

MATLAB CRASH COURSE, OCTOBER 2024

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Course website: <https://courses.maths.ox.ac.uk/course/view.php?id=5727>

Objectives

The objective of this course is to give an introduction to MATLAB and the essentials of MATLAB programming. This course will last about eight hours and will consist of a mixture of lectures and practicals. **The best way to learn the software is by using it.** There will be no grades, and no such thing as a stupid question.

Useful references

D.J. Higham and N.J. Higham, *MATLAB Guide*, SIAM, 2005

T.A. Driscoll, *Learning MATLAB*, SIAM, 2009

C.B. Moler, *Numerical Computing with MATLAB* and *Experiments with Matlab*
(freely available online: <http://www.mathworks.com/moler/>)

Online MATLAB courses: <https://matlabacademy.mathworks.com/>

MATLAB Cody: <https://www.mathworks.co.uk/matlabcentral/cody/>

MATLAB installation instructions

As a student at Oxford you're entitled to a free copy for your personal machine. Follow the link at <https://www.maths.ox.ac.uk/members/it/software-personal-machines/matlab>. Note, you will need your single sign on details in order to do this.

Tentative timetable:

MONDAY 7TH OCTOBER	
11:00 – 12:30	Introduction Theory 0: Basic operations with the command window Practical 0
13:30 – 15:00	Practical 0 (cont.) Theory 1: Scripts, Logic, Control Structures & Anonymous Functions Practical 1
15:30 – 17:00	Theory 2: Cell arrays, Functions & Programming Practical 2
TUESDAY 8TH OCTOBER	
11:30 – 13:00	Practical 2 (cont.) Theory 3: Graphics Practical 3
14:00 – 15:00	Practical 3 (cont.) Theory 4: Built In Functions
15:30 – 17:00	Practical 4
