# **COURSE DETAIL**

### TIME-SERIES ANALYSIS

**Country** Hong Kong

**Host Institution** University of Hong Kong

**Program(s)** University of Hong Kong

UCEAP Course Level Upper Division

UCEAP Subject Area(s) Statistics

UCEAP Course Number 120

**UCEAP Course Suffix** 

UCEAP Official Title TIME-SERIES ANALYSIS

**UCEAP Transcript Title** TIME SERIES ANALYS

**UCEAP Quarter Units** 5.00

UCEAP Semester Units 3.30

#### **Course Description**

A time series consists of a set of observations on a random variable taken over time. Time series arise naturally in climatology, economics, environment studies, finance and many other disciplines. The observations in a time series are usually correlated; the course establishes a framework to discuss this. This course distinguishes different type of time series, investigates various representations for the processes and studies the relative merits of different forecasting procedures. Students will analyze real time-series data on the computer. Topics: Stationary and the autocorrelation functions; linear stationary models; linear non-stationary models; model identification; estimation and diagnostic checking; seasonal models and forecasting methods for time series.

#### Language(s) of Instruction English

Host Institution Course Number STAT4601

Host Institution Course Title TIME-SERIES ANALYSIS

**Host Institution Campus** 

**Host Institution Faculty** 

Host Institution Degree

## Host Institution Department

Statistics & Actuarial Science

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