

# 國立虎尾科技大學動力機械工程系機械與機電工程博士班課程科目表

National Formosa University Department of Power Mechanical Engineering  
Curriculum for Doctor'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
Required Courses	Technical Seminar 1 工程技術論文研討一	0	2	Technical Seminar 2 工程技術論文研討二	0	2
Elective Courses	Special Topic on Numerical Heat Transfer 數值熱傳專論	3	3	Nonlinear System Analysis 非線性系統分析	3	3
Elective Courses	Advanced Engineering Analysis 高等工程分析	3	3	Advanced Mechanism Design 高等機構設計	3	3
Elective Courses	Nano /Micro Measurement 微奈米量測	3	3	Principle and Measurement Technology of Photonic Devices 光通訊元件原理與量測技術	3	3
Elective Courses	Micromachining Technology 微細加工學	3	3	Advanced Nano/Micro Tribology 高等微奈米磨潤	3	3
Elective Courses	Plasticity 塑性力學	3	3	Micro Electric Machine System Design 微機電系統設計	3	3
Elective Courses	Nonlinear Geometric Modeling 非線性幾何模型	3	3	Hybrid Electric System Analysis 混成動力系統分析	3	3
Elective Courses	Practical Transmission Engineering 傳動工程實務	3	3	Special Topic on Reliability Engineering 可靠度工程專論	3	3
Elective Courses	Biosolid Mechanics 生物力學	3	3	Mass Transfer Analysis 質傳分析	3	3
Elective Courses	Advanced Quality Control 高等品質管制	3	3	Research Methodology and Technical Writing 研究方法與科技論文寫作	3	3
Elective Courses	Viscous Fluid Dynamics 黏性流體力學	3	3	Practical Mechanism Innovation Design 機構創新設計實務	3	3
Elective Courses	Biofabrication 生醫製造學	3	3	Design of Microoptics 微光學元件設計	3	3

First Academic Year						
	First Semester			Second Semester		
	Course Name	Credit	Hour	Course Name	Credit	Hour
Elective Courses	Dynamics of Machine System 機器系統動力學	3	3	Combustion 燃燒學	3	3
Elective Courses	Dynamics of Multibody Systems 多體動力學	3	3	Photomechanics 光測力學	3	3
Elective Courses	Friction Engineering 摩擦工程	3	3	Radiation Heat Transfer 輻射熱傳	3	3
Elective Courses	<b>Big Data Analysis</b> 巨量資料分析	3	3	Gear Principle 齒輪原理	3	3
Elective Courses				Nano/Micro Fabrication and Measurement 微奈米製造與檢測	3	3
Elective Courses				<b>Intelligent Optimization Algorithm</b> 智慧型最佳化演算法	3	3

Second Academic Year						
	First Semester			Second Semester		
	Course Name	Credit	Hour	Course Name	Credit	Hour
Required Courses	Technical Seminar 3 工程技術論文研討三	0	2	Technical Seminar 4 工程技術論文研討四	0	2
Required Courses	Dissertation 1 博士論文	6	0	Dissertation 2 博士論文	6	0
Elective Courses	Advanced Computer-Aided Mold Design 進階電腦輔助模具設計	3	3	Ultrasound in Medicine 醫用超音波	3	3

Note :

※本所博士生須修滿至少十八學分(不包括博士論文、研究討論),必修博士論文(十二學分)及工程技術論文研討(兩學年,零學分)共十二學分。