Preparing to Take this Course

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# Instructions for All Courses

If you are preparing to take one of the courses I teach, then I applaud you for getting here, hopefully before the semester starts. Please install the software you will need.

There are [video instructions for installing some of the following tools](https://drive.google.com/open?id=1Y4A8po7VMNgqa6_oDe02X1yfd66QDiv6LBtUD7U29E0) (not all yet)

For all courses, please download the following:

git <https://git-scm.com/>

You will also need an account on github: sign up and get your free student pack: <https://education.github.com/>

Please also install the following software depending on which course you are in.

## Data Structures

Install either C++ or Java. Instructions may be found under those headings below. Your homework must compile either on g++ or Java, so the tools listed below will do that. Any other tools that use g++ are fine, but don’t expect us to support your choices.

## EE-553 (C++)

Please install Qt. I do not have instructions recorded yet, but it’s pretty straightforward on Windows and presumably on Mac OSX. <http://www.qt.io/download/>

Qt contains g++ and a debugger. If you want, you may install cygwin, but that is more complicated so I am not going to cover it here.

Make sure that you can create a zip file for some homeworks that may require multiple files

***.rar files are not acceptable***. On windows you can get 7zip: <http://www.7-zip.org/>

You may use Visual Studio or XCode, but if you do you must make sure your code will work on our system (g++ 4.9 under linux) when submitted. If your code does not work you get 25% though you may resubmit.

If you like, install any programming editor. Good candidates include Sublime Text 3, Atom, Brackets

Please take the pretest as soon as the course opens. This is just to collect data on how much you knew going into the course. There are no prerequisites, you do not have to know how to program to take it (but it is obviously easier if you do).

## EE-552 (Java)

Please install:

Processing: (<http://processing.org>).

Java <http://www.oracle.com/technetwork/java/javase/downloads/index.html>

Eclipse: <http://www.eclipse.org/>

# Bibliography

For C++, there is a free textbook, but if you want to buy one I recommend Lippman, 5e: <http://www.amazon.com/Primer-5th-Stanley-B-Lippman/dp/0321714113/ref=sr_1_2?ie=UTF8&qid=1451008292&sr=8-2&keywords=lippman%2C+5e>

For Java, there is a free textbook, but if you want to buy one I recommend R. Daniel Liang: <http://www.amazon.com/Intro-Java-Programming-Comprehensive-Version/dp/0133761312/ref=sr_1_fkmr0_1?ie=UTF8&qid=1451008341&sr=8-1-fkmr0&keywords=r+daniel+liang>

For Data structures, the textbook is Cormen, Leiserson, Rivest and Stein: <http://www.amazon.com/Introduction-Algorithms-3rd-Thomas-Cormen/dp/0262033844/ref=sr_1_1?ie=UTF8&qid=1452860977&sr=8-1&keywords=cormen+leiserson+rivest+and+stein+introduction+to+algorithms+3rd+edition>