IERG 2470 Probability for Engineers
Spring 2022

Lecture Notes will be available in due course.

Reference Book
Roy D. Yates and David J. Goodman, *Probability and Stochastic Processes: A Friendly Introduction for Electrical and Computer Engineers, 3rd Edition,* Wiley 2014
https://learning-oreilly-com.easyaccess1.lib.cuhk.edu.hk/library/view/probability-and-stochastic/9781118324561/Contents.html

Course Website
https://blackboard.cuhk.edu.hk/ultra/courses/_165101_1/cl/outline

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Course Weighting

Homework Assignments   25%
Midterm   25%
Final   50%

Lectures and Tutorial

Lectures
M 11:30 – 12:15, MMW LT1
F 9:30 – 11:15, MMW LT1

Tutorial
W 1:30 – 2:15, TBA

Rules

1. There will be bi-weekly homework assignments.
2. Solutions to homework assignments should be submitted by the deadline. There is a 10% penalty for late submissions within 1 day and 50% penalty for late submissions after 1 day but within 1 week after the deadline. Late submissions after 1 week will not be accepted.

Syllabus

Preliminaries

Logic, sets, relations, proof methods, combinatorics

Probability

Probability and events: expectation, variance, moments, moment generating functions, single variate distributions. Multivariate probability: conditional probability, joint probability, Bayes' Theorem, conditional expectation, covariance, multivariate distributions. Functions of random variables. Central limit theorem, law of large numbers.