國立東華大學

課　綱　Course Outline
資訊工程學系國際組

中文課程名稱 Course Name in Chinese	程式設計能力檢定				
英文課程名稱 Course Name in English	Programming Ability Certification				
科目代碼 Course Code	CSIEM0540	班　別 Degree		碩士班 Master's	
修別 Type	選修 Elective	學分數 Credit(s)	0.0	時　數 Hour(s)	0.0
先修課程 Prerequisite					

課程目標
Course Objectives

透過外部考試，客觀檢測學生程式能力

Objectively test students' programming abilities through external exams.

系教育目標
Dept.'s Education Objectives

1	探究學科知識，善用專業技能 Explore academic knowledge, utilize professional skills.
2	訓練評析思考，創新解決問題 Exercise analytical thinking, enhance creative problem solving skills.
3	學習團隊分工，強化溝通表達 Participate in teamwork, strengthen communication skills.

	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	統合資工知識技術之能力 Ability to integrate knowledge and technologies of computer science and information engineering.	●
B	設計技術理論驗證實驗之能力 Ability to design and conduct science experiments and to validate hypotheses.	●
C	資訊軟硬體設計開發之能力 Ability to design and develop computer software and hardware.	●
D	團隊專案開發之能力 Ability to design and develop team projects.	

| E | 批判性思考與創新研發之能力
Ability of analytical thinking, creative research planning, and innovative development. | ○ |

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

課程大綱
Course Outline

1.運用基礎數學、科學知識
2.基礎程式設計能力
3.設計完整系統/運算思維
4.解決工程問題的能力

1. Application of basic mathematical and scientific knowledge
2. Basic programming skills
3. Ability to design complete systems/computational thinking
4. Ability to solve engineering problems

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

學生必須於畢業前選修此課程且取得成績，若本課程成績不及格，不影響畢業。

Students must take this course and obtain grades before graduation. Failure to pass this course will not affect graduation.

其他
Miscellaneous