# Installation guide for Statistical Computing and Empirical Mathods

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#### Introduction

This document contains recommended steps for configuring your laptop's R environment for Statistical Computing and Empirical Methods (Unit EMATM0061).

#### 1 Install R

Go to https://www.r-project.org/ and click on the download R link. This will direct you to a collection of mirrors for CRAN (the Comprehensive R Network). Download R from an appropriate mirror. If in doubt choose https://cloud.r-project.org/. You can then download an appropriate version of R for your operating system by following the instructions in the links. Download and install R.

## 2 Install R Studio

Go to <a href="https://rstudio.com/products/rstudio/download/">https://rstudio.com/products/rstudio/download/</a> to download the **free** version of RStudio. Click on the download link directly below **Free** and choose an appropriate version of RStudio for your operating system. Download the file and install. Next open an RStudio session.

# 3 Register for a Git account

Go to https://github.com/ and sign up for a free GitHub account. Its a good idea to choose something sensible and simple here as you may well want to share your github profile with future employers. Be careful to choose a secure password. You can also gain access to more tools as student via GitHub education https://education.github.com/.

### 4 Install Git

Install git on your own machine. The way to do this depends upon your operating system:

- Windows: Go to <a href="https://gitforwindows.org/">https://gitforwindows.org/</a>, click the download button and then install. Choose "Git from the command line and also from 3rd-party software" when asked about "Adjusting your PATH environment".
- Mac OSX: At your command line type xcode-select --install.
- Ubuntu/Debian Linux: At your command line type sudo apt-get install git.
- Fedora/RedHat Linux: At your command line type sudo yum install git.

## 5 Connect RStudio to git

Connect RStudio to git via the "usethis" R package by performing the following steps within your R console:

```
install.packages("usethis") # Install the "usethis" R package
library(usethis) # Load the "usethis" R library
use_git_config(user.name = "Bob Smith", user.email = "bob@example.org")
# Set git profile info
```

The first step installs the "usethis" R package. The second step loads the "usethis" R library. You may be prompted to install RTools at this stage. If so follow the links provided by RStudio. The third step sets your git profile information. The user name you enter should be the same as the username you used to set up your git profile. Similarly, the email needs to be the same email address as you used to set up your git profile.