115(1)電機系博士班資格考公告 (115-01Academic Ph.D. Qualifying Exam.)

說明：

1.申請時間：115.09.07-115.09.18，填妥申請表，交至系辦(70512R)。

Period of Application: 2026. 09.07-2026.09.18

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

2.考試時間：**115.10.16(星期五)上午 8:40 起**。

Exam. Time : 2026.10.16(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.欲以修課或期刊發表或發明專利申請抵免資格考試者，請填妥相關申請表並檢附相關成績單，於115.09.18 前將申請資料送交系辦。

Students who wish to waive the qualification examination by means of coursework, journal publications, or patent applications must complete the relevant application form and **attach the necessary transcripts**. The application materials should be submitted to the department office by September 18, 2026.(before 2026.09.18)

6.本案承辦人：傅金暖(分機 7101)

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

115(1)博士班資格考科目

115.07.01 114 學年度第 27 次組務會議通過

組別 group	選考科目 Elective Subjects	參考書目 Reference Books	參考範圍 Reference Scope	修課抵免對應課程科目 Courses Corresponding to Course Exemption
電子組 Electronics Group	VLSI 信號處理	K. K. Parhi, VLSI Digital Signal Processing Systems, John Wiley & Sons, 1999.	Ch 1~Ch 7 ● 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 ● 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 ● 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 Digital Technology Group	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,(3rd 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)

組別 group	選考科目 Elective Subjects	參考書目 Reference Books	參考範圍 Reference Scope	修課抵免對應課程科目 Courses Corresponding to Course Exemption
控制組 Control Group	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)
	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”, 3rd Edition, 2010, McGraw Hill, Hadi Saadat.	All	進階電力系統 Advanced Power Systems (EEA661)
	資料科學	Data Driven Approaches on Medical Imaging	All	資料科學 Data Science (EEA677)
	深度學習	Deep learning	All	深度學習 (Deep Learning) EEA680
	多媒體深度學習	Deep Learning	All	多媒體深度學習 (Deep Learning for Multimedia) EEA696
	計算機視覺	無	All	計算機視覺 (Computer Vision) EEA625
	樣形識別	講義 https://geniusturtle6174.github.io/music-info-analysis-tutorial/	All	樣形識別 (Pattern Recognition) EEA610
	深度學習與視覺應用	Deep learning	All	強化學習 (Reinforcement Learning) EEA699
	影像處理演算法開發及應用	老師課堂宣布	All	影像處理演算法開發及應用 (Algorithms of Image Processing : Development and Applications) EEA656

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: _____

<table>
<tr><td>申請人學號
(Student ID)</td><td colspan="3"></td></tr>
<tr><td>申請人姓名
(Student Name)</td><td colspan="3"></td></tr>
<tr><td>申請人連絡電話
(Mobile Number)</td><td colspan="3"></td></tr>
<tr><td>申請以修課抵免之
<u>資格考科目名稱</u>
(<u>Qualifying exams</u>
offset by coursework)</td><td colspan="3">1._____

2._____</td></tr>
<tr><td rowspan="2">修課課程名稱
(Course Name)</td><td>1._____</td><td rowspan="2">抵免方式
(options for course offset)</td><td>□成績達 80 分以上
(course result above 80)
□該班修課成績達前 30%以上
(course grade ranking in top 30%)</td></tr>
<tr><td>2._____</td><td>□成績達 80 分以上
(course result above 80)
□該班修課成績達前 30%以上
(course grade ranking in top 30%)</td></tr>
<tr><td>申請人簽名
(Student Signature)</td><td></td><td>日期
(d/m/y)</td><td></td></tr>
<tr><td>指導教授簽名
(Advisor Signature)</td><td></td><td>日期
(d/m/y)</td><td></td></tr>
<tr><td>所長簽名
(Chairman Signature)</td><td></td><td>日期
(d/m/y)</td><td></td></tr>
</table>

****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

(Application Form for Ph.D. Qualification Examination Department of Electrical Engineering, Group A)

填表日(Date of Application)：＿＿＿年(year)　月(month)＿＿＿日(day)

申請人姓名 Applicant's Name		學號 (Student's ID)	
聯絡電話 Contact Number			
考試時間 Examination Time	學年度第　　學期		
考試組別 Examination Group			
考試科目 Examination Subjects	(若考二科請寫在同一張) (If taking two subjects, please list them on the same form)		
指導教授簽名 Advisor's Signature			

單位主管(Department Chairperson)：　＿＿＿＿＿＿＿＿＿＿

經辦人(Responsible Officer)：＿＿＿＿＿＿＿＿

元智大學電機系甲組博士班以發明專利抵免資格考申請表

Application Form for Qualifying Examination Exemption via Invention Patent- Yuan Ze University Department of Electrical Engineering Program A Ph.D.

申請學生姓名(Name)：_____　　學號(Student's ID)：_____　　申請日期(Apply yy/mm/dd)：_____

★發明專利(Invention Patent)

114.03.04　113 學年度第 11 次組務會議通過

時間(請以發明證書之年月日為主) Date (Please refer to the year, month, and day stated on the invention certificate)	發明專利名稱 Invention Patent Title	發明專利證號 Invention Patent Certificate Number	發明人姓名(請依證書所列排名，指導教授姓名右上角標示*、共同指導教授姓名右上角標示**) Inventor's Name (Listed in the order shown on the certificate, with the advisor's name marked with * at the top right corner, and the co-advisor's name marked with ** at the top right corner)	發明專利取得國家 Country of Patent Acquisition	抵免資格考科目數 The number of subjects eligible for credit exemption
本人於此申請表中填寫之各項資料均確實無誤，若有造假，本人自願無條件放棄口試資格(I hereby declare that all the information provided in this application form is true and accurate. If any falsification is found, I voluntarily and unconditionally waive my right to an interview.) 申請人簽名(Applicant's Signature)			指導教授簽名(Advisor's Signature)		
研究生事務委員會議召集人簽名 (Signature of the Convener of the Graduate Affairs Committee)			單位主管簽名(Department Head's Signature)		
通過會議名稱(含時間) Name of the Approved Meeting (including time)					

附註(Remarks)：

1.該送審專利若非以元智大學名義申請，請提供專利產出計畫合約影本或於適當說明。(If the submitted patent is not applied under the name of Yuan Ze University, please provide a copy of the patent production project contract or an appropriate explanation.)

2.除指導教授(*)、共同指導教授(**)以規定符號標示外，非上述二種身份之教授，請於姓名後以括弧填寫校內或校外教授。(Except for the advisor (*) and co-advisor (**), who should be marked with the designated symbols, professors who do not fall into these two categories should have '(Internal Professor)' or '(External Professor)' indicated in parentheses after their names."

3.需檢附專利證書影本。(A copy of the patent certificate must be provided.)

4.同一技術項目之多國專利，僅認列計算一次。(Multiple patents for the same technological item in different countries are counted only once.)

元智大學電機系甲組博士班以論文期刊抵免資格考申請表

Application Form for Qualifying Examination Exemption via Journal Papers- Yuan Ze University Department of Electrical Engineering Program A Ph.D.

申請學生姓名(Name)：_____ 學號(Student's ID)：_____ 申請日期(Apply yy/mm/dd)：_____

114.03.04 113 學年度第 11 次組務會議修訂通過

論文題目 (Thesis Title)	期刊名稱 (Journal Name)	論文等級(請註明 A 類或長篇) Paper Level (Please specify Category A or Full-Length)	該篇作者(請依發表順序，並於指導教授姓名右上角標示*、共同指導教授姓名右上角標示** (Authors (Please list in the order of publication, marking * above the name of the advisor and ** above the name of the co-advisor)	排名/作者人數(排名不含校內外教授) Ranking/Number of Authors (Excluding Internal and External Professors)	發表年月 (Date of Publication)	篇數 (Number of Papers)	抵免資格考科目數 The number of subjects eligible for credit exemption
		☐ A 類(A) ☐ 長篇(Full-Length Paper) ☐ 短篇(Short Paper)					
		☐ A 類(A) ☐ 長篇(Full-Length Paper) ☐ 短篇(Short Paper)					
本人於此申請表中填寫之各項資料均確實無誤，若有造假，本人自願無條件放棄口試資格(I hereby declare that all the information provided in this application form is true and accurate. If any falsification is found, I voluntarily and unconditionally waive my right to an interview.) 申請人簽名(Applicant's Signature)				指導教授簽名(Advisor's Signature)			
研究生事務委員會議召集人簽名 (Signature of the Convener of the Graduate Affairs Committee)				單位主管簽名 (Department Head's Signature)			
通過會議名稱(含時間) Name of the Approved Meeting (including time)							

附註(Remarks)：

1.需檢附發表論文全文及 SCI 期刊等級相關資料(含書面及電子檔)。(The full text of the published paper and relevant information regarding the SCI journal ranking must be submitted (including both printed and electronic versions)