



課 綱 Course Outline
材料科學與工程學系一般組

中文課程名稱 Course Name in Chinese		電化學原理與腐蝕工程				
英文課程名稱 Course Name in English		Principle of Electrochemistry and Corrosion Engineering				
科目代碼 Course Code		MS__57110	班 別 Degree	碩士班 Master' s		
修別 Type		選修 Elective	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite						
課程目標 Course Objectives						
使學生了解電化學原理，利用電化學原理解釋腐蝕的機制及防蝕的基本原理。						
系教育目標 Dept.' s Education Objectives						
1	建立專業知識基礎 Set the professional knowledge foundation					
2	培養專業實驗技能 Train the professional experimental skill					
3	養成獨立研究能力 Insure capability of independent research					
4	養成優質社會人格 Form the positive social character					
5	開展國際視野 Develop global vision					
系專業能力 Basic Learning Outcomes				課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.' s Education Objectives		
A	具備材料科學所需的進階物理、化學及數學的知識。 Acquire required advanced physical, chemical, and mathematic knowledge for materials science and engineering.				●	
B	具備材料科學的進階專業知識，並能應用於解決工程上之問題。 Acquire required advanced professional knowledge for materials science and engineering, applicable in solving engineering problems				●	

C	具備獨立研究之能力。 Equipped with capabilities of independent research.	○
D	具備專業道德及責任感，與良好的溝通及團隊合作的能力。 Acquire professional morality and responsibility, and capability of quality communication and team cooperation.	○
E	具備進階的英文能力，應用於學習與交流。 Acquire English capability used for learning and interaction.	○

圖示說明Illustration：● 高度相關 Highly correlated ○ 中度相關 Moderately correlated

課程大綱
Course Outline

本課程主要介紹電化學原理，利用電化學原理解釋腐蝕的機制及防蝕的基本原理。

資源需求評估（師資專長之聘任、儀器設備的配合．．．等）
Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

課程要求和教學方式之建議
Course Requirements and Suggested Teaching Methods

其他
Miscellaneous