

Academic Org: Fac Office of Engineering – Subject: Courses offered by Fac of Erg

Course: ENGG2780 **Course ID:** 013401 **Eff Date:** 2022-07-01 **Crse Status:** Active **Apprv. Status:** Approved **【Course Rev】**
Statistics for Engineers 統計及其工程應用

A first course in the fundamentals of statistics and their applications in engineering. Topics include populations and samples, point estimation, confidence intervals, hypothesis testing, and basics of linear regression.

本科教授統計學基礎及其在不同工程領域上的應用。內容包括：母群及樣本、點估計、區間估計、假設檢驗和線性回歸的基本概念。

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: 2 (Min) / 2 (Max) / 2 (Acad Progress)

Grading Basis: Graded

Repeat for Credit: N

Multiple Enroll: N

Course Attributes:

Topics:

COURSE OUTCOMES

Learning Outcomes:

- At the conclusion of the course, students should be able to
1. define and understand the fundamental concepts in statistics
 2. identify, formulate, and solve simple statistical problems in engineering and data science application

Course Syllabus:

Provided by the course teacher(s) in the respective teaching term.

Assessment Type:

Essay test or exam	: 65%
Homework or assignment	: 25%
Others	: 10%

Feedback for Evaluation:

Students may provide their feedback through office hours and course evaluation.

Required Readings:

To be provided by course instructor

Recommended Readings:

1. Jay L. Devore, Probability and Statistics for Engineering and the Sciences, CENGAGE, 9th Edition, 2016
2. Richard A. Johnson, Irwin Miller, and John E. Freund, Miller and Freund's Probability and Statistics for Engineers, Pearson, 9th Edition, 2017

OFFERINGS

1. ENGG2780 Acad Organization=ENO; Acad Career=UG

COMPONENTS

LEC : Size=80; Final Exam=Y; Contact=2
TUT : Size=80; Final Exam=N; Contact=2

ENROLMENT REQUIREMENTS

1. ENGG2780 **Enrollment Requirement Group:**
Not for students who have taken ENGG2430 or ENGG2450 or ESTR2002 or ESTR2005 or 2020
Co-requisite(s): ENGG2760 or ESTR2018 or 2308 or IERG2470

CAF

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

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