

Computing for mathematics handout 1 - What you need to know

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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 headphones!**);
- 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 (**version 2.x**) on your own machine if you have one:
 - If you have a windows machine follow the instruction at www.python.org/
 - If you have a linux machine or using Mac OS (both of these are 'nix' machines) then python is already installed.
- Start working on 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.