97-2 Preliminary Syllabus, Da-Yeh Univ

Information				
Title	FPGA晶片設計與應用實務	Serial No. / ID	1935 / EDR5074	
Dept.	電機工程學系博士班	School System / Class	研究所博士班1年1班	
Lecturer	黃登淵	Full or Part-time	專任	
Required / Credit	Optinal / 3	Graduate Class	NO	
Time / Place	(—)567 / H371	Language	Chinese	

Introduction

This course emphasizes on both theory and practice of FPGA IC design in equality, and it also provides any needed concepts of VHDL on FPGA chip design. Additionally, EDA software like Xilinx ISE and related FPGA modules will be introduced to students. Hence, after finishing the lessons, I believe the students to take this course will be capable of being skillful in IC design.

Outline

Introduction to VHDL Design Methodology Basics of Combinatorial Logic Design Gate Level Functional Simulation Chip Level Functional Verification Basics of Sequential Logic Design I:

Registers, Counters, Timers

Basics of Sequential Logic Design II:

Process, System design, State Machine Logic

Project Demonstration: Electronic clock, Security lock

Prerequisite	
Digital logic design	
Electronics	