

How to Set Up the Software Necessary for Your AEEM Master's Studies

Kaloyan Ganev

2016/2017

1 Overview

The Applied Econometrics and Economic Modelling Master's Programme of the Faculty of Economics and Business Administration offers a number of courses that imply extensive usage of specialized software packages/programming languages. The list includes R, Python, EViews, L^AT_EX, SAS, VBA, and SQL. This set of guidelines is intended to serve you as a shortcut to obtaining the necessary software and getting it ready for work on your personal home computer/laptop.

2 Getting and Installing R

R is free software. You can obtain a copy from <https://cran.r-project.org/mirrors.html>. There are versions for Linux, OS X (Mac), and for MS Windows. Follow the normal procedure for your operating system to install the downloaded file. Normally, if your computer is not very old, you need the 64-bit version, and not the 32-bit one, but installing both will cause no harm.

In addition to R, in order to make your work easier, more efficient, and more pleasant, it is a good idea to install the R Studio integrated development environment (IDE). It can be downloaded from here: <https://www.rstudio.com/products/rstudio/download3/>. There are again versions for MS Windows, Mac OS X, and two of the most popular Linux distributions. After installing it, it automatically discovers your R installation and uses it.

If you want to update R, procedures are different on different OS's. On Linux, for example, it is updated using the respective package manager. On Windows, in order to keep your current settings and packages, it is advisable to use the `installr` package (<https://cran.r-project.org/web/packages/installr/installr.pdf>). A

good user-friendly guide can also be found here: <https://www.r-statistics.com/2013/03/updating-r-from-r-on-windows-using-the-installr-package/>.

3 Python

Python is among the most popular programming languages of the present. It is also free and cross-platform, and it covers a very broad range of operating systems, including the above-mentioned (a list is available here: <https://www.python.org/downloads/>). Besides the 'original' one, there are several distributions that you can download and install on your computer (a list is available here: <https://www.python.org/download/alternatives/>).

Classes will be based on the WinPython distribution (<https://winpython.github.io/>). As you will quickly notice, there are two versions of Python mentioned there: 3.4 and 3.5. Download and install the 3.5 version (actually installation involves only unpacking the archive to a folder you select; does not require administrative privileges). Further details will be available at the beginning of the course, if necessary. Please note that there is no version for operating systems other than MS Windows, so if you are under a different OS, you have to switch to another distribution.

For home use, besides WinPython, I can also recommend using Anaconda Python (<https://www.continuum.io/downloads>) which provides a quite high degree of flexibility and multi-OS support. It also allows to easily set up an environment for working with the older version of Python (2.7, still used in practice) additionally so that you can switch between the two if necessary.

4 EViews

EViews is commercial software. It is sold by IHS (see <http://www.eviews.com/home.html>). FEBA has a subscription for EViews for its computer labs, but if you wish you could buy a student version from the seller for \$39.95. There is also a Student Lite version which is free of charge but has some (not so restrictive) limitations.

As an alternative, you might also consider the free software gretl (available cross-platform from <http://gretl.sourceforge.net/>). Note, however, that it is not a perfect substitute of EViews.

5 L^AT_EX

You will need L^AT_EX if you choose the corresponding elective course and/or would like to write your (mathematical) documents with it. The most popular distribution for MS Windows, M^IK_TE_X can be downloaded from here: <http://miktex.org/>. If you are using Linux, check what comes with your specific distribution. If you are using Mac OS X, a good choice would be Mac_TE_X (<https://tug.org/mactex/>).

Although L^AT_EX documents can be edited in any plain text editor, I would recommend using Texmaker (<http://www.xm1math.net/texmaker/download.html>). If you don't like it, ask Google for alternatives (there are quite a few of them).

6 SAS

SAS is commercial software. Nevertheless, there is the SAS Academic Program that lets you use it for free while you study; check your options here: <http://support.sas.com/learn/ap/student/index.html>.

7 VBA

VBA (Visual Basic for Applications) comes with every installation of Microsoft Office. While you are a student, you are entitled to a free MS Office license. Login to your university email and the installation will be waiting there.

8 SQL

There are many DBMS implementations of the SQL language. Ask your lecturer which one (among the ones free of charge) to set up on your computer. There might be also some availability of commercial products, but, again, ask your lecturer.