



## Course outline

Participants will learn to visualise and analyse data in R. This programme will enable them to create reproducible data analysis reports, demonstrate a conceptual understanding of the unified nature of statistical inference, perform Frequentist statistical inference, modelling to understand natural phenomena, and be able to make data-based decisions. Participants will also learn to effectively interpret statistical results, and in context using layman's term. They will also learn to critique data-based claims and evaluated data-based decisions, and visualise data with R packages for data analysis.

## Course objectives

R is one of the most widely used open-source language of analytics in the world and continues to be the platform of choice for the data scientists. A language of big data, R's statistical programming helps to describe, mine, and test relationships between large amounts of data.

With the advent of the data deluge, recent years have witnessed exponential growth in the number of courses in data analytics.

Yet, not all data analytics courses are created equal. The current certificate program offers several unique features as follows:

- Hands-on R Programming Meets Lessons in Statistical Thinking
- Analysing Datasets that Hold Real-World Implications
- Data Visualisation and Storytelling—Beyond the “Data Speaks for Itself” Approach
- Capstone Project Based on Participants’ Professional Interests

- Module 1: Introduction to Data Analytics (using R Programming)
- Module 2: Introduction to Data Visualisation (using R programming)

### Course details

2 weeks

Certificated by Singapore Management University (SMU)

### Who should attend

Data Scientists who are familiar with basics in R programming and would want to learn how to perform web scraping from multiple webpages using packages in R.

### Pre-requisites

Participants need to complete the basic data analytics modules

### Tools

R Programming

### Model of training

Classroom, Field trip

