

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, χ^2 -, 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 Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Statistics and Data Science

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