COURSE DETAIL

THEORY OF STATISTICAL INFERENCE

Country
United Kingdom - Scotland

Host Institution
University of Edinburgh

Program(s)
University of Edinburgh

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Mathematics

UCEAP Course Number
103

UCEAP Course Suffix

UCEAP Official Title
THEORY OF STATISTICAL INFERENCE

UCEAP Transcript Title
STAT INTERFERENCE

UCEAP Quarter Units
4.00

UCEAP Semester Units
2.70

Course Description

This course covers: -Parametric families and likelihood -Sufficiency, Neyman factorisation, minimal sufficiency, joint sufficiency -Elements of statistical decision theory -Estimation, minimum variance unbiased estimators, Cramer-Rao lower bound, Bayes and minimax estimators -Hypothesis testing, pure significance tests, optimal tests, power, Neyman-Pearson lemma, uniformly most powerful tests -Confidence intervals, relationship to hypothesis testing -Selected topics in modern statistics.

Language(s) of Instruction

English

Host Institution Course Number

MATH10028

Host Institution Course Title

THEORY OF STATISTICAL INFERENCE

Host Institution Course Details

Host Institution Campus

University of Edinburgh

Host Institution Faculty

Host Institution Degree

Host Institution Department

School of Mathematics

Course Last Reviewed