

112(2)電機系博士班資格考公告 (112-02 Academic Ph.D. Qualifying Exam.)

說明：

1.申請時間：113.02.19-113.03.07，填妥申請表，交至系辦(70512R)。

Period of Application: 2024.02.19-2024.03.07

Fill the application form and submit it to department office (70512R).

2.考試時間：113.04.12(星期五)上午 8:40 起。

Exam. Time : 2024.04.12(Friday) starting from 8:40 a.m.

3.各組考試科目及參考書目(請參見附件)

Exam. Subjects and Bibliography: Please find the attachment.

4.各科詳細考試時間及地點將另行通知。

Exam. Time and Location of Each Subject: Further notice.

5.欲以修課抵免資格考試者，請填妥申請表並檢附**相關成績單**，於**113.03.07 前**將申請資料送交系辦。

Those who apply for waiving the Qualifying Exams will fill the application form attached with the transcripts and submit it to the department office.(before 2024.03.07)

6.本案承辦人：傅金暖(分機 7101)

Staff-in-charge: Ms. Fu (extension 7101)

組別	選考科目	參考書目	參考範圍	修課抵免對應課程科目
電子組	VLSI 信號處理	K. K. Parhi, VLSI Digital Signal Processing Systems, John Wiley & Sons, 1999.	Ch 1~Ch 7 <ul style="list-style-type: none"> ● Introduction to Signal Processing Systems. ● Iteration Bound ● Pipelining and Parallel Processing ● Retiming ● Unfolding ● Folding ● Systolic Architecture Design 	VLSI 信號處理 VLSI Signal Processing (EEA531)
	超大型積體電路系統設計	Neil Weste, David Harris, "CMOS VLSI Design: A Circuits and Systems Perspective ", Addison Wesley Pub., 2010-03-10 4th Edition. (ISBN:0321547748)	Ch1~Ch8, Ch15 <ul style="list-style-type: none"> ● Devices ● Speed ● Power ● Wires ● Scaling, Reliability and Variability ● SPICE ● Gates ● Fabrication 	高等 VLSI 系統設計 The Advanced VLSI System Design (EEA608)
	數位 IC 設計	Neil Weste, David Harris, "CMOS VLSI Design: A Circuits and Systems Perspective ", Addison Wesley Pub., 2010-03-10 4th Edition. (ISBN:0321547748)	Ch9~Ch14 <ul style="list-style-type: none"> ● Sequencing ● Datapath ● Memories ● Packaging, Power, Clock, I/O ● Methodology ● Test 	數位 VLSI 設計 Digital VLSI Design (EEA588)
	類比積體電路設計	Behzad Razavi, "Design of Analog CMOS Integrated Circuits," McGraw-Hill, 2001, ISBN:0-07-238032-2	All	類比積體電路設計 Analog IC Design (EEA580)
數位科技組	計算機結構	John P. Hayes, "Computer Architecture and Organization ", McGraw-Hill, 1988	All	計算機結構 Computer Architecture (EEA508)
	影像處理	Rafael C. Gonzalez and Richard E. Woods, Digital Image Processing,(3 rd Edition) Prentice Hall, 2007	All	影像處理 Image Processing (EEA507)
	電腦網路	"Data & Computer Communications" 6th. ed., Willian Stallings and Prentice Hall	Data Communication Local Area Networks Wireless Networks Communications Architecture and Protocols	家庭網路傳輸標準 Transmission Standards of Digital Home Network (EEA647)
	樣形識別	Pattern classification, Duda 2000	All	樣形識別 Pattern Recognition (EEA610)
控制組	線性系統理論	Frank M. Callier, Charles A. Desoer, "Linear System Theory", Springer 1991	All	線性系統理論 Linear System Theory (EEA505)

組別	選考科目	參考書目	參考範圍	修課抵免對應課程科目
	可變結構控制	Sliding modes in control and optimization, Vadim I. Utkin, Springer-Verlag	All	可變結構控制 Variable Structure Control (EEA537)
	非線性控制	“Applied Nonlinear Control “prentice-Hall ,1991, J.J.E. Slotine and W. Li	All	非線性控制 Nonlinear Control Systems (EEA536)
	強健控制	“Robust Process Control “prentice-Hall ,1989 M. Morariad E. Zafirid	All	強健控制 Robust Control (EEA538)
	模糊控制	(1) 認識 Fuzzy, 第三版, 全華圖書,王文俊	All	模糊控制 Fuzzy Control (EEA532)
		(2) “Neural Fuzzy Systems : Part I : Fuzzy Systems ” prentice-Hall ,1996, C.T. Lin and C.S. G.Lee	Ch1~7	
	類神經網路	“Neural Fuzzy Systems : Part II : Neural Network” prentice-Hall ,1996, C.T. Lin and C.S. G.Lee	Ch9~13 and Ch15~16	類神經網路 Neural Network (EEA600)
	隨機過程	Athanasios Papoulis , Probability , Random Variables, and Stochastic Processes , McGraw-Hill , New York, 1991	All	隨機程序 Random Processes for Engineers (EEA509)
	進階電力系統	“Power System Analysis”, 3 rd Edition, 2010, McGraw Hill, Hadi Saadat.	All	進階電力系統 Advanced Power Systems (EEA661)

電機工程學系甲組_____學年度_____學期以修課科目抵免博士班資格考試科目申請表
(Application Form for Qualifying Exams Offset by Coursework)

Academic Year: _____

申請人學號 (Student ID)			
申請人姓名 (Student Name)			
申請人連絡電話 (Mobile Number)			
申請以修課抵免之 資格考科目名稱 (Qualifying exams offset by coursework)	1. _____ 2. _____		
修課課程名稱 (Course Name)	1. _____	抵免 方式 (options for course offset)	<input type="checkbox"/> 成績達 80 分以上 (course result above 80) <input type="checkbox"/> 該班修課成績達前 30% 以上 (course grade ranking in top 30%)
	2. _____		<input type="checkbox"/> 成績達 80 分以上 (course result above 80) <input type="checkbox"/> 該班修課成績達前 30% 以上 (course grade ranking in top 30%)
申請人簽名 (Student Signature)		日期 (d/m/y)	
指導教授簽名 (Advisor Signature)		日期 (d/m/y)	
所長簽名 (Chairman Signature)		日期 (d/m/y)	

**** 上述申請資料須包含成績單正本(若以該班修課成績達前 30% 以上方式，成績單上標示清楚<每學期末教務處會寄發成績單給同學，該成績單會註明修課課程每科所佔該班比例>)****

**** Attach your original transcripts (that appear your result or course grade ranking in the class)****

電機工程學系甲組 博士班資格考試申請表

填表日： 年 月 日

申請人姓名		學號	
聯絡電話			
考試時間	學年度第 學期		
考試組別			
考試科目	(若考二科請寫在同一張)		
指導教授簽名			

單位主管：

經辦人：