

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 recorded 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.

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.

Pre-requisites for LANG 4031

LANG 2030 or LANG 2030(H). The course is open to ECE students and CPEG students undertaking an ECE FYP only. The most appropriate time to take this course is in Fall Semester Year 4.

Competencies and Intended Learning Outcomes

HKUST Competency	CLE-sub-competency and LANG 4031 ILOs
Problem-solving	Synthesis, Critical Analysis, Comprehension 1. You can critically analyze and discuss major issues and recent developments in your major and related professions. 2. You can recognize appropriate organizational structure, tone and formatting in written and spoken communication in your major subject and in related professional sources. 3. You can select relevant and appropriate information from texts in your major subject and from related professional sources. 4. You can summarize and synthesize this information appropriately, avoiding copying. 5. You can support claims with appropriate evidence, and properly acknowledge sources.
Communication	Substance and coherence 6. You can speak and write clearly and fully, using relevant information, ideas and arguments. 7. You can write and speak coherently using appropriate organizational structures and formatting for engineering-related

	communication tasks.
	Language form and accuracy 8. You can use accurate and fluent language (pronunciation, intonation, vocabulary, linguistic structures and style) relevant to engineering-related communication tasks.
	Mode of Communication 9. You can use appropriate body language in engineering-related presentations. 10. You can use a variety of modes of communication effectively, e.g. PowerPoint, posters. 11. You can integrate non-written data, e.g. graphs, equations, images, effectively into your written and spoken communication.
	Language use 12. You can address the needs and concerns of a variety of academic and professional audiences in speaking and writing.
Personal Development	Learning Motivation, Professionalism, Being an Effective Learner 13. You can identify strengths and weaknesses in your own work and that of others. 14. You can give constructive feedback to improve the performance of others in engineering-related communication tasks.
Social responsibility	Cultural Knowledge, Cultural Sensitivity, Cultural Flexibility 15. You can identify the different needs and concerns of a variety of academic and professional audiences and are able to adapt the way you communicate technology to a non-technical audience.

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

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

Course Assessment

Assessment	Weighting	ILOs
A technology blog post on industry trends and important developments, in one area of ECE (individual)	25%	1, 3, 4, 6, 7, 8, 10, 12, 15
An individual recorded presentation on industry trends, focusing on one area of ECE	20%	1, 3, 4, 6, 7, 8, 10, 12, 15
The introduction and background section of the Final Year Project progress report (individual)	25%	1, 2, 3, 4, 5, 6, 7, 8, 11
A poster presentation describing progress in the Final Year Project (individual)	25%	1, 2, 3, 4, 5, 6, 7, 8, 10
Peer review of recorded presentation	5%	13, 14