Part I
A Foundation Course in CSP

The following 8 chapters are intended to give the reader a good basic knowledge of CSP, and are similar in content to the *Concurrency* course that has been given to undergraduate and Masters’ students at Oxford for many years.

CSP is a programming language, a specification language and a theory to help you understand concurrent systems and decide whether a program meets its specification. It belongs to a class of notations known as *process algebras*, where concepts of communication and interaction are presented in an algebraic style. The odd-numbered chapters successively introduce more of the language, with the even-numbered ones being used to explain reasoning techniques and provide larger examples. Each of Chaps. 1–7 shows how to use the FDR tool in connection with its material; Chap. 8 gives much more information about FDR and is intended to be studied in parallel with a course based on Chaps. 1–7, with its later Sects. 8.5–8.8 being optional.

It is strongly recommended that courses based on this Part are accompanied by practical work using FDR. As described in the Preface, teaching and practical materials are available from this book’s web-site and the author.