

LANG 4031 Technical Communication II for ECE & CPEG (3 credits)

Course Description

LANG 4031 is a three-credit course offered to students from ECE and CPEG students taking an ECE FYP. Over one semester, students will attend three hours of class, and will be expected to complete up to six hours of out-of-class work, per week. The course focuses on two areas:

Communication in Professional Contexts

Students will research an ECE opportunity and issue, identify a trend and development of an ECE topic, analyze the impacts and potential of this development, and explain its commercial applications in an individual technology blog post and an individual presentation. Students will read, view and discuss materials on ECE-related topics from a variety of genres. They will also analyze the audience and communicative purpose of different types of written texts. Peer review is a small element of this component, with students reviewing each other presentations.

Communication skills for ECE projects

Students will develop their ability to use appropriate language and organization to write their Final Year Project report and give an oral presentation of their work. Students will read and discuss materials on ECE-related topics from academic journal articles and conference papers. They will work through a range of tasks which prepare them for the various types of writing and speaking that are required for their FYP report and presentation.

Core Areas for Learning and LANG 4031 Intended Learning Outcomes

HKUST Competency	CLE Core Areas for learning and LANG 4031 ILOs.
Problem-solving (PS03)	Synthesis <ol style="list-style-type: none">1. You can critically analyze and discuss major issues and recent developments in your major and related professions.2. You can select relevant and appropriate information from texts in your major subject and from related professional sources, including non-written data, e.g. graphs, equations, images.3. You can summarize and synthesize this information appropriately, avoiding copying.4. You can support claims with appropriate evidence, and properly acknowledge sources.
Communication (CM01-4)	Substance <ol style="list-style-type: none">5. You can speak and write clearly and fully, using relevant information, ideas and arguments.
	Coherence <ol style="list-style-type: none">6. You can write and speak coherently using appropriate organizational structures and formatting for engineering-related communication tasks.7. You can recognize appropriate organizational structure, tone and formatting in written and spoken communication in your major subject and in related professional sources.

	<p>Language accuracy and use (written and spoken)</p> <p>8. You can use accurate and fluent language (pronunciation, intonation, vocabulary, linguistic structures and style) relevant to engineering-related communication tasks.</p>
	<p>Interaction</p> <p>9. You can use appropriate language to address the needs and concerns of a variety of academic and professional audiences in speaking and writing.</p>
	<p>Mode of Communication</p> <p>10. You can use appropriate body language in engineering-related presentations.</p> <p>11. You can use a variety of modes of communication effectively (such as project posters)</p>
<p>Personal Development (SR02)</p>	<p>Being an effective learner</p> <p>12. You can identify strengths and weaknesses in the work of others.</p> <p>13. You can give constructive feedback to improve the performance of others in engineering-related communication tasks.</p>

Course Content

Part 1 Communication in Professional Contexts

- Talking about technology
- Writing about technology
- Analyzing corporate technology blogs
- Discussing trends
- Writing an effective blog post
- Workplace communication
- Presenting trends and technologies
- Peer review

Part 2 Communication in Academic Contexts

- Introducing an ECE project
- Writing the Final Year Project introduction
- Reviewing the literature
- Describing a design
- Comparing approaches and describing challenges
- Describing procedures in implementing a design
- Discussing and evaluating results
- Writing an evaluation of results
- Completing the Final Year Project report
- Preparing an ECE poster

- Practicing presentation skills

Assessment

A technology blog post on industry trends and important developments and/or a solution to a problem in one area of ECE (individual) Relevant ILOs: 1, 5, 6, 7, 8, 9	25%
An interview presentation on industry trends and important developments and/or a solution to a problem in one area of ECE (individual) Relevant ILOs: 1, 5, 6, 8, 9, 10	20%
Peer Review: completion of a peer review of a classmate's presentation Relevant ILOs: 11, 12	5%
The introduction and background section of the Final Year Project progress report (individual) Relevant ILOs: 1, 2, 3, 4, 5, 6, 7, 8, 9	25%
A poster presentation describing progress in the Final Year Project (individual) Relevant ILOs: 1, 2, 5, 6, 8, 9, 10, 11	25%