

## 0971學期 課程基本資料

系所 / 年級 資工系 2年級 課號 / 班別 64U00084 / A

學分數 3學分 選 / 必修 必修

科目中文名稱 數位系統邏輯設計 科目英文名稱 Digital system logic design

主要授課老師 關國裕 開課期間 一學期

人數上限 60 人 已選人數 60人

## 起始週 / 結束週 / 上課地點 / 上課時間

第1週 / 第18週 / I527 / 星期3第02節  
第1週 / 第18週 / I527 / 星期3第03節  
第1週 / 第18週 / I527 / 星期3第04節

請各位同學遵守智慧財產權觀念；請勿非法影印。

## 教學綱要

一、教學目標(**Objective**) This course is aimed at introducing the fundamental concepts and the basic tools used in the logic design of digital systems.

二、先修科目(**Pre Course**)

三、教材內容(**Outline**)

四、教學方式(**Teaching Method**) 講授、研討、媒體運用、專題實作

五、參考書目(**Reference**) Logic and Computer Design Fundamentals, 3rd EditionM. Morris Mano & Charles R. KimePearson Prentice Hall(Ch1~7) Digital Design, 3rd EditionM. Morris ManoPrentice Hall.(Ch1~7)

2008/9/18	Digital Computers and Information -Digital Computers -Number Systems -Arithmetic Operations -Decimal, Gray, and Alphanumeric Codes	關國裕
2008/9/25	Digital Computers and Information -Digital Computers -Number Systems -Arithmetic Operations -Decimal, Gray, and Alphanumeric Codes	關國裕
2008/10/2	Digital Computers and Information -Digital Computers -Number Systems -Arithmetic Operations -Decimal, Gray, and Alphanumeric Codes	關國裕

六、教學進度 <b>(Syllabi)</b>	2008/10/9	Digital Computers and Information -Digital Computers -Number Systems -Arithmetic Operations -Decimal, Gray, and Alphanumeric Codes	關國裕
	2008/10/16	Boolean Algebra and Logic Gates -Binary Logic and Gates - Boolean Algebra	關國裕
	2008/10/23	Boolean Algebra and Logic Gates -Binary Logic and Gates - Boolean Algebra	關國裕
	2008/10/30	Gate-Level Minimization -Two-Level Circuit Optimization - Multiple-Level Circuit Optimization	關國裕
	2008/11/6	Gate-Level Minimization -Two-Level Circuit Optimization - Multiple-Level Circuit Optimization	關國裕
	2008/11/13	Team Project or Mid-term Exam	關國裕
	2008/11/20	Combinational Logic -Combinational Logic Design Flow - Combinational Functions and Circuits	關國裕
	2008/11/27	Combinational Logic -Combinational Logic Design Flow - Combinational Functions and Circuits	關國裕
	2008/12/4	Combinational Logic -Combinational Logic Design Flow - Combinational Functions and Circuits	關國裕
	2008/12/11	Combinational Logic -Combinational Logic Design Flow - Combinational Functions and Circuits	關國裕
	2008/12/18	Synchronous Sequential Logic -Latches and Flip-Flops - Synchronous Sequential Circuit Analysis and Design Flow - Registers and Counters	關國裕
	2008/12/25	Synchronous Sequential Logic -Latches and Flip-Flops - Registers and Counters	關國裕
	2009/1/1	Synchronous Sequential Logic -Latches and Flip-Flops - Synchronous Sequential Circuit Analysis and Design Flow - Registers and Counters	關國裕
	2009/1/8	Synchronous Sequential Logic -Latches and Flip-Flops - Synchronous Sequential Circuit Analysis and Design Flow - Registers and Counters	關國裕
	2009/1/15	Team Project or Final Exam	關國裕

七、評量方式  
**(Evaluation)** Participation: 10% Team Project: 30% Mid-term Exam: 30% Final Exam: 30%

八、講義位址  
**(http://)**

九、教育目標