



ENPM 676 VLSI Testing and Design for Testability

Instructor

Name: Manoj Franklin

E-mail: manoj@umd.edu

Office Hours: After class or by appointment

Textbook

1. M. Bushnell and V. Agrawal, Essentials of Electronic Testing for Digital, Memory and Mixed-Signal VLSI Circuits

Tentative Course Content

Ch	Dates	Topic(s)	Remarks
Ch 1, 2	31 May	Introduction, VLSI Testing Process and Test Equipment	
Ch 3, 4	07 Jun	Test Economics and Product Quality; Fault Modeling	
Ch 5.	14 Jun	Logic and Fault Simulation	
Ch 6	21 Jun	Testability Measures	
Ch 7	28 Jun	Combinational Circuit Test Generation	

Ch 8	05 Jul	Sequential Circuit Test generation	
Ch 9			
	TBA	Midterm Exam	Up to & incl. Chapter 7
Ch 12			
Ch 13			
	TBA	Endterm Exam	

Grading

Weightage

Item	Weightage
Term Paper	30%
Midterm Exam	35%
Endterm Exam	35%
Total	100%

Lectures

Lectures will be recorded. However, students are strongly encouraged to attend the lectures in order to have a fruitful discussion.

Exam Policies

Exams will be conducted during the lecture time.

If you have to miss an exam, you must contact me (e-mail is preferred) and present documentation to be eligible to schedule a make-up exam.

Academic Integrity and Student Conduct

It is not an exaggeration to say that there is no greater sin in science than that of fraud, whether it be faking data, or stealing credit for someone else's results or ideas. In this course this principle is encapsulated by the University's Code of Academic Integrity. All members of the University share this responsibility, but the Code of Academic Integrity is designed so that special responsibility for upholding the principle of academic honesty lies with you.

Honor pledge: The University has a nationally recognized Honor Code, administered by the Student Honor Council. The Student Honor Council proposed and the University Senate approved an Honor Pledge. The University of Maryland Honor Pledge reads: "I pledge on my honor that I have not given or received any unauthorized assistance on this examination."

The Pledge statement should be handwritten and signed on the front cover of all exams submitted in this course.

Students with disabilities:

If you have a documented disability and need accommodations to fully participate in this class, please contact me as soon as possible to discuss your needs. All accommodations **MUST** be approved through Accessibility and Disability Service in the Counseling Center: (301) 314-7682.

Know your rights and responsibilities:

The University expects each student to take full responsibility for their academic work and academic progress. While course-specific requirements, responsibilities, and rights are outlined in this syllabus, the University's policies and expectations may be found at the following page:

<http://www.ugst.umd.edu/courserelatedpolicies.html>
(<http://www.ugst.umd.edu/courserelatedpolicies.html>)