

Reading Lists

We have had several requests for reading lists and have put together this unofficial document. It simply lists some personal recommendations from tutors and various others connected with the MSc. Mathematics books tend to be quite expensive but can often be bought more cheaply used from various large internet suppliers and can, of course, sometimes be obtained from libraries. Mathematics does not tend to change over time, secondhand copies of earlier editions can be helpful for background reading (but for some modules it is important to have the correct edition of the set text).

Analysis

Mathematical Analysis a straightforward approach by Binmore (Cambridge)

Calculus by Spivak (Cambridge) a basic introduction

An Introduction to Analysis and Integration Theory by Phillips (Dover)

Methods

Advanced Engineering Mathematics by Kreyszig (published by Wiley)

Mathematical Methods in the Physical Sciences by Boas (again published by Wiley);

Mathematical Methods for Physics and Engineering by Wiley, Hobson and Bench (Cambridge)

Analytic number theory

A primer of analytic number theory by Stopple (Cambridge)

Differential Equations

Differential Equations by Bronson (Schaum)

Complex Analysis

Complex Analysis by Stewart and Tall (Cambridge)

Introduction to Complex Analysis by Priestly (Oxford)

Group Theory

Groups by Jordan and Jordan (Butterworth – Heinemann) A basic introduction

Abstract Algebra

Abstract Algebra: An Introductory Course by Lee (Springer Undergraduate Mathematics Series)

Vector Calculus

Vector Calculus by Matthews (Springer)

Metric and Topological Spaces

Introduction to Metric and Topological Spaces by Sutherland (OUP)