CS 4/55111 Principles of Customized VLSI Design
CS 6/76995 Special Topics: System Design

Spring 1997, MWF 1:10-200pm

Instructor: Prof. R. Walker

This course will combine a broad overview of VLSI chip design with hands-on experience designing FPLD-based chips. The course will present a broad overview of various chip design technologies, including the design of Application-Specific Integrated Circuits (ASICs). However, the course will concentrate on design using Field-Programmable Logic Devices (FPLDs) -- programmable devices consisting of thousands of gates. Students will use several commercial computer-aided design (CAD) tools to specify and simulate designs, and implement them using FPLD chips.

The prerequisite for this course is CS 45101 Computer Organization and Architecture. A hardware design course such as PHYS 12411 Introduction to Computer Hardware would be helpful, but is not necessary.

Students taking the course as CS 6/76995 will be required to do an extra project.

Textbooks:

"Workview Office Student Edition" R. James Duckworth Prentice Hall, 1997 ISBN 0-13-490327-7 softcover	(OK to share with others)
"Digital Systems Design and Prototyping Using Field Programmable Logic" Zoran Salcic and Asim Smailagic Kluwer Academic Publishers, 1997 ISBN 0-7923-9935-8 hardcover	(Might want your own copy)