

國立虎尾科技大學 電子工程系碩士班課程科目表
 [108學年入學適用] (Since 2019 Academic Year)

National Formosa University Curriculum of the master program of the Department of Electronic Engineering

108年6月12日107學年度第4次教務會議通過

學年 Academic Year	第一學年First Year						
學期Semester	上學期First			下學期Second			
必修科目 Required Course	科目Subject	學分 Credit	時數 Hours	科目Subject	學分 Credit	時數 Hours	
		書報討論(一) Seminar(I)	0	2	書報討論(二) Seminar(II)	0	2
	科技論文閱讀與寫作(一) Technical paper reading and writing(I)	0	2	科技論文閱讀與寫作(二) Technical paper reading and	0	2	
專業選修科目 Elective Courses	展頻通訊技術Spread spectrum communication technology	3	3	電磁波傳播 Electromagnetic wave propagation	3	3	
	無線通訊 Wireless communications	3	3	微波電路設計 Microwave circuits design	3	3	
	微波工程 Microwave engineering	3	3	語音處理技術 Voice processing technology	3	3	
	正交分頻多工技術 (OFDM)Orthogonal frequency division multiplex technology	3	3	數位通訊技術 Digital communication technology	3	3	
	高等數位訊號處理 Advanced digital signal processing	3	3	行動通訊技術 Mobile communication technology	3	3	
	隨機程序 Random process	3	3	電腦視覺Computer visions	3	3	
	機器人學 Robotic theory	3	3	高速網路High-speed networks	3	3	
	光電能源元件 Optoelectric energy device	3	3	高速半導體元件High-speed semiconductor device	3	3	
	顯示器元件 Displaying device	3	3	表面分析Surface analysis	3	3	
	壓電元件 Piezoelectric device	3	3	薄膜工程技術專論 Special topics on thin film technology	3	3	
	高速半導體元件物理 High-speed semiconductor physics & device	3	3	電子材料製程與分析 Technology and analysis of electronic material	3	3	
	固態物理 Solid state physics	3	3	奈米科技應用The application of nanotechnology	3	3	
	超大型積體電路製程 VLSI processing	3	3	嵌入式微處理器程式設計Embedded microprocessor programs design	3	3	
	嵌入式系統設計與應用 Design and application of embedded system	3	3	類比積體電路分析與設計Analog IC design and analysis	3	3	
		數位積體電路分析與設計 Digital IC analysis and design	3	3	鎖相迴路分析與設計 Design and analysis of phase-locked loops	3	3
		混合模式積體電路設計 Mixed-mode IC design	3	3	FPGA系統設計實務 Practical training of FPGA system design	3	3
	高等數位系統設計 Advanced digital systems design	3	3	系統晶片設計SOC design	3	3	
	超大型積體電路分析與設計 VLSI analysis and design	3	3	智慧型系統設計 Intelligent system design	3	3	
	奈米光能電池 Nano photoenergy cells	3	3	高科技專利取得與攻防Advanced technology patents acquisition and defense	3	3	
	類神經網路Artificial neural network	3	3	光電元件Opoelectric device	3	3	
	多媒體通訊 Multimedia communications	3	3	光學薄膜設計Optical thin film design	3	3	
	進階物件導向程式 Advanced Object-Oriented Programming	3	3	智慧型機器人系統應用專題 Intelligent robot system application project	3	3	
	應用電路學 Applied Electric Circuits	3	3	校外實習 Internship	2	2	
				進階物件導向程式設計實務 Advanced Object-Oriented Programming Design and Practice	3	3	
				應用電子學 Applied Microelectronic Circuits	3	3	
學年 Academic Year	第二學年Second Year						
學期Semester	上學期First			下學期Second			

必修科目 Required Course	科目 Subject	學分 Credit	時數 Hours	科目 Subject	學分 Credit	時數 Hours
		碩士論文(一) Master Dissertation(I)	3	0	碩士論文(二) Master Dissertation(II)	3
專業選修科目 Elective Courses	書報討論(三) Seminar(III)	0	2	書報討論(四) Seminar(IV)	0	2
	科技論文閱讀與寫作(三) Technical paper reading and writing(III)	0	2	科技論文閱讀與寫作(四) Technical paper reading and writing(IV)	0	2
備註Note	<p>1.最低畢業學分：30學分。其中必修科目6學分，最低選修科目：24學分。</p> <p>2.研究生因研究需要，經系主任之同意得選修他所開授之科目，其學分准列入畢業學分之計算，外所選修課至多承認6學分；以同等學力或非相關科系畢業而考取者，依需要加修大學部相關學系開授之科目，其學分不得列入畢業學分之計算。</p> <p>3.外國學生可修讀華語教學課程來抵免書報討論課程。外國學生開放選修外系(電資、工程學院)全英文授課課程，唯須經指導教授同意，不受上述6學分限制。</p> <p>4.學生於畢業前須至「台灣學術倫理教育資源中心」線上平台修習指定課程，課程測驗成績達及格標準，並於線上取得修業證明，經指導教授推薦並提出論文(含提要及論文原創性比對系統檢測結果)，始得申請學位考試。</p> <p>5.108學年度起適用。</p> <p>6.校外實習之實習時數需滿320小時。</p> <p>1.Minimun credits for graduation is 30, which includes required courses at least 6 credits and elective courses at least 24 credits.</p> <p>2.For research purposes, with the approval of the head of the department, students are allowed to take courses from other departments and those credits are counted in the required graduation credits (at most 6 credits). For students who possess B.S. equivalent certificates, or non-electronic engineering related diplomas, should take additional necessary undergraduate courses and those course-credits are not counted in the required graduation credits.</p> <p>3.The students can waive the Seminars courses only if they successfully complete the required mandarin courses.</p> <p>Besides the department of Electronic Engineering, international students can also take the English speaking courses from the departments of the college of Electrical and Computer Engineering and the college of Engineering. Otherwise, unless with the approval of their advisers, the courses they take will be subjected to the 6 elective course credits limits mentioned above.</p> <p>4.The postgraduate students who enroll in the Master's degree of the NFU EE department must attend the designated online course provided by the Taiwan Academic Ethics Education Resource Center online platform before graduation. they can apply for their oral examination for Master's degree only after they pass the required course, acquire the course certificate of fulfillment, and recommend to submit their thesis (which also include thesis abstract and pass the Turnitin plagiarism Checker system mandated by the University) by their supervisors.</p>					