

# 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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