

ECE 587 – HARDWARE/SOFTWARE CO-DESIGN Fall 2006

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Prerequisite:	Fundamentals of logic design and computer architecture. Microprocessor, microcontroller and ASIC design. Familiarity with VHDL or Verilog hardware description languages.
Class Time:	Monday: 6:25-9:05 PM
Class Location:	E1 - 104
Office Hrs:	Wednesday and Thursday: 2:00-3:00 PM SH 301 You can also email me to make an appointment for any other time.
Class Home Page:	http://www.ece.iit.edu/~eoruklu/courses/ece587
Required Textbook:	"Specification and Design of Embedded Systems" Daniel D. Gajski, Frank Vahid, Sanjiv Narayan, Jie Gong, Prentice Hall, 1994. ISBN: 0131507311 "Embedded System Design - A Unified Hardware/Software Introduction", Frank Vahid and Tony Givargis John Wiley & Sons, Inc., 2002 ISBN: 0471386782
References:	"Hardware/Software Co-Design - Principles and Practice" J. Staunstrup and W. Wolf, Kluwer Academic Publishers, 1997 ISBN: 0792380134
Course Objective:	This course will cover the fundamental topics in HW/SW codesign and partitioning concepts in designing embedded systems. The emphasis will be on goals and methodology for partitioning hardware/software in embedded systems.

Topics Covered: Introduction to embedded systems, models and architectures for system specification, specification languages, system behavior capture and implementation, algorithms and techniques for system partitioning & estimation and modeling methodologies.

Grading:

Homeworks	15%
Midterm Exam:	30%
Final Exam:	35%
Class Project(s):	20%

Homework Policy: Homework is due at the start of class. Late homework will not be accepted. Working together on homework is encouraged, but *copying assignments will call for **disciplinary action**.*

Exam Policy: Makeup exams will not be given, except for extraordinary reasons. The final is comprehensive.