

國立虎尾科技大學動力機械工程系
機械與機電工程碩士在職專班課程科目表

National Formosa University Department of Power Mechanical Engineering Curriculum for
Master's Program (2017)

106 年 6 月 14 日 105 學年度第 4 次教務會議通過

First Academic Year						
	First Semester			Second Semester		
	Course Name	Credit	Hour	Course Name	Credit	Hour
Elective Courses	Thin Film Engineering 薄膜工程	3	3	Additive Manufacturing 積層製造學	3	3
Elective Courses	Numerical Method 數值方法	3	3	Convective Heat Transfer 熱對流	3	3
Elective Courses	Numerical Heat Transfer 數值熱傳	3	3	Computational Fluid Dynamics 計算流體力學	3	3
Elective Courses	Electric Motor Controls 電動機控制	3	3	Linear System Analysis 線性系統分析	3	3
Elective Courses	Elasticity 彈性力學	3	3	Finite Element Method 有限元素法	3	3
Elective Courses	Mechanical Vibrations 機械振動學	3	3	Reliability Engineering 可靠度工程	3	3
Elective Courses	Tribology Theory 磨潤原理	3	3	Electronic Equipment Cooling System 電子裝備散熱系統	3	3
Elective Courses	Digital Image Processing 數位影像處理	3	3	Heat Transfer Analysis and Experiment for Electro-optic Product Design 光電產品熱傳分析與實驗	3	3
Elective Courses	Design of Experiments 實驗設計	3	3	Reliability Engineering Practice 可靠度工程實務	3	3
Elective Courses	Probability and Statistics 機率與統計	3	3	Systematic Innovation Design Theory 系統化創新設計理論	3	3
Elective Courses	Micro Electric Machine System (MEMS) 微機電系統	3	3	Heat Exchanger Design 熱交換器設計	3	3
Elective Courses	Advanced Vehicle Dynamics 高等車輛動力學	3	3	Product Competitive Analysis of High-tech Industry 高科技產業產品競爭力分析	3	3
Elective Courses	Design and Verification Technology for Automotive Electron 車輛電子設計與驗證技術	3	3	Development of Intelligent Technology for Vehicle 車輛智慧化關鍵技術發展	3	3
Elective Courses	Object-Oriented Programming 物件導向程式設計	3	3	Electric Motor Controls 電動機控制	3	3
Elective Courses				Artificial Intelligence and Its Applications 人工智慧與應用	3	3

Second Academic Year

	First Semester			Second Semester		
	Course Name	Credit	Hour	Course Name	Credit	Hour
Required Courses	Thesis 1 碩士論文	3	0	Thesis 2 碩士論文	3	0
Elective Courses	Engineering Optics 工程光學	3	3	Special Topic on Machine Tools 工具機特論	3	3
Elective Courses	Optimum Design 最佳化設計	3	3	Mold Flow Computer Simulation 電腦輔助模流分析	3	3
Elective Courses	Energy Conversion Principle 電能轉換原理	3	3			
Elective Courses	Computer-aided Mold Design 電腦輔助模具設計	3	3			

Note: 碩士在職班畢業學分為 30 學分，其中碩士論文 6 學分，專業選修科目至少 24 學分以上。