

The Hong Kong University of Science and Technology

UG Course Syllabus

[Course Title] Discrete Mathematical Tools for Computer Science

[Course Code] COMP2711

[No. of Credits] 3

[Any pre-/co-requisites] Prerequisite(s): A passing grade in AL Pure Mathematics/AL Applied Mathematics; OR level 3 or above in HKDSE Mathematics Extended Module M1/M2; Corequisite(s): (For students without prerequisites) MATH 1012 OR MATH 1013 OR MATH 1014 OR MATH 1020 OR MATH 1023 OR MATH 1024; Exclusion(s): COMP 2711H, MATH 2343

Name: Kenneth Wai-Ting LEUNG

Email: kwtleung@cse.ust.hk

Course Description

Basic concepts in discrete mathematics needed for the study of computer science: enumeration techniques, basic number theory, logic and proofs, recursion and recurrences, probability theory and graph theory. The approach of this course is specifically computer science application oriented.

Assessments:

| Assessment Task | Contribution to Overall Course grade (%) |
|------------------------|---|
| Homework | 20% |
| In-Class Exercises | 10% |
| Midterm Exam | 25% |
| Final Examination | 45% |

Required Texts and Materials

N/A

[Optional] Additional Resources

N/A