from post-baccalaureate status to a master's, specialist or doctoral degree program at The University of Kentucky. All applications must be submitted on-line. To access the form and instructions, visit this URL - http://www.research.uky.edu/gs/gspcedure_onlineapp.html [1]”

For more information:

Contact Dr. Jane Hayes (hayes@cs.uky.edu)

[1] University of Kentucky, Graduate school, <http://www.research.uky.edu/gs/bulletin/bull05Fall/GraduateAdmission.shtml>