# COURSE DETAIL

## TIME SERIES ANALYSIS

**Country**
United Kingdom - England

**Host Institution**
University of Bristol

**Program(s)**
University of Bristol

**UCEAP Course Level**
Upper Division

**UCEAP Subject Area(s)**
Mathematics

**UCEAP Course Number**
147

**UCEAP Course Suffix**

**UCEAP Official Title**
TIME SERIES ANALYSIS

**UCEAP Transcript Title**
TIME SERIES ANALYS

**UCEAP Quarter Units**
8.00

**UCEAP Semester Units**
5.30

**Course Description**

Students learn to identify and remove simple trends and seasonalities from time series data; describe the properties of stationary time series and their autocorrelations; define various time series probability models (ARMA, ARIMA, GARCH); construct time series probability models from data and verify model fit; define the spectral density function and understand it as a distribution of energy in the frequency domain; compute the periodogram and smoothed versions; and analyze multivariate time series.

**Language(s) of Instruction**
English

**Host Institution Course Number**
MATH33800

**Host Institution Course Title**
TIME SERIES ANALYSIS

**Host Institution Campus**
Bristol

**Host Institution Faculty**
Faculty of Science

**Host Institution Degree**

**Host Institution Department**

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