

EECS 579: Digital Systems Testing (Instr: Prof. Mazumder), Fall 2002

Text Book: *Essentials of Electronic Testing* by Bushnell and Agrawal, Kluwer Academic Publisher (2000)

Date	Book Chapters	References	Topic	HW/Exam
3-Sep-02	Ch 1: 1.1-1.5		Introduction to Testing	
5-Sep-02	Ch 2: 2.1-2.4		Testing Process and Test Equipment	
10-Sep-02	Ch 3: 3.1-3.4		Test Economics and Test Quality	
12-Sep-02	Ch 4: 4.1-4.5	Ref 1: pp. 96-117	Fault Modeling	
17-Sep-02	Ch 4: 4.1-4.5	Ref 1: pp. 96-117	Fault Modeling	
19-Sep-02	Ch 7: 7.1-7.4	Ref 1: pp. 117-128	Testing of Gates	
24-Sep-02	Ch 7: 7.1-7.4	Ref 1: 117-121	Testing of Simple Gated Networks	HW 1 (Due)
26-Sep-02	Ch 7: 7.4-7.8	Ref 1: 181-281	Combinational Circuit Testing	
1-Oct-02	Ch 7: 7.4-7.8	Ref 1: 181-281	Combinational Circuit Testing	Proposal
3-Oct-02	Ch 7: 7.4-7.8	Ref 1: 181-281	Combinational Circuit Testing	HW 2 (Due)
8-Oct-02	Ch 7: 7.4-7.8	Ref 1: 181-281	Combinational Circuit Testing	
10-Oct-02	Ch 7: 7.4-7.8	Ref 1: 181-281	Combinational Circuit Testing	Midterm 1
15-Oct-02	Ch 5: 5.1-5.7	Ref 1: 131-174	Fault Simulation	
17-Oct-02	Ch 5: 5.1-5.7	Ref 1: 131-174	Fault Simulation	HW 3 (Due)
22-Oct-02	Ch 6: 6.1-6.3		Testability Measures	Progress-1
24-Oct-02	Ch 8: 8.1-8.3		Sequential Circuit Test Generation	
29-Oct-02	Ch 13: 13.1-13.7		IDDDQ Test	
31-Oct-02	Ch 10: 10.1-10.5		Analog and Mixed Signal Test	HW 4 (Due)
5-Nov-02	Ch 10: 10.1-10.5		Analog and Mixed Signal Test	
7-Nov-02	Ch 11: 11.1-11.6		Analog and Mixed Signal Test	Progress-2
12-Nov-02	Ch 9: 9.1-9.5	Ref 2: 45-70	Memory Test	
13-Nov-02	Ch 9: 9.1-9.5	Ref 2: 76-150	Memory Test	HW 5 (Due)
19-Nov-02	Ch 9: 9.1-9.5	Ref 2: 76-150	Memory Test	
21-Nov-02	Ch 14: 14.1-14.5	Ref 3: Chap 3	Design for Test	Midterm 2

26-Nov-02	Ch 14: 14.1-14.5	pp. 465-485	Ref 3: Chap 4	Design for Test	HW 6 (Due)
28-Nov-02	Thanks Giving			No Class	
2-Dec-02	Ch 14: 14.1-14.5	pp. 465-485	Ref 3: Chap 4	Design for Test	Progress-3
4-Dec-02	Ch 15: 15.1-15.5	pp. 489-540	Ref 3: Chap 5	Built-in Self-Test	
9-Dec-02	Ch 15: 15.1-15.5	pp. 489-540	Ref 2: 221-322	Built-in Self-Test	
11-Dec-02	Ch 16: 16.1-16.2	pp. 549-569		Boundary Scan standard	Final Project
13-Dec-02	Ch 18: 18.1-17.2	pp. 595-608		SOC Testing	
22-Dec-02					Final Exam

Ref 1: Digital Testing by Abaramovici, Breuer and Friedman

Ref 2: Testing and Testable Design of RAMs by Mazumder and Chakraborty

Ref 3: Built-in Self-Testing by Bardell, McAnney and Savir