1. Record Nr. UNINA9910349277903321

Autore	O'Regan Gerard
Titolo	Concise Guide to Software Testing / / by Gerard O'Regan
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-28494-8
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XXIV, 293 p. 92 illus., 84 illus. in color.)
Collana	Undergraduate Topics in Computer Science, , 1863-7310
Disciplina	005.14
Soggetti	Software engineering Quality control Reliability Industrial safety Software Engineering Quality Control, Reliability, Safety and Risk
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Fundamentals of Software Quality -- Fundamentals of Software Engineering -- Fundamentals of Software Testing -- Static Testing -- Software Test Planning -- Test Case Analysis and Design -- Test Execution and Management -- Test Outsourcing -- Test Metrics and Problem Solving -- Software Testing Tools -- Test Process Improvement -- Testing in the Agile World -- Verification of Safety Critical Systems -- Legal, Ethical and Professional Aspects of Testing -- Configuration Management -- Epilogue.
Sommario/riassunto	This practically-focused textbook provides a concise and accessible introduction to the field of software testing, explaining the fundamental principles and offering guidance on applying the theory in an industrial environment. Topics and features: Presents a brief history of software quality and its influential pioneers, as well as a discussion of the various software lifecycles used in software development Describes the fundamentals of testing in traditional software engineering, and the role that static testing plays in building quality into a product Explains the process of software test planning, test analysis and design, and test management Discusses test outsourcing,

and test metrics and problem solving Reviews the tools available to support software testing activities, and the benefits of a software process improvement initiative Examines testing in the Agile world, and the verification of safety critical systems Considers the legal and ethical aspects of software testing, and the importance of software configuration management Provides key learning topics and review questions in every chapter, and supplies a helpful glossary at the end of the book This easy-to-follow guide is an essential resource for undergraduate students of computer science seeking to learn about software testing, and how to build high quality and reliable software on time and on budget. The work will also be of interest to industrialists including software engineers, software testers, quality professionals and software managers, as well as the motivated general reader. Dr. Gerard O'Regan is a CMMI software process improvement consultant with research interests including software quality and software process improvement, mathematical approaches to software quality, and the history of computing. He is the author of such Springer textbooks as Concise Guide to Formal Methods, Concise Guide to Software Engineering, Guide to Discrete Mathematics, and Introduction to Software Quality.