

COURSE DETAIL

COMPUTER INTENSIVE STATISTICAL METHODS

Country

Singapore

Host Institution

National University of Singapore

Program(s)

National University of Singapore

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Statistics Computer Science

UCEAP Course Number

114

UCEAP Course Suffix**UCEAP Official Title**

COMPUTER INTENSIVE STATISTICAL METHODS

UCEAP Transcript Title

STATISTICAL METHODS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course introduces students to several computer intensive statistical methods and the topics include: empirical distribution and plug-in principle, general algorithm of bootstrap method, bootstrap estimates of standard deviation and bias, jack-knife method, bootstrap confidence intervals, the empirical likelihood for the mean and parameters defined by simple estimating function, Wilks theorem, and EL confidence intervals, missing data, EM algorithm, and Markov Chain Monte Carlo methods. This course has a prerequisite of Mathematical Statistics.

Language(s) of Instruction

English

Host Institution Course Number

ST4231

Host Institution Course Title

COMPUTER INTENSIVE STATISTICAL METHODS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Statistics and Data Science

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