

## **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 Bence (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)