



材料科學與工程學系

(Department of Materials Science and Engineering)

大學部核心能力

(Educational core abilities for undergraduate student)

(A) 運用數學、科學及材料工程知識能力

Ability to apply knowledge of mathematics, science, and materials engineering

(B) 設計與執行材料實驗及分析數據之能力

Ability to design and conduct experiments, as well as analyze data

(C) 執行材料工程實務所需之技術與能力

Ability to use techniques and skills for materials engineering practices

(D) 製程整合及元件實作之能力

Ability to integrate process and make devices

(E) 溝通協調之能力與團隊合作之精神

Ability to communicate effectively and cultivate the spirit of teamwork

(F) 獨立思考及解決問題之能力

Ability to think independently and solve problems

(G) 培養國際觀及認識綠色材料對全球環境的影響

Cultivation of cosmopolitan worldview and understanding effects of eco-materials on global environment

(H) 終身學習之習慣與能力

Ability to cultivate life-long learning habit

(I) 瞭解材料工程人員的社會責任與專業倫理

Understanding materials engineers' social responsibility and professional ethics

研究所核心能力

(Educational core abilities for graduate student)

(A) 特定材料之專業知識

Specialized knowledge in materials science and engineering

(B) 策劃及執行專題研究之能力

Ability to plan and execute a research project

(C) 撰寫專業論文之能力

Ability to write journal articles

(D) 創新思考及獨立解決問題之能力

Ability to do innovative thinking and independent problem solving

(E) 跨領域協調整合之能力

Ability to work in an interdisciplinary setting

(F) 國際觀及綠色材料意識

A fine international scope and general concept of eco-materials

(G) 領導、管理及規劃之能力

Ability in leadership, management, and organization

(H) 終身自我學習成長之能力

Ability for life-long learning

(I) 學術專業倫理

Professional ethics in science and engineering