

Academic Org: Dept of Computer Sci & Engg – Subject: Computer Science

Course: CSCI1580 **Course ID:** 002568 **Eff Date:** 2022-07-01 **Crse Status:** Active **Apprv. Status:** Approved **【Course Rev】**
Visual Programming 可視化編寫

This course introduces computer application programming using a visual programming environment. Students will learn visual programming principles, modern programming concepts, and problem solving techniques. There will be learning examples and hands-on exercises for the understanding and creation of GUI-based computer applications in areas such as data processing, statistical analysis, financial reporting, etc. Students will be able to apply these computing skills in building practical computer applications for various disciplines.

本科以可視化編程環境介紹計算機應用程式設計。學生將學會可視化編程的基本原理、現代編程的概念和解決問題的技術。透過學習例子和實踐練習，讓同學明白並創作基於圖像化使用者接口的計算機應用程式，應用於例如數據處理、統計分析、財政報告等範疇。學生將能應用這些技能於不同學科中，建立實用的計算機應用程式。

Grade Descriptor:

A

EXCELLENT – exceptionally good performance and far exceeding expectation in all or most of the course learning outcomes; demonstration of superior understanding of the subject matter, the ability to analyze problems and apply extensive knowledge, and skillful use of concepts and materials to derive proper solutions.

有關等級說明的資料，請參閱英文版本。

B

GOOD – good performance in all course learning outcomes and exceeding expectation in some of them; demonstration of good understanding of the subject matter and the ability to use proper concepts and materials to solve most of the problems encountered.

有關等級說明的資料，請參閱英文版本。

C

FAIR – adequate performance and meeting expectation in all course learning outcomes; demonstration of adequate understanding of the subject matter and the ability to solve simple problems.

有關等級說明的資料，請參閱英文版本。

D

MARGINAL – performance barely meets the expectation in the essential course learning outcomes; demonstration of partial understanding of the subject matter and the ability to solve simple problems.

有關等級說明的資料，請參閱英文版本。

F

FAILURE – performance does not meet the expectation in the essential course learning outcomes; demonstration of serious deficiencies and the need to retake the course.

有關等級說明的資料，請參閱英文版本。

Equivalent Offering:

Units: 3 (Min) / 3 (Max) / 3 (Acad Progress)

Grading Basis: Graded

Repeat for Credit: N

Multiple Enroll: N

Course Attributes:

Topics:

COURSE OUTCOMES

Learning Outcomes:

1. Be able to understand the principle and concept of visual programming environments
2. Be able to create a complete computer application program with graphical user-interface
3. Be able to analyze, design and implement a solution to solve a problem by means of computer programming

Course Syllabus:

This course introduces computer application programming using a visual programming environment. Students will learn visual programming principles, modern programming concepts, and problem solving techniques. There will be learning examples and hands-on exercises for the understanding and creation of GUI-based computer applications in areas such as data processing, statistical analysis, financial reporting, etc. Students will be able to apply these computing skills in building practical computer applications for various disciplines.

Assessment Type:

Essay test or exam : 70%
Others : 30%

Feedback for Evaluation:

1. Course evaluation and questionnaire
2. Reflection of teachers (including evidence from assessment)
3. Results of assignments and examination
4. Question-and-Answer sessions during class
5. Student consultation during office hours or online

Required Readings:

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Recommended Readings:

1. Object-Oriented Programming with Visual Basic .NET, J.P. Hamilton, O'Reilly, 2002.
2. Visual Basic 2005 How to Program, 3rd ed., Deitel and Deitel, Prentice Hall, 2006.
3. Visual Studio Tools for Office: Using Visual Basic 2005 with Excel, Word, Outlook, and InfoPath, Eric Carter and Eric Lippert, Addison Wesley Professional, 2006.

OFFERINGS

1. CSCI1580 Acad Organization=CSD; Acad Career=UG

COMPONENTS

LEC : Size=30; Final Exam=Y; Contact=3
TUT : Size=30; Final Exam=N; Contact=1

ENROLMENT REQUIREMENTS

1. CSCI1580 **Enrollment Requirement Group:**
Not for students who have taken ENGG1100 or ENGG1110 or ENGG2600 or 2601 or ESTR1000 or 1002 or 2008.

New Enrollment Requirement(s):
Exclusion = no change

CAF

eLearning hrs for blended cls 0
No. of micro-modules 0
Research components (UG) 0%

< E N D O F R E P O R T >