COURSE DETAIL

PROBABILITY FOR STATISTICS
Country Australia
Host Institution University of Melbourne
Program(s) University of Melbourne
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Statistics
UCEAP Course Number 124
UCEAP Course Suffix
UCEAP Official Title PROBABILITY FOR STATISTICS
UCEAP Transcript Title PROBABLTY FOR STATS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course develops the probability theory that is necessary to understand statistical inference. Properties of probability are reviewed, random variables are introduced, and their properties are developed and illustrated through common univariate probability models. Models for the joint behavior of random variables are introduced, along with conditional probability and Markov chains. Methods for obtaining the distributions of functions of random variables are considered along with techniques to obtain the exact and approximate distributions of sums of random variables. These methods will be illustrated through some well known normal approximations to discrete distributions and by obtaining the exact and approximate distributions of some commonly used statistics.

Language(s) of Instruction
English

Host Institution Course Number
MAST20006

Host Institution Course Title
PROBABILITY FOR STATISTICS

Host Institution Course Details
https://handbook.unimelb.edu.au/subjects/mast20006

Host Institution Campus
Parkville

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics and Statistics

Course Last Reviewed
2026-2027

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