COURSE DETAIL

MATHEMATICAL STATISTICS
Country Singapore
Host Institution National University of Singapore
Program(s) National University of Singapore
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Statistics
UCEAP Course Number 132
UCEAP Course Suffix
UCEAP Official Title MATHEMATICAL STATISTICS
UCEAP Transcript Title MATH STATISTICS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course introduces the theoretical underpinnings of statistical methodology and concentrates on inferential procedures within the framework of parametric models. Topic include: random sample and statistics, method of moments, maximum likelihood estimate, Fisher information, sufficiency and completeness, consistency and unbiasedness, sampling distributions, x2-, t- and F distributions, confidence intervals, exact and asymptotic pivotal method, concepts of hypothesis testing, likelihood ratio test, and Neyman-Pearson lemma. The course has a prerequisite of Probability and Statistics.

Language(s) of Instruction
English

Host Institution Course Number
ST2132

Host Institution Course Title
MATHEMATICAL STATISTICS

Host Institution Course Details
https://nusmods.com/courses/ST2132/mathematical-statistics

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Statistics and Data Science

Course Last Reviewed
2024-2025

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