

## Urban Big Data Centre (UBDC) Summer Training Programme 2016

### 'Using R: Statistical Analysis'

**Course instructor:** Dr Jing Yao, UBDC, University of Glasgow

**Course duration:** 1 day (Tuesday 23<sup>rd</sup> August 2016, 9:30am – 4:30pm, lunch break included)

**Course location:** Jura teaching lab, Level 4 Annexe, Glasgow University Library

**Audience:** Social scientists, students, practitioners

**Pre-requisite knowledge:** Basic understanding of statistical analysis and 'Introduction to R' course or equivalent knowledge of basic R programming

#### Course summary:

As a powerful open-source tool for statistical analysis, R has been increasingly utilised in higher education, scientific research and practice. The purpose of this course is to introduce how to use a set of R packages for statistical analysis, including both visualization and mathematical methods. By the end of the course, you will be able to load data into R, calculate descriptive statistics, implement hypothesis testing and carry out generalised linear regression analysis.

#### Course content:

- Calculate descriptive statistics
- Create statistic graphs
- Basic linear regression analysis and hypothesis testing