PURDUE
U N I V E R S I T Y

Department of Computer Science

CS 590T Model Based Software Testing

Fall 2005   Credits 3   T Th 4:30-5:45pm   Room: REC 227

Instructor: Aditya Mathur (apm@purdue.edu)

http://www.cs.purdue.edu/homes/apm/courses/cs590T-fall05

Target majors: Graduate or senior level standing in Computer Science or Engineering

Prerequisites: Proficiency in programming

Objective

Introduce practical test generation techniques, and their applications, based on formal mathematical models.

Topics

Testing preliminaries; Test generation using FSM, Statechart, Logic, Cominatorial, Z, and other models; Empirical studies; Applications in Safety, Security, Aerospace, Automotive, Nuclear.
Please visit the course web site for details.

Notable Features

■ **Term projects**. *Students work in teams of 2 or 3. A team may select a focus area, research it. Alternately, a team may select a software project (implementation and/or experimentation).*

■ *Focus on **commercial applications** of model based software testing via presentations by representatives from the industry.*

Graduate student or Senior in

Computer Science or Engineering?

Consider enrolling in this course!

Gain

▪ ***In depth knowledge*** *of the state of the art and state of the practice testing techniques and tools.*

▪ ***Preparation for research*** *and **the knowledge to impress** interviewers from the high tech industry.*