# Installing R and RStudio

**This module is designed to guide you through the process of installing R and RStudio.  Everything that you need is available on line free of charge.**

N.B. With the exception of this module and the "What is R?" module all of the other modules in this workbook series are based on the assumption that you have full access to R and RStudio.  If you do not already have access to R and RStudio at your workplace we would urge you to install them on your personal notebook or PC before you go any further by following the instructions in this module.

RStudio is an Integrated Design Environment (IDE) for R which is described in detail in the "What is RStudio?" module.  Before you install RStudio you will first need to install R.  RStudio needs at least R version 2.11 but we would recommend that you install the latest version.  Both R and RStudio will run on many computer platforms (Windows, Mac, Linux, Unix) – either for single use on a local computer or on a central server for multiple users accessed via a web interface.

## Installation on your personal desktop or notebook
*(for Server installations click here)*

**First step to install R**
Point your browser to:  www.r-project.org
In the text under the Getting Started heading click on **download R**

This will lead to a page displaying all of the mirror sites of the Comprehensive R Archive Network (CRAN)

Scroll down this page to find the UK mirrors  and select one of these

Pick the package that matches your operating system, download and follow the instructions to install R

Alternatively you can go to www.inside-r.org
And click on the large blue tab labelled **Download R!**
This will automatically sense your operating system and take you straight to a mirror to download the latest version of R.  Download and follow the instructions to install R.

**Second step to install RStudio**
The desktop version of RStudio can be downloaded from http://www.rstudio.com/ide
Select the desktop icon
Then click on Download RStudio Desktop
Then select appropriate Installer (likely to be Windows or Mac OS X)
Download the installation file and follow the instructions.

 RStudio will search your local computer for the R installation that you have previously installed

The following youtube video will walk you through all of the above processes
https://www.youtube.com/watch?v=eD07NznguA4

## Server installation

Running R and RStudio on a server (offering a web interface, where several users can make use of the resource) has many advantages, especially if you have a specific time limited project with very large data sets – the "renting" of cloud based powerful computer processing for large data is catered for by several computer providers offering pre-built R/Rstudio environments, such as Amazon's RStudio Server Amazon Machine Image.
If you want to set up your own server or implement it within your work group/organization, we recommend you ask your IT support to run the installations. As starting point you can direct them to the following website resources for further information:
R server installation:
https://cran.r-project.org/manuals.html

RStudio Server installation :
https://www.rstudio.com/products/rstudio/#Server