1. Record Nr. UNINA9910466308303321 Autore Rubin Olis Titolo Control engineering in development projects // Olis Rubin Pubbl/distr/stampa Norwood, Massachusetts:,: Artech House,, [2016] [Piscatagay, New Jersey]:,: IEEE Xplore,, [2016] **ISBN** 1-63081-003-7 Descrizione fisica 1 online resource (256 pages): illustrations Collana Artech House radar series Disciplina 629.8 Soggetti Automatic control - Design and construction Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Control Engineeringin Development Projects; Preface; 1Introduction; 1.1 Scope of This Book; 1.1.1 Extent of Scope; 1.1.2 Limitations on Scope: 1.2 Control Engineering in an Engineering Enterprise: 1.3 Control Engineering Within a Development Project; 1.3.1 Technology Programs; 1.3.2 Concept Studies; 1.3.3 Project Definition Phase; 1.3.4 Design Phase; 1.3.5 Implementation Phase; 1.4 Other Applications--With Other Challenges; 1.4.1 A Flight Control System; 1.4.2 A Nuclear Power Plant: 1.5 Modeling and Simulation: 1.6 Discussion: 1.7 Some Questions; Bibliography; 2Technology Programs. 2.1 Introduction2.2 Sensor Technology; 2.3 Electric Motor Technology; 2.4 Manufacturing Tolerances and Other Effects; 2.5 Test Facilities; 2.6 Controller Hardware and Software; 2.7 Discussion; 2.8 Some Questions; Bibliography; 3Concept Studies; 3.1 Introduction; 3.2 Definition of the Plant; 3.2.1 Setting Up the Differential Equa. Sommario/riassunto This practical new guide to designing control systems gives readers a "virtual experience" into the complex engineering problems that may occur during the design and development process. This book gives engineers guidance in their journey to obtain a greater understanding of the thought processes involved in designing and developing successful control systems for radar, flight control, and several other applications. This constructive new resource takes engineers through

various phases of project development. Clear examples and case

studies are presented throughout demonstrating various management styles. Readers discover a variety of challenges that could occur during actual projects. This book represents a unique contribution to the technical literature on control system design by illustrating principles in the language of control engineering with copious figures. It presents methodical procedures for setting up simulation models used for integrating controls systems with hardware in order to reduce errors.