

MSc in Mathematics and Computation – 2025/6
Notice Regarding MA407 Algorithms and Computation

Dear incoming MSc in Mathematics and Computation Student,

In the MSc in Mathematics and Computation regulations, you are required to take the course [MA407 Algorithms and Computation](#). This document provides Information about preparing for this course.

The course **MA407 Algorithms and Computation** includes, as an integral part, programming in the computer language Python. An introduction to programming in Python is given in a series of pre-sessional classes and an online module provided by the Digital Skills Lab at LSE. However, this introduction is necessarily rapid. So, students who have never done any programming may easily fall behind. (In fact, some MSc students from previous years experienced this as a major difficulty.) For that reason, if you do not have any or have only very little programming experience, please take some time to prepare for the course and learn some basics with the following resources (and/or any other resource you prefer):

- The Python beginner guide at

<https://www.python.org/about/gettingstarted/>

gives you a good introduction to Python and many pointers for further exploration. Using the instructions linked from this page, you can download, install and start using Python on your own computer (if you have not already set up for it). You are encouraged to do so.

- The brief tutorial at

<https://docs.python.org/3/tutorial/>

presents many of the Python concepts and constructs that we will use in the course. Going through the first four sections (up to and including *More Control Flow Tools*) should give adequate preparation for the beginning of the course. If you do not have prior experience with Python, please make sure to try writing and running Python code that you see in the tutorials and/or Python code that you write on your own for some simple exercises.

Those who have covered the material in MA407 in previous courses may be exempted from MA407 at the discretion of the Programme Director. Upon supplying satisfactory evidence of relevant previous courses taken to the MA407 lecturer, a student shall replace MA407 with the course [MA421 Topics in Algorithms](#), subject to approval of the Programme Director.

Best wishes,

Dr Tugkan Batu (Lecturer for MA407)