

Academic Org: Dept of Computer Sci & Engg – Subject: AI: Systems & Tech

Course: AIST2601 **Course ID:** 013199 **Eff Date:** 2022-07-01 **Crse Status:** Active **Apprv. Status:** Approved **【Course Rev】**
Technology, Society and Engineering Practice 科技、社會及工程實務

This course teaches the following topics: the impact of technology on society; introduction to engineering as a profession (different engineering fields, professional societies and registration, soft skills for working in a team); engineering design and innovation; introduction to intellectual property (copyright, trademarks, registered design and patents); engineering project management; product safety; professional ethics; liability and responsibility; workplace safety; environmental impact and market requirements; case studies and experience sharing from industry; global energy policies and standards.

本科講授以下的題目：科技對社會的影響；專業工程的介紹（不同工程領域的簡介，專業工程師學會及註冊，團隊成員的溝通技巧）；工程設計及創新；知識產權的介紹（版權，商標權，註冊設計權及專利權）；工程項目的管理；產品安全；專業道德；責任及義務；工作場所的安全守則；對環境影響及市場的要求；個案研討；工程師實務經驗的分享；全球性的能源政策和標準。

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 end of the course of studies, students will have acquired the ability to

1. examine the impact of technology on the society and the environment.
2. recognise the contributions of engineers to the society
3. appreciate the design and innovation aspects of engineering profession
4. acquire the skills and tools to manage engineering projects
5. learn the skills for working in a team
6. understand the value of being an ethical engineer and a responsible citizen

Course Syllabus:

This course teaches the following topics: the impact of technology on society; introduction to engineering as a profession (different engineering fields, professional societies and registration, soft skills for working in a team); engineering design and innovation; introduction to intellectual property (copyright, trademarks, registered design and patents); engineering project management; product safety; professional ethics; liability and

responsibility; workplace safety; environmental impact and market requirements; case studies and experience sharing from industry; global energy policies and standards.

Assessment Type:

Essays : 25%
Presentation : 25%
Short answer test or exam : 50%

Feedback for Evaluation:

1. CTE: course questionnaire filled by students
2. Reflection of teachers
3. Discussions (in-class, out-class and online) between students and teachers
4. Department student-staff tea gatherings
5. Department SSCC

Required Readings:

1. E.A. Stephan et al., Thinking like an engineer: an active learning approach, Pearson Prentice Hall, 3rd ed, 2015.
2. The Hong Kong Institution of Engineers web site (<https://www.hkie.org.hk>).
3. Intellectual Property Department web site (<https://www.ipd.gov.hk>).
4. The Office of the Government Chief Information Officer (OGCIO) web site (<https://www.ogcio.gov.hk>).

Recommended Readings:

OFFERINGS

1. AIST2601 Acad Organization=CSD; Acad Career=UG

COMPONENTS

LEC : Size=50; Final Exam=Y; Contact=2

ENROLMENT REQUIREMENTS

1. AIST2601

Enrollment Requirement Group:

Not for students who have taken CSCI3250 or CSCI3251 or ENGG2601 or ENGG2602.

New Enrollment Requirement(s):

Exclusion = no change

CAF

eLearning hrs for blended cls 0
No. of micro-modules 0
Research components (UG) 0%
University theme/ priority Global Citizenship & Social Enterprisingness

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