

The Hong Kong University of Science and Technology

UG Course Syllabus

A System View of Communications: From Signals to Packets

ELEC 1200

4 Credits

Co-requisites: (COMP 1021 OR COMP 1022P) AND (MATH 1003 OR MATH 1014 OR MATH 1020 OR MATH 1024)

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Course Description

Have you ever wondered what technologies go into your mobile phone or a WiFi hotspot? Through hands on work with a simple but fully functional wireless communication system, you will understand the basic engineering tools used and tradeoffs encountered in the design of these systems. This course is centered on weekly laboratories, each designed to introduce an important concept in the design of these systems. The lab sessions are supported by two one-hour lectures and a tutorial that introduces the concepts for the next laboratory, as well as reviewing and expanding the concepts learned in the previous laboratory.

Assessments:

Assessment Task	Contribution to Overall Course grade (%)
Lab	25%
Homework	10%
Midterm Exam	25%
Final Exam	40%

Required Texts and Materials

No required text.

Reference Book:

(F) Frenzel, Louis E, "Principles of electronic communication systems." 5th Edition, McGraw-Hill, 2023 (ebook).

(OWN) Alan V. Oppenheim, Alan S. Willsky and S. H. Nawab, Signals and Systems, 2nd Ed., Prentice Hall, 1997

Additional Resources

NA