# Computing for mathematics handout 1 - What you need to know

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**Office hours: Thursday 1300-1500**

## Intended learning outcomes for this module:

* Understand and be able to write in Python the following programming ideas: Conditional Statements; Flow Control; Data Structures; Recurrence, Basic ideas of Object Orientated Programming;
* Use the above and a Mathematics package (Sage) to tackle mathematical problems;
* Have a basic knowledge of LaTeX;
* Work in groups to tackle problems and convey solutions to those problems through presentation.

## How the material will be taught (first term):

* 2 lab sessions to do 1 lab sheet (**bring headphone!**);
* Need to complete 80% of 'TICKABLES';
* **YOU WILL NEED TO WORK OUTSIDE OF THE LABS TO HAVE SUFFICIENT TIME TO COMPLETE LAB SHEETS**
* Lecture on Thursday 1100;
* Office hours Thursday 1300 - 1500.

## What you should do next:

* Download and install Python on your own machine if you have one:
  + If you have a windows machine follow the instruction at [www.python.org/](http://www.python.org/)
  + If you have a linux or a Mac (nix) then python is already installed.
* Start working on the the first lab sheet.
* Organise a study group of 4 to 5 people to work together (I suggest finding people in your own tutor groups).

## Resources:

* All teaching resources are available at [www.vincent-knight.com/home/teaching/computing-for-mathematics](http://www.vincent-knight.com/home/teaching/computing-for-mathematics).