Record Nr.	UNINA9910779035203321
Autore Titolo	Aouad Ghassan Computer Aided Design Guide for Architecture, Engineering and Construction / / Aouad, Ghassan
Pubbl/distr/stampa	Routledge, , 2013
ISBN	1-134-00598-9 1-299-69289-3 1-134-00599-7 0-203-87875-2
Edizione	[1st edition]
Descrizione fisica	1 online resource (137 p.)
Disciplina	604.2
Soggetti	Computer-aided design Architecture - Computer-aided design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Computer Aided Design Guide for Architecture, Engineering and Construction; Copyright; Contents; Chapter 1 Introduction to CAD for the AEC/FM industry; 1.1 Introduction; 1.2 What is CAD?; 1.3 A brief history of CAD; 1.4 CAD technology; Chapter 2 Project and product modelling; 2.1 Introduction; 2.2 Why a process model?; 2.3 What is a process?; 2.4 Approaches to process modelling; 2.5 Product modelling; 2.6 Summary; Chapter 3 2D CAD; 3.1 An introduction to 2D CAD drafting; 3.2 The history of 2D CAD drafting; 3.3 2D drafting principles; 3.4 2D CAD practical examples; 3.5 Summary Chapter 4 3D CAD4.1 An introduction to 3D modelling; 4.2 3D modelling principles; 4.3 Creating a 3D model; 4.4 3D modelling practical examples; 4.5 Summary; Chapter 5 BIM (Building Information Modelling); 5.1 An introduction to BIM; 5.2 BIM applications within the AEC/FM industry; 5.3 The advantages and disadvantages of BIM; 5.4 BIM modelling principles; 5.5 Summary; Chapter 6 4D CAD; 6.1 An introduction to 4D CAD; 6.2 4D CAD in practice; 6.3 The advantages of 4D CAD; 6.4 The limitations of 4D CAD; 6.5 The 4D CAD modelling process; 6.6 Summary; Chapter 7 nD Modelling; 7.1 Introduction 7.2 What is nD modelling?7.3 nD modelling research development; 7.4

1.

	The future of nD modelling; Bibliography; Index
Sommario/riassunto	Recent years have seen major changes in the approach to Computer Aided Design (CAD) in the architectural, engineering and construction (AEC) sector. CAD is increasingly becoming a standard design tool, facilitating lower development costs and a reduced design cycle. Not only does it allow a designer to model designs in two and three dimensions but also to model other dimensions, such as time and cost into designs. Computer Aided Design Guide for Architecture, Engineering and Construction provides an in-depth explanation of all the common CAD terms and tools used in the AEC sector. It describes each approach to CAD with detailed analysis and practical examples. Analysis is provided of the strength and weaknesses of each application for all members of the project team, followed by review questions and further tasks. Coverage includes: 2D CAD 3D CAD 4D CAD nD modelling Building Information Modelling parametric design, virtual reality and other areas of future expansion. With practical examples and step-by step guides, this book is essential reading for students of design and construction, from undergraduate level onwards.