

# Software Carpentry workshop

*Thursday, 11 April 2013 11:00 (1h 30m)*

## Impact

Software Carpentry's experience with boot camps is consistent with recent research: students learn best in a blended environment that combines directed in-person instruction with self-directed online learning. As well as improving learning, boot camps solve two other recurring problems. Researchers are busy people who often cannot make time for a semester-long traditional course. However, most can find two or three days to get started (and to get past installation and configuration hurdles if they are working on their own machines). At the same time, it can be hard to stay motivated when working in isolation; by bringing people together, boot camps create help peer support communities in selected disciplines or geographic regions.

## Summary

EGLeu, together with the UK Software Sustainability Institute, will run 3 Software Carpentry sessions for researchers. These sessions are drawn from Software Carpentry's highly successful and popular boot camps which teach basic software development skills to researchers, enabling them to do more, in less time and with less pain. The three sessions are:

- Using revision control to record provenance and collaborate - includes an introduction to Git and GitHub.
- Using testing to help ensure your software, and results, are correct.
- Data management using files and NoSQL DBs - includes an introduction to the NoSQL database MongoDB.

The only prerequisite is knowledge of a programming language and some familiarity with using the command line. Though we'll be using Python for the latter two sessions, we'll provide a quick introduction to the key syntax in each case.

Up to a maximum of 40 can attend this workshop, you'll need to bring your laptop –see <http://go.egi.eu/swcarpentry>

## URL

<http://github.com/swcarpentry/boot-camps/blob/2013-04-egi-forum/README.md>

## Description

A boot camp is an in-person, example-driven workshop which covers useful software development skills to enable researchers to be more productive programmers. These skills can include developing maintainable software, version control, automation and testing. A boot camp is specifically tailored to the needs of researchers and demonstrates how software development skills contribute to correct, reproducible and reusable research

Short tutorials alternate with hands-on practical exercises, and participants are encouraged both to help one another. Participants usually work on their own computers (typically laptops), using either native software or a standard set of packages running in a virtual machine. This ensures that they have a working environment when the boot camp is done. Software Carpentry provides a wealth of on-line material for self-directed follow-up learning.

**Primary author:** Dr JACKSON, Mike (EPCC)

**Presenter:** Dr JACKSON, Mike (EPCC)

**Session Classification:** Software Carpentry workshop

**Track Classification:** Community Platforms (Track Lead: P Solagna and M Drescher)