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ISBN	1-55753-854-9 1-61249-307-6
Descrizione fisica	1 online resource (206 p.)
Collana	Purdue information literacy handbooks
Disciplina	620/.00420711
Soggetti	TECHNOLOGY & ENGINEERING / Industrial Design / General EDUCATION / Teaching Methods & Materials / Science & Technology EDUCATION / Teaching Methods & Materials / Library Skills Information literacy Project method in teaching Engineering - Information resources - Study and teaching (Higher) Electronic books.
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	""Cover""; ""Copyright""; ""Contents""; ""Foreword""; ""Preface""; ""Introduction""; ""Part I: Information-Rich Engineering Design""; ""Chapter 1: Multiple Perspectives on Engineering Design ""; ""Chapter 2: Information Literacy and Lifelong Learning ""; ""Chapter 3: Ways That Engineers Use Design Information""; ""Chapter 4: Information-Rich Engineering Design: An Integrated Model""; ""Part II: Designing Information-Rich Engineering Design Experiences""; ""Chapter 5: Act Ethically: Design with Integrity"" ""Chapter 6: Build a Firm Foundation: Managing Project Knowledge Efficiently and Effectively"" ""Chapter 7: Find the Real Need: Understanding the Task ""; ""Chapter 8: Scout the Lay of the Land: Understanding the Broader Context of a Design Project ""; ""Chapter 9: Make It Safe and Legal: Meeting Broader Community Expectations ""; ""Chapter 10: Draw on Existing Knowledge: Taking Advantage of Prior Art ""; ""Chapter 11: Make Dependable Decisions: Using Information

Wisely"; "Chapter 12: Make It Real: Finding the Most Suitable Materials and Components"  
"Chapter 13: Get Your Message Across: The Art of Gathering and Sharing Information"  
"Chapter 14: Reflect and Learn: Capturing New Design and Process Knowledge"; "Part III: Ensuring That Students Develop Information Literacy Skills"; "Chapter 15: Scaffold and Assess: Preparing Students to Be Informed Designers"; "Conclusion"; "Contributors"; "Index"

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## Sommario/riassunto

"Engineering design is a fundamental problem-solving model used by the discipline. Effective problem-solving requires the ability to find and incorporate quality information sources. To teach courses in this area effectively, educators need to understand the information needs of engineers and engineering students and their information gathering habits. This book provides essential guidance for engineering faculty and librarians wishing to better integrate information competencies into their curricular offerings. The treatment of the subject matter is pragmatic, accessible, and engaging. Rather than focusing on specific resources or interfaces, the book adopts a process-driven approach that outlasts changing information technologies. After several chapters introducing the conceptual underpinnings of the book, a sequence of shorter contributions go into more detail about specific steps in the design process and the information needs for those steps. While they are based on the latest research and theory, the emphasis of the chapters is on usable knowledge. Designed to be accessible, they also include illustrative examples drawn from specific engineering sub-disciplines to show how the core concepts can be applied in those situations. "--

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