Record Nr. UNINA9910827041803321 Autore Hardin Therese **Titolo** Concepts and semantics of programming languages 2: modular and object-oriented constructs with Ocaml, Python, C++, Ada and Java / / Therese Hardin [and three others] Hoboken:,: ISTE Ltd / John Wiley and Sons Inc,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 1-119-85118-1 1-119-85119-X 1-119-85117-3 Descrizione fisica 1 online resource (265 pages) Collana Computer engineering series Disciplina 005.13 Soggetti Programming languages (Electronic computers) - Semantics OCaml (Computer program language) Python (Computer program language) C++ (Computer program language) Ada (Computer program language) Java (Computer program language) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Includes index. Sommario/riassunto This book - composed of two volumes - explores the syntactical constructs of the most common programming languages, and sheds a mathematical light on their semantics, providing also an accurate presentation of the material aspects that interfere with coding. Concepts and Semantics of Programming Languages 2 presents an original semantic model, collectively taking into account all of the constructs and operations of modules and classes: visibility, import, export, delayed definitions, parameterization by types and values, extensions, etc. The model serves for the study of Ada and OCaml modules, as well as C header files. It can be deployed to model object

and class features, and is thus used to describe Java, C++, OCaml and Python classes. This book is intended not only for computer science

students and teachers but also seasoned programmers, who will find a guide to reading reference manuals and the foundations of program verification.