

淡江大學 111學年度 機械與機電工程學系博士班 入學新生課程規劃表
Curriculums of the Department of Mechanical and Electro-Mechanical Engineering
Doctoral Program at Tamkang University
(Applicable to Newly-Admitted Students for the 2022 Academic Year)

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科目名稱 /Subjects		學分 Credits	第1學年		第2學年		第3學年		第4學年		備註 Remarks
			1st Academic Year		2nd Academic Year		3rd Academic Year		4th Academic Year		
			第1學期	第2學期	第1學期	第2學期	第1學期	第2學期	第1學期	第2學期	
			1st Semester	2nd Semester	1st Semester	2nd Semester	1st Semester	2nd Semester	1st Semester	2nd Semester	
■本系必修課程：4學分 Required Courses：4 credits	書報討論（一） Seminar(I)	1	1								
	書報討論（二） Seminar(II)	1		1							
	書報討論（三） Seminar(III)	1			1						
	書報討論（四） Seminar(IV)	1				1					
	資格考試 Qualifying Exam	0				0					
	論文 Thesis	0				0					
■本系系選修課程：至少須修21學分以上。 Department Elective Courses: A minimum of 21 credits must be completed.	進階能源轉換 Advanced Energy Conversion	3	3								附註： 系選修課程之開設科目，將依據本校規定可開課學分數開課。不是每個科目都會開課。 Note: The elective courses offered by the department will be arranged based on the number of credits permitted under the university' s regulations. Not all listed courses will necessarily be offered.
	感測原理與時頻譜分析 Principles of Sensors and Time-Frequency Analysis	3	3								
	高解析黎曼算則與應用 High Resolution Riemann Solver and Applications	3	3								
	流體機械及冷凍空調實務 Practice of Turbomachinery and Air	3	3								
	企業研發實務 Practice of Business Research and Development	3	3								
	高超音速和高溫氣體動力學 Hypersonic and High Temperature Gas Dynamics	3	3								
	雷射鐳接積層製造簡介 Introduction to Laser Welding Additive	1	1								
	熱管科學與技術 Heat Pipe Science and Technology	3		3							
	感測器與驅動器 Sensors and Actuators	3		3							
	兩相流數值方法專論 Special Topic in The Computational Modelling of Two-Phase Flows	3		3							
	多相流體力學 Multiphase Flow Dynamics	3		3							
	奈米生醫光子學應用 nanobiophotonics:	1		1							
	熱傳應用數值分析practical Based Computational Fluid Dynamics For Heat Transfer Applications	1		1							
	綠電與綠能最佳化設計與建置 Green Power and Green Energy Optimal Design and Construction	3		3							
	無人機系統設計與開發 Unmanned Aerial Vehicle System Design and	3		3							

(1)必修科目總學分數：4學分

(1)Total Credits for Required Courses: 4 credits

(2)最低應修本系選修科目總學分數：21學分

(2)Minimum Credits Required for Departmental Elective Courses: 21 credits

畢業總學分數：25學分

Total Number of Credits Required for Graduation: 25 credits