Preface

The textbook *Mathematics for Economics and Business* is a translation of the Italian textbook *Matematica per l'Economia e l'Azienda* by the same Authors, and maintains the general outlines of its Italian counterpart.

We have selected some topics which we consider to be fundamental and mandatory for our students:

- the knowledge of Calculus, for functions of one and two variables;
- the use of Calculus in optimization;
- the notion of integral for functions of one variable;
- the language and the elementary techniques of Linear Algebra;
- the basics of Financial Calculus.

Several preliminary examples from applied sciences (mainly from Economics) introduce the theoretical aspects. We have tried to avoid an excessive formalism, in order to quickly reach the fundamental concepts.

The result is a textbook which is tailored for those educational programs which include a first (and perhaps only) course of Mathematics, in particular for those in Economics and Management.

At the end of each Chapter a number of proposed exercises should be useful as a comprehension test. The solutions are available in the Students' area of: www.egeaonline.com

Milan, May 2008

The Authors

Structure of the book

The following diagram shows the relations among Chapters and suggests a way to use this textbook. The first Chapter is an introduction to the whole book. Chapter 11 is a short introduction to Financial Calculus, and there are frequent links to it throughout the book.

