

國立虎尾科技大學

動力機械工程系機械與機電工程碩士班課程科目表

National Formosa University

104.05.12 103 學年度第 7 次系務會議通過 104.6.16

103 學年度第 4 次教務會議 通過

Department of Power Mechanical Engineering

Curriculum for Master's Program (2015)

First Academic Year						
	First Semester			Second Semester		
	Course Name	Credit	Hour	Course Name	Credit	Hour
Required Courses	Chinese1 華語教學 1	0	4	Chinese2 華語教學 2	0	4
Required Courses	Seminar 1 專題研討 1	0	2	Seminar 2 專題研討 2	0	2
Elective Courses	Thin Film Engineering 薄膜工程	3	3	Rapid Prototyping and Tooling 快速原型與快速模具	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 Methods for 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	Object-Oriented Programming 物件導向程式設計	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				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	Chinese 3 華語教學 3	0	4	Chinese 4 華語教學 4	0	4
Required Courses	Thesis 1 碩士論文	3	0	Thesis 2 碩士論文	3	0
Required Courses	Seminar 3 專題研討 3	0	2	Seminar 4 專題研討 4	0	2
Elective Courses	Industrial R&D Internship 1 產業研發實習(一)	0	2	Industrial R&D Internship 2 產業研發實習(二)	0	2
Elective Courses	Engineering Optics 工程光學	3	3	Special Topic of 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 :

1.最低畢業學分： 30 學分。含必修學分(畢業論文)： 6 學分；選修學分：24 學分（選修學分含經核定之跨系所選修學分）。

【Minimum required credit: 30 credits with 6 required credits and 24 elective credits which may include pre-approved inter-institution elective credits.】

2.允許跨所選修不得高於 9 學分【Approving inter-institution 9 elective credits.】

3.外籍學生必修科目為華語教學 1(0 學分/4 小時)、華語教學 2(0 學分/4 小時)、華語教學 3(0 學分/4 小時)、華語教學 4(0 學分/4 小時)、可抵免專題研討學分。【Foreign Students Required Courses: Chinese 1、Chinese 2、Chinese 3 and Chinese 4.】