

1. Record Nr.	UNINA9910992788803321
Autore	Facchini Alberto
Titolo	Introduction to Ring and Module Theory // by Alberto Facchini
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Birkhäuser, , 2025
ISBN	9783031825095 3031825098
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (440 pages)
Collana	Compact Textbooks in Mathematics, , 2296-455X
Disciplina	512.46
Soggetti	Associative rings Associative algebras Algebra, Homological Associative Rings and Algebras Category Theory, Homological Algebra Anells associatius Àlgebres associatives Àlgebra homològica Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	- 1. Basic Notions -- 2. Some Classes of Modules -- 3. Right Artinian Rings -- 4. Local Rings, Injective Modules, Flat Modules -- 5. Additive Categories, Abelian Categories -- 6. Appendices.
Sommario/riassunto	This textbook is designed for a first course in ring theory, module theory and category theory. Written following several decades of teaching experience, it stands out with its clear and engaging style, featuring thorough explanations and attention to detail. Carefully selected exercises encourage active learning and problem-solving. The textbook integrates elementary category theory with basic concepts and examples developed throughout the course. Although the primary focus is on rings and modules, relevant notions for other algebraic structures, such as groups and semigroups, are also discussed. Thus, this book aims at introducing students to noncommutative rings and modules within a broader algebraic context. Aimed at advanced

undergraduates or master students in mathematics, this textbook is suitable both for use in the classroom and self-study. Whereas the first part of the book covers a basic course in ring and module theory, the latter part includes optional deepening topics.
