



Introduction to R

Course ISI-1493 - Two days - Instructor-led - Hands-on

Introduction

R is a programming language for transforming, analyzing, and visualizing data. R can be applied to a variety of different data sources, including both files and databases. Its applications include statistical data analysis and machine learning.

This course helps students meet the prerequisites for Microsoft class 20773, Analyzing Big Data with R. It introduces the R language, the RStudio editor, and common R packages used to import, manipulate, and analyze data. The 20773 class assumes that basic familiarity with R. 20773 builds on that foundation by adding visualization, machine learning algorithms (including regression, clustering, and decision trees), support for very large data sets using Microsoft R Server, and ways to access Microsoft SQL Server database data.

At Course Completion

At course completion, students will be able to use an R development environment, access data stored in files, import package code, and write their own R functions.

Prerequisites

This course is appropriate for students new to R. Prior programming experience will be helpful but is not required.

Student Materials

The student kit includes a comprehensive workbook and other necessary materials for this class.

Course Outline

Module 1: Obtaining R

Module 2: Using an R Development Environment

Module 3: Basics of the R Language

Module 4: R Data Structures

Module 5: Control Statements

Module 6: Writing R Functions

Module 7: Working with R Packages

Module 8: Reading Data into R with readr and readxl

Module 9: Manipulating Data with dplyr

Module 10: Manipulating Strings with stringr

Module 11: Manipulating Dates with lubridate

Module 12: Basic Statistics

Contact ISInc for more information at 916.920.1700 or by visiting our website at <http://www.isinc.com>



Module 13: Linear Regression
Module 14: Statistical Graphics

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