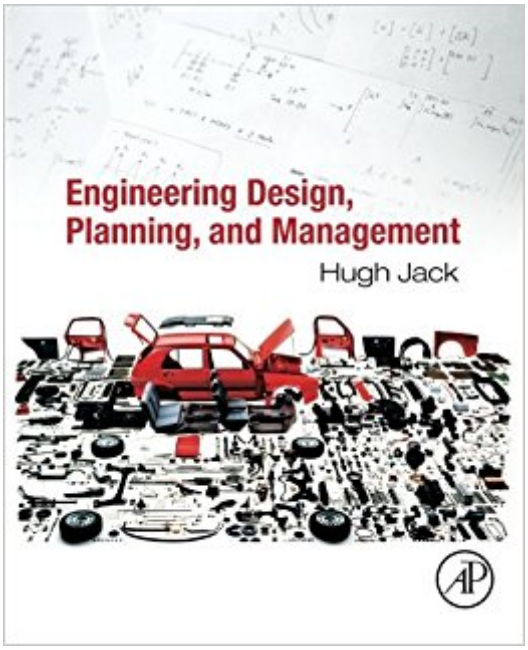
Engineering Design, Planning, And Management



Synopsis

Engineering Design, Planning and Management covers engineering design methodology with an interdisciplinary approach, concise discussions, and a visual format. The book explores project management and creative design in the context of both established companies and entrepreneurial start-ups. Readers will discover the usefulness of the design process model through practical examples and applications from across the engineering disciplines. The book explains useful design techniques such as concept mapping and weighted decision matrices, supported with extensive graphics, flowcharts, and accompanying interactive templates. The discussions are organized around 12 chapters dealing with topics such as needs identification and specification; design concepts and embodiments; decision making; finance, budgets, purchasing, and bidding; communication, meetings, and presentations; reliability and system design; manufacturing design; and mechanical design. Methods in the book are applied to practical situations where appropriate. The design process model is fully demonstrated via examples and applications from a variety of engineering disciplines. The text also includes end-of-chapter exercises for personal practice. This book will be of interest to product designers/product engineers, product team managers, and students taking undergraduate product design courses in departments of mechanical engineering and engineering technology. Chapter objectives and end-of-chapter exercises for each chapterSupported by a set of PowerPoint slides for instructor useAvailable correlation table links chapter content to ABET criteria

Book Information

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Customer Reviews

Covering engineering design methodology with an interdisciplinary approach, Engineering Design, Planning, and Management studies the different approaches to project management and creative design. Useful design techniques like concept mapping and weighted decision matrices are introduced with extensive graphics, flowcharts, and accompanying interactive templates. Recognizing that design is a process that is most often performed in teams, project management and team dynamic topics are also covered. Methods in the book are applied to practical situations where appropriate. Concise yet full of examples, Engineering Design, Planning, and Management is a useful tool for any student of engineering interested in product design. Key Features: Provides examples and applications from a variety of engineering disciplines, to fully demonstrate the design process model Explains development of successful design methods with flowcharts, checklists, and other useful templates Focuses and fosters discussion of project management techniques Includes end-of-chapter exercises for personal practice About the Author: Hugh Jack holds a Ph.D. in Mechanical Engineering from the University of Western Ontario. His work has been recognized by the American Society for Engineering Education (ASEE) and the Society of Manufacturing Engineers (SME), among others. In 2000, he was awarded the John T. Parsons Outstanding Young Manufacturing Engineer by the Society of Manufacturing Engineers (SME). Currently, Dr. Jack is a Professor of Product Design and Manufacturing Engineering at Grand Valley State University.

Product Design and Manufacturing EngineeringGrand Valley State UniversityDr. Jack holds a Bachelors degree in Electrical Engineering and a Masters and Ph.D. in Mechanical Engineering. His areas of interest include Manufacturing Controls, Robotics, Rapids Prototyping and Process Planning. In 2000 he was awarded the John T. Parsons Outstanding Young Manufacturing Engineer by the SME.

I use this in my University class I teach. Very understandable and head and shoulders over the older common texts used in most Systems classes.

You can understand easily about engineering, design management including skill, schedule, planning.I’d like to recommend this book who wants to know about engineering

nice, good transaction, low price.

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