### The Hong Kong University of Science and Technology UG Course Syllabus

Technical Communication I LANG2030/H 3 credits Pre-requisites: LANG (CORE) 1403 OR LANG (CORE) 1404 OR LANG 1003 (prior to 2022-23). Co-requisites: N/A

Names of Course Leaders: Martin Ma & Eric Lee

Emails of Course Leaders: <a href="mailto:lceric@ust.hk">lceric@ust.hk</a> & <a href="mailto:lceric@ust.hk">lceric@ust.hk</a>

**Office Hours of Course Leaders:** Available by appointment only. Students should contact their section instructor directly with any questions.

### **Course Description**

Technical Communication 1 is a three-credit course offered to students from the School of Engineering. Over one semester, students will attend three hours of class, and will be expected to complete up to sixhours of out-of-class work, per week. The course focuses on three areas:

Key topics:

- **The Communicating Engineer**: In this short introductory section, students will examine what characteristics make engineers different from other professionals and analyze the language that is typically used in engineering texts.
- Engineers and social responsibility: Students will analyze and discuss some of the major ethical issues that engineers face in their work, with reference to real-world cases. They will work in a group to prepare and deliver a presentation and lead a seminar discussion on an engineering ethics issue. They will also write a short analytical report.
- **Engineers and creativity**: Students will discuss and evaluate engineering innovations and will work in a group to devise an innovative engineering idea. They will present the innovation to their classmates and submit an individual proposal report.

The course aims to develop students' ability to deliver presentations and take part in discussions on topics relevant to the work of a professional engineer. It also aims to enhance their ability to write aboutengineering-related topics, combining the use of sources with their own ideas. Language work focuses on developing the vocabulary, language structures, writing and speaking skills which will allow students to fulfill these aims.

# Intended Learning Outcomes (ILOs)

HKUST competency	CLE sub-competency and LANG2030 ILOs	
Problem-solving	Synthesis and substance	
	You can critically analyze and discuss general engineering issues and semi-technical topics.	
	You can select relevant and appropriate information from general to semi-technical engineering texts.	
	You can summarize and synthesize this information appropriately and properly acknowledge sources.	
	You can support claims with appropriate evidence.	
Communication	Coherence	
	You can develop well-framed ideas clearly and fully, in both speaking and writing, using relevant information, ideas and arguments. You can organize ideas coherently using appropriate organizational structures and formatting for engineering-related communication tasks.	
	Language Accuracy and Use	
	You can identify the different needs and concerns of a non-technical audience and are able to adapt the way you communicate accordingly. You can use language accurately and appropriately (pronunciation, intonation, vocabulary, linguistic structures and style) in engineering-related communication tasks.	
	Mode of Communication	
	You can use different modes of communication, e.g. audio, written and visual/graphical, effectively. You can use effective body language in presentations. You can interact effectively with participants in a seminar and/or in a Q&A session.	
Personal Development	Professionalism	
	You can work effectively in a team.	
	You can give constructive feedback to others for performance improvement.	
Social responsibility	Cultural Knowledge and Ethical Awareness	
	You can evaluate the benefits and dangers of engineering technologies for society. You can recognize major ethical issues and career pressure faced by engineers.	

### **Assessment and Grading**

This course will be assessed using criterion-referencing and grades will not be assigned using a curve. Detailed rubrics for each assignment are provided below, outlining the criteria used for evaluation.

### Assessments:

Assessment Task	Contribution to Overall Course grade (%)	Due date
A1: A group presentation and seminar discussion on an engineering ethics issue	30%	Approx. week 8*
A2: An analytical report on an engineering ethics issue	20%	Approx. week 8*
A3: A group presentation of a proposal for an engineering innovation	30%	Approx. week 13*
A4: A proposal report for an engineering innovation, including two quizzes on research skills and citing sources	20%	Approx. week 13*

\* Specific due dates are posted on Canvas. Assessment marks for individual assessed tasks will be released within two weeks of the due date.

### Mapping of Course ILOs to Assessment Tasks

Assessed Task	Mapped ILOs
A1: A group presentation and seminar discussion on an engineering	1. a, b, c, d
ethics issue (group and individual)	2. a, b
	3. a, b
	4. a, b, c
	5. a, b
	6. a, b
A2: An analytical report on an engineering ethics issue (individual)	1. a, b, c, d
	2. a, b
	3. a, b
	4. a
	5. a, b
	6. a, b

A3: A group presentation of a proposal for an engineering innovation (group and individual)	<ol> <li>a, b, c, d</li> <li>a, b</li> </ol>
A4: A proposal report for an engineering innovation (group and individual), including two quizzes on research skills and citing sources based on the online library workshop & guide (2%)	<ol> <li>a, b, c, d</li> <li>a, b</li> <li>a, b</li> <li>a, b</li> <li>a, 5</li> <li>a, b</li> </ol>

### **Grading Rubrics**

Detailed rubrics for each assignment are provided on Canvas. These rubrics clearly outline the criteria used for evaluation. Students can refer to these rubrics to understand how their work will be assessed.

## **Final Grade Descriptors:**

Letter Grade	Average Performance Level
A-range	Excellent
B-range	Good
C-range	Satisfactory
D	Marginal Pass
F	Fail

### **Course AI Policy**

We encourage students to make use of all the tools available that can help them to communicate more effectively in English. We also expect students to uphold the highest standards of academic integrity. There is no penalty for using or not using GenAI. However, GenAI and other tools cannot be used as a substitute for a student's own work. Students are expected to write their own assessed assignments and to prepare their presentations themselves.

GenAI tools can be very useful for:

- Brainstorming ideas and suggesting sources BUT the information provided may not be accurate or relevant to your assignment.
- Giving suggestions about improving the organization of your writing BUT GenAI tends to suggest very formulaic patterns of writing which may not fit your requirements.
- Giving suggestions about improving your language BUT GenAI may make suggestions for language changes which are not appropriate for the intended context and audience.
- Suggesting simple ways of expressing complex discipline-specific concepts BUT these explanations may be unfamiliar to your audience.
- Providing summaries of long texts BUT important information may be omitted, particularly if the original text is not well-written.

In short, GenAI provides opportunities to enhance your use of English and contains pitfalls which you need to be aware of.

### **Communication and Feedback**

Assessment marks for individual assessed tasks will be communicated via Canvas within two weeks of submission. Feedback on assignments will include strengths and areas for improvement where relevant. Students who have further questions about the feedback including marks should consult the instructor within five working days after the feedback is received.

### **Resubmission Policy**

Resubmissions are not accepted, except in exceptional circumstances.

### **Required Texts and Materials**

Course materials and additional resources are provided via Canvas.

### **Academic Integrity**

Students are expected to adhere to the university's academic integrity policy. Students are expected to uphold HKUST's Academic Honor Code and to maintain the highest standards of academic integrity. The University has zero tolerance of academic misconduct. Please refer to <u>Academic Integrity</u> | <u>HKUST – Academic Registry</u> for the University's definition of plagiarism and ways to avoid cheating and plagiarism.