Record Nr. UNINA9910813290403321 Autore Simmons Harold **Titolo** An introduction to category theory / / Harold Simmons [[electronic resource]] Cambridge: ,: Cambridge University Press, , 2011 Pubbl/distr/stampa **ISBN** 1-107-22867-0 1-139-23509-5 1-283-38259-8 9786613382597 1-139-18968-9 0-511-86322-5 1-139-19097-0 1-139-18837-2 1-139-18375-3 1-139-18607-8 Descrizione fisica 1 online resource (ix, 226 pages) : digital, PDF file(s) MAT018000 Classificazione Disciplina 512/.62 Soggetti Categories (Mathematics) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Machine generated contents note: Preface; 1. Categories; 2. Basic gadgetry; 3. Functors and natural transformations; 4. Limits and colimits in general; 5. Adjunctions; 6. Posets and monoid sets; Bibliography; Index. Sommario/riassunto Category theory provides a general conceptual framework that has proved fruitful in subjects as diverse as geometry, topology, theoretical computer science and foundational mathematics. Here is a friendly, easy-to-read textbook that explains the fundamentals at a level suitable for newcomers to the subject. Beginning postgraduate mathematicians will find this book an excellent introduction to all of the basics of category theory. It gives the basic definitions; goes through the various associated gadgetry, such as functors, natural transformations, limits and colimits; and then explains adjunctions.

The material is slowly developed using many examples and illustrations to illuminate the concepts explained. Over 200 exercises, with solutions available online, help the reader to access the subject and make the book ideal for self-study. It can also be used as a recommended text for a taught introductory course.