Introduction to Statistical Data Science (STAT0032)

**Description**
This module aims to provide a general background on fundamental statistical methods and applications in data science. It is intended for students registered on certain taught postgraduate degree programmes offered by the Department of Statistical Science, or jointly with other departments. It may also serve as a core module for students registered on the Data Science and Cultural Heritage MSc.

On successful completion of the module, students should have an understanding of the fundamental aspects of probability and statistics sufficient to follow other taught postgraduate level modules in Statistical Science. Students should also be equipped to lead basic data analysis projects in industry and research. The module will teach students: how to use probability as a language to express uncertainty, ways of visualizing and preparing data for statistical analysis, estimation techniques in the context of applied data analysis problems, the role of algorithms in the computation of estimators, how to express uncertainty in estimation via confidence intervals and hypothesis testing, predictive analysis from the point of view of regression.

**Key information**
- **Year**: 2019/20
- **Credit value**: 15 (150 study hours)
- **Delivery**: PGT L7, Campus-based
- **Reading List**: [View on UCL website](#)
- **Tutor**: Dr Tom Honnor
- **Term**: Term 1
- **Timetable**: [View on UCL website](#)

**Assessment**
- Written examination (main exam period): 90%
- Coursework: 10%

**Find out more**
For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)