









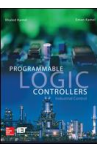











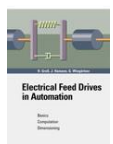






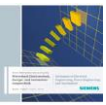

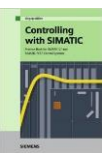


TEXTBOOK OVERVIEW

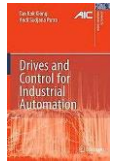

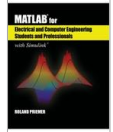

Book	Title	Author	Publisher	Edition	Price in \$	Ordering	LINKS	Summary
	Quick Start to Programming in Siemens Step 7 (TIA Portal)	Jon Stenerson David Deeg	CreateSpace Independent Publishing Platform	2015	29,95	ISBN 978-1515230946	LINK	This book is intended to meet the need for an easy-to-understand book that can quickly get the reader up and programming with Siemens Step 7. The book includes a link to download a trial version of Siemens Step 7 (TIA Portal) software. There are many practical explanations and examples to illustrate and ease learning. There is a step-by-step appendix on creating a project to ease the learning curve. The coverage of project organization provides the basis for a good understanding of programming and project organization. Linear and modular programming are covered to provide the basis for an understanding of how a Step 7 project is organized and how it functions. The book covers ladder logic and Function Block Diagram (FBD) programming. There is in-depth coverage of ladder logic, timers, counters, math, special instructions, and function blocks. There is also a chapter that features a step-by-step coverage on how to create a working HMI application. There are extensive questions and exercises for each chapter to guide and aid learning. The book includes answers to selected chapter questions and programming exercises.
	Siemens Step 7 (TIA Portal) Programming, a Practical Approach	Jon Stenerson David Deeg	CreateSpace Independent Publishing Platform	2015	37,98	ISBN 978-1515220541	LINK	The book includes a link to download a trial version of Siemens Step 7 (TIA Portal) software. There are many practical explanations and examples to illustrate and ease learning. There is also a step-by-step appendix on creating a project to ease the learning curve. The book covers various models of Siemens PLCs including S7-300, S7-1200, S7-400, and S7-1500. The coverage of project organization provides the basis for a good understanding of programming and project organization. The book covers ladder logic and Function Block Diagram (FBD) programming. Linear and modular programming are covered to provide the basis for an understanding of how an S7 project is organized and how it functions. There is in-depth coverage of ladder logic, timers, counters, math, special instructions, function blocks, and technology objects. Wiring and use of I/O modules for various PLC models is covered. Sinking/sourcing, and the wiring of digital and analog modules are covered. There are also practical examples of the use and application of analog modules and their resolution. There is also a chapter that features step-by-step coverage on how to create a working HMI application. The setup and application of Technology Objects for PID and motion control are also covered. There are extensive questions and exercises for each chapter to guide and aid learning. The book includes answers to selected chapter questions and programming exercises.
	Industrial Software Applications. A Master's Course for Engineers	Rainer Geisler	De Gruyter; Oldenbourg	2015	45,99	ISBN 978-3-11-037098-0	LINK	Each day, engineers and technical professionals encounter Information Technology issues, such as implementing IT systems, managing them, and taking part in requirements analysis/vendor selection. Thorough knowledge of these concepts, along with a basic understanding of modern ERP Systems, is indispensable to these professionals. Additionally, engineers are expected to understand and apply the terminology and tools for software management. This book focuses on several vital areas of information systems. First, it explores the types and uses of industrial IT systems and how they are connected to support business processes. Secondly, the concepts behind production planning and enterprise resource planning are explained, using real-world examples from SAP. An overview of IT governance and management concepts enables the reader to actively manage the relationship between technical business departments and IT departments. In the area of software creation, four basic decisions are described: business planning for IT systems, requirements for engineering and specification, vendor selection, and outsourcing considerations. The methods for illustrating processes, use cases and business structures are explained, as well as tools for choosing software with a decision matrix and scoring model. Finally, important aspects of IT project management and IT system testing are discussed. Change management, an essential component of any successful implementation, is explained using theoretical background and practical hints. - Focus on industrial application systems for mechanical engineers - Full 5 ECTS study module for master's-level students and professionals - Close connection between theory and practical application - Relevant examples of SAP, one of the leading ERP systems 150 multiple-choice questions and practical exercises.
	Programmable Logic Controllers	W. Bolton	Newnes	sixth edition 2015	38,99	ISBN: 978-0-12-802929-9	LINK	This textbook, now in its sixth edition, continues to be straightforward and easy-to-read, presenting the principles of PLCs while not tying itself to one manufacturer or another. Extensive examples and chapter ending problems utilize several popular PLCs, highlighting understanding of fundamentals that can be used regardless of manufacturer. This book will help you to understand the main design characteristics, internal architecture, and operating principles of PLCs, as well as identify safety issues and methods for fault diagnosis, testing, and debugging. New to This edition: A new chapter 1 with a comparison of relay-controlled systems, microprocessor-controlled systems, and the programmable logic controller, a discussion of PLC hardware and architecture, examples from various PLC manufacturers, and coverage of security, the IEC programming standard, programming devices and manufacturer's software. More detail of programming using Sequential Function Charts. Extended coverage of the sequencer. More information on fault finding, including testing inputs and outputs with an illustration of how it is done with the PLC manufacturer's software. New case studies.
	Internet of Things Principles and Paradigms	Rajkumar Buyya Amir Vahid Dastjerdi	Morgan Kaufmann Publishers In	2016 NEW!	73,90	ISBN: 978-0-12-805395-9	LINK	Internet of Things: Principles and Paradigms captures the state-of-the-art research in Internet of Things, its applications, architectures, and technologies. The book identifies potential future directions and technologies that facilitate insight into numerous scientific, business, and consumer applications. The Internet of Things (IoT) paradigm promises to make any electronic devices part of the Internet environment. This new paradigm opens the doors to new innovations and interactions between people and things that will enhance the quality of life and utilization of scarce resources. To help realize the full potential of IoT, the book addresses its numerous challenges and develops the conceptual and technological solutions for tackling them. These challenges include the development of scalable architecture, moving from closed systems to open systems, designing interaction protocols, autonomous management, and the privacy and ethical issues around data sensing, storage, and processing.

Book	Title	Author	Publisher	Edition	Price in \$	Ordering	LINKS	Summary
	How to Succeed in the Digital Age. Strategies from 17 Top Managers	Rupert Stadler Walter Brenner Andreas Herrmann	Frankfurter Allgemeine Buch	2014	29,90	ISBN: 978-3-95601-042-2	LINK	It's starting to look as if the whirlwind of the Internet revolution might be petering out to a gentle breeze. The customer's new position of power is now a well-established fact. For the business world, Facebook and Twitter accounts, coupled with an attractive website, now rank high on most checklists for corporate success. But is that really enough? In a world where even the smallest air current can build into a powerful storm, it can obviously prove to be a mistake not to keep a constant watch on the ever-changing digitalization trend - the trend that is generating new data and networking ever more physical products all the time. How fast can an online post by a single disgruntled customer call forth hordes of angry users that can do lasting damage to a company's reputation? Could data be the key to business success in the future? Success in the Digital Age is the first-ever collection of success stories and reports of real-world experiences by 17 CEOs and leading executives from a diverse range of industries as well as leading academics.
	Process Control Systems Engineering	Leon Urbas	Oldenburg Industrieverlag	2012	39,61	ISBN: 978-3838631984	LINK	Process Control Systems (PCS) are distributed control systems (DCS) that are specialized to meet the requirements of the process industries. Many processes and plants of that domain have high safety and availability requirements, are instrumented with a large number of sensors and actuators and show a rather high degree of automation at least in standard operation regimes. There are remarkable differences and cross-discipline interdependencies between chemical-physical properties of the substances, procedures, unit operations, equipment, instrumentation and control strategies. This results in the observation that there hardly any two plants that are identical, even if the products are interchangeable. Thus, it is not surprising, that there is an ongoing discussion if each domain of the process industries, namely chemicals, pharma, pulp & paper, oil & gas, food & beverages and water/waste water treatment should have its own specialized automation system. On the contrary, there are some opinions that PCS architectures that address all of the distinct requirements of the process industries, should even be generic enough to render the distinction between PCS and e.g. DCS for power generation and distribution a merely marketing or historical issue, not a technical one.
	STEP 7 in 7 Steps: A Practical Guide to Implementing S7-300/S7-400 Programmable Logic Controllers	Clarence T. Jones	Patrick-Turner Publishing	2009	64,99	ISBN: 978-1889101033	LINK	The book is uniquely organized to include seven practical steps associated with getting the job done efficiently and painlessly. A task-oriented guide to configuring, programming, deploying, troubleshooting, and maintaining S7-300/S7-400 PLCs and Simatic Networks. Each of the seven task areas are introduced with a brief tutorial that is followed up with a number of actual task examples. Each task is presented in a two-page spread layout. On the left-hand page, the task is described under the headings Basic Concept, Essential Elements, and Application Tips. On the right-hand page, the task is presented in a step-by-step table format. With over 150 example tasks, your tasks are surely already done! Step 1 — Getting Started with STEP 7 Step 2 — Working with Projects and Libraries Step 3 — Working with Hardware Configurations Step 4 — Working with Programs and Data Step 5 — Managing Online Interactions with the CPU Step 6 — Working with Monitoring and Diagnostic Tools Step 7 — Working with Simatic Network Configurations Book Highlights - 464 pages - Appendix and Index - Extensive Glossary - Over 175 Examples of Actual Tasks - Each Example Presented in a 2-page layout - Presented in Concise and Easily Read Language
	STEP 7 programming made easy in LAD and FBD and STL a practical guide to programming S7 300/s7/400 programmable logic controllers	Clarence T. Jones	Patrick-Turner Publishing	2013	64,99	ISBN: 978-1889101040	LINK	New from C.T. Jones - May 2013 Availability: Finally, STEP 7 programming is made crystal clear! This new book introduces and thoroughly covers every important aspect of developing STEP 7 programs in LAD, FBD, and STL. You'll learn to correctly apply and develop STEP 7 programs from addressing S7 memory areas and I/O modules, to using Functions, Function Blocks, Organization Blocks, and System Blocks. With over 500 illustrations and examples, STEP7 program development is certainly made easier. A programming assistant for every STEP 7 user.
	Programmable Logic Controllers the Complete Guide to the Technology	Clarence T. Jones	Patrick-Turner Publishing	1996	145,71	ISBN: 978-1889101002	LINK	Programmable Logic Controllers includes 15 in-depth chapters covering the basics, as well as every important aspect of PLCs. Each topic is written in a modular style that allows each subject to be covered thoroughly and in one place. Chapters on specialized topics such as Programming and Documenting the Control System, Introduction to Local Area Networks, and Intelligent I/O provide a plain English and thorough introduction to important related topics. These chapters are like books in themselves. This book provides the most comprehensive, practical, and easy to understand source on the subject of PLCs. It's a great resource for the whole engineering or maintenance team. The answers to the many questions readers have regarding system design, programming, implementation, startup, and maintenance will be made crystal clear!
	Programmable Logic Controllers: Industrial Control (Mechanical Engineering)	Khaled Kamel Eman Kamel	Professional	1st edition 2013	90,86	ISBN: 978-0071810456	LINK	<i>Programmable Logic Controllers: Industrial Control</i> offers a thorough introduction to PLC programming with focus on real-world industrial process automation applications. The Siemens S7-1200 PLC hardware configuration and the TIA Portal are used throughout the book. A small, inexpensive training setup illustrates all programming concepts and automation projects presented in the text. Each chapter contains a set of homework questions and concise laboratory design, programming, debugging, or maintenance projects. This practical resource concludes with comprehensive capstone design projects so you can immediately apply your new skills.
	LOGO! 8! Practical introduction with circuit and programming examples	Stefan Kruse	PUBLICIS	2015	24,90	ISBN: 978-3-89578-445-3 Siemens internal order via http://books.erlm.siemens.de	LINK	This practical guide descriptively illustrates how to plan LOGO! 8 projects, develop programs and how to select the hardware. Standard control technology scenarios are thereby demonstrated by building on the fundamentals of modern information technology and with the help of several real-life sample switches. Readers are provided with practice-oriented descriptions of various basic and special LOGO! 8 modules with which specific tasks can be very flexibly implemented. Contents Fundamentals of modern information technology • The LOGO! Soft Comfort software • LOGO! 8 connection and program transfer • Easy LOGO! 8 exercises and sample switches • Examples of LOGO! 8 usage in daily practice: Automated garden irrigation, personalized access control, energy savings with LOGO!, power supply for a garden building, automated lawn mower, automated terrarium and aquarium, solar system extension with a Scandinavian wooden stove, versatile weather station – Fault alerts and problems.

Book	Title	Author	Publisher	Edition	Price in \$	Ordering	LINKS	Summary
	Electrical Drives Principles, Planning, Applications, Solutions (PRINT and E-BOOK)	Jens Weidauer Richard Messer	PUBLICIS	2014	49,90	ISBN: 978-3-89578-434-7 Siemens internal order via http://books.erm.siemens.de	LINK	From the point of view of a user this book covers all aspects of modern electrical drives. It is aimed at both users, who wish to understand, design, use, and maintain electrical drives, as well as specialists, technicians, engineers, and students, who wish to gain a comprehensive overview of electrical drives. Jens Weidauer and Richard Messer describe the principles of electrical drives, their design, and application, through to complex automation solutions. In the process, they introduce the entire spectrum of drive solutions available and their main applications. A special aspect is the combination of multiple drives to form a drive system, as well as the integration of drives into automation solutions. In simple and clear language, and supported with many diagrams, complex relationships are described and presented in an easy-to-understand way. The authors deliberately avoid a comprehensive mathematical treatment of their subject and instead focus on a coherent description of the active principles and relationships. As a result, the reader will be in a position to understand electrical drives as a whole and to solve drive-related problems in everyday professional life.
	Automating with SIMATIC (PRINT and E-BOOK)	Hans Berger	PUBLICIS	5th edition, 2013	44,90	ISBN: 978-3-89578-387-6 Siemens internal order via http://books.erm.siemens.de	LINK	Taking the example of the SIMATIC S7 programmable controller, this book provides a comprehensive introduction to the architecture and operation of a state-of-the-art automation system. It also gives an insight into configuration and parameter setting for the controller and the distributed I/O. Communication via network connections is explained, along with a description of the available scope for operator control and monitoring of a plant. The new engineering framework TIA Portal combines all the automation software tools in a single development environment. Inside the TIA Portal, SIMATIC STEP 7 Professional V11 is the comprehensive engineering package for SIMATIC controllers. As the central engineering tool, STEP 7 manages all the necessary tasks, supports programming in the IEC languages LAD, FBD, STL, S7-SCL and S7-GRAPH, and also contains S7-PLCSIM for offline tests. As well as updating the previously-depicted components, this edition also presents new SIMATIC S7-1200 hardware components for PROFIBUS and PROFINET. In addition to the STEP 7 V5.5 engineering software, now STEP 7 Professional V11 is also described, complete with its applications inside TIA Portal. The book is ideally suited to all those, who, despite little previous knowledge, wish to familiarize themselves with the topic of programmable logic controllers and the architecture and operation of automation systems.
	Automating with SIMATIC S7-300 inside TIA Portal Hardware Components, Programming with STEP 7 Basic in LAD and FBD, Visualization with HMI Basic Panels (PRINT and E-BOOK)	Hans Berger	PUBLICIS	2nd edition, 2014	79,90	ISBN: 978-3-89578-443-9 Siemens internal order via http://books.erm.siemens.de	LINK	SIMATIC S7-300 has been specially designed for innovative system solutions in the manufacturing industry, and with a diverse range of controllers it offers the optimal solution for applications in centralized and distributed configurations. Alongside standard automation safety technology and motion control can also be integrated. The TIA Portal user interface is tuned to intuitive operation and encompasses all the requirements of automation within its range of functions: from configuring the controller, through programming in the different languages, all the way to the program test and simulation. For beginners engineering is easy to learn and for professionals it is fast and efficient. This book describes the configuration of devices and network for the S7-300 components inside the new engineering framework TIA Portal. With STEP 7 Professional V12, configuring and programming of all SIMATIC controllers will be possible in a simple and efficient way; in addition to various technology functions the block library also contains a PID control. As reader of the book you learn how a control program is formulated and tested with the programming languages LAD, FBD, STL and SCL. Descriptions of configuring the distributed I/O with PROFIBUS DP and PROFINET IO using SIMATIC S7-300 and exchanging data via Industrial Ethernet round out the book.
	Automating with SIMATIC S7-400 inside TIA Portal Hardware Components, Programming with STEP 7 Basic in LAD and FBD, Visualization with HMI Basic Panels (PRINT and E-BOOK)	Hans Berger	PUBLICIS	2013	69,90	ISBN: 978-3-89578-383-8 Siemens internal order via http://books.erm.siemens.de	LINK	The user interface of the engineering framework TIA Portal is tuned to intuitive operation and encompasses all the requirements of automation within its range of functions: from configuring the controller, through programming in the different languages, all the way to the program test. The book describes the configuration and network configuring of the SIMATIC S7-400 components with the STEP 7 V11 engineering software in the programming languages LAD, FBD, STL and SCL. The distributed I/O is configured with PROFIBUS DP and PROFINET IO, and data exchange is configured via Industrial Ethernet. Content System overview SIMATIC S7-400 and STEP 7 Professional V11 (TIA Portal) • Hardware components • Device configuration and network configuring • Operating states and user program execution • Programming with LAD, FBD, STL, and SCL • Variables and data types • Description of the program functions • Online mode, program test and diagnostics • PROFIBUS, PROFINET and communication via Industrial Ethernet
	Automating with SIMATIC S7-1200 Hardware Components, Programming with STEP 7 Basic in LAD and FBD, Visualization with HMI Basic Panels (PRINT and E-BOOK)	Hans Berger	PUBLICIS	2nd enlarged and revised edition, 2013	49,90	ISBN: 978-3-89578-356-2 Siemens internal order via http://books.erm.siemens.de	LINK	S7-1200 is the first controller of the new SIMATIC generation. The book presents the hardware components of the automation system S7-1200 as well as its configuration and parameterization. A profound introduction into STEP 7 Basic (TIA Portal) shows the basics of programming and trouble shooting. Content Introduction into STEP 7 Basic and into project handling • Hardware components S7-1200 • Device configuration and network planning • Operating conditions and running the user program • Programming in LAD and FBD • Variables and data types • Description of all program functions • Online operation, program test and diagnosis • Communication via PROFINET and point-to-point connection • Visualization with HMI basic panels
	Automating with SIMATIC S7-1500 (PRINT and E-BOOK)	Hans Berger	PUBLICIS	2014	81,71	ISBN: 978-3-89578-404-0 Siemens internal order via http://books.erm.siemens.de	LINK	The SIMATIC S7-1500 controller sets new standards in productivity and efficiency in control technology with its many innovations. The new controller with its outstanding system performance and with PROFINET as standard interface ensures extremely short system response times and the highest control quality with a maximum of flexibility for most demanding automation tasks. A new backplane bus with a high baud rate and efficient transmission protocol ensures this excellent system performance. With PLCopen, the controller provides standardized components for the connection of drives that support PROFIdrive without additional modules. Comprehensive Trace functionalities for all CPU variables allow precise diagnosis of user programs and motion applications as well as fast optimization of drives and controls. The integrated security concept includes authorization levels, component protection and even communication integrity. Thus, it protects your investment and contributes to high plant availability. In the book, the new automation system is presented in detail. You learn how the consistent control concept for controllers, HMI, and drives is implemented inside TIA portal with common data storage and how you to make the most effective use of the advantages of the TIA portal.

Book	Title	Author	Publisher	Edition	Price in \$	Ordering	LINKS	Summary
	Automating with STEP 7 in LAD and FBD SIMATIC S7-300/400 Programmable Controllers	Hans Berger	PUBLICIS	5th revised and enlarged edition 2012	69,90	ISBN: 978-3-89578-410-1 Siemens internal order via http://books.erm.siemens.de	LINK	This book was written for all users of SIMATIC S7 controllers. It describes elements and applications of the graphic-oriented programming languages LAD (ladder diagram) and FBD (function block diagram) for use with both SIMATIC S7-300 and SIMATIC S7-400. It provides an introduction to latest version of the programming software STEP 7 with new functions for PROFINET IO. First-time users are introduced to the field of programmable controllers, while advanced users learn about specific applications of the SIMATIC S7 automation system. Contents • Operation Principle of Programmable Controllers • System overview: SIMATIC S7 und STEP 7 – LAD und FBD Programming languages • Data Types • Binary und Digital Instructions • Program Sequence Control • User Program Execution.
	Automating with STEP 7 in STL and SCL SIMATIC S7-300/400 Programmable Controllers	Hans Berger	PUBLICIS	6th revised and enlarged edition 2012	69,90	ISBN: 978-3-89578-412-5 Siemens internal order via http://books.erm.siemens.de	LINK	The readers learn all about elements and applications of the text-oriented programming languages statement list (STL) and structured control language (SCL) for use with both SIMATIC S7-300 and SIMATIC S7-400. It provides an introduction to the latest version of the programming software STEP 7. First-time users are introduced to the field of programmable controllers, while advanced users learn about specific applications of the SIMATIC S7 automation system. Contents • System overview: SIMATIC S7 and STEP 7 • Programming languages STL and SCL • Data types • Binary and digital STL operations • Program flow control • Program execution
	Planning Guide for Power Distribution Plants Design, Implementation and Operation of Industrial Networks (PRINT and E-BOOK)	Hartmut Kiank Wolfgang Fruth	PUBLICIS	2011	69,90	ISBN: 978-3-89578-371-5 Siemensinterne Bestellung: http://books.erm.siemens.de	LINK	This book is intended for engineers and technicians of the energy industry, industrial companies and planning departments. It provides basic technical network and plant knowledge on planning, installation and operation of reliable and economic industrial networks. In addition, it facilitates training for students and graduates in this field. In an easy and comprehensible way, this book informs about solution competency gained in many years of experience. Moreover, it also offers planning recommendations and knowledge on standards and specifications, the use of which ensures that technical risks are avoided and that production and industrial processes can be carried out efficiently, reliably and with the highest quality.
	Automating with PROFINET Industrial Communication based on Industrial Ethernet	Raimond Pigan Mark Metter	PUBLICIS	2nd revised edition 2008	59,90	ISBN: 978-3-89578-294-7 Siemens internal order via http://books.erm.siemens.de	LINK	This book serves as an introduction to PROFINET technology. Configuring engineers, commissioning engineers and technicians are given an overview of the concept and the fundamentals they need to solve PROFINET-based automation tasks. Technical relationships and practical applications are described using SIMATIC products as example. Contents Fundamentals and Protocols • Ethernet • Real-time Communication • PROFINET IO • PROFINET CBA • User Interfaces • SIMATIC and PROFINET Devices and Network structures • Security and Safety with PROFIsafe
	Electrical Feed Drives in Automation Basics, Computation, Dimensioning	Hans Groß Jens Hamann Georg Wiegärtner	PUBLICIS	2001	69,00	ISBN: 978-3-89578-148-3 Siemens internal order via http://books.erm.siemens.de	LINK	This book gives a comprehensive introduction to the physical and technological fundamentals of automatic control and drive technology with special emphasis on the computation and dimensioning of electrical feed drives for automation. Contents • Fundamentals of Automatic Control Technology • Control Circuits • Bearing Control • Computation and Dimensioning
	Dictionary of Drives and Mechatronics Deutsch-Englisch; English-German	Thomas Antoni	PUBLICIS	3rd revised and enlarged edition 2007	89,90	ISBN: 978-3-89578-282-4 Siemens internal order via http://books.erm.siemens.de	LINK	The dictionary offers a comprehensive collection of terms for the areas of drive systems, automation, mechatronics, and related fields, e.g. field bus technology and electrical machines. For this edition, the number of entries has been enlarged by more than 20 percent, resulting in a total of nearly 74,000 entries with 145,000 translations. The large number of comments and well-conceived order of translations for each entry make this dictionary especially user-friendly.
	Dictionary of Drives and Mechatronics / Wörterbuch Antriebstechnik und Mechatronik: CD-ROM English-German / Deutsch- Englisch, 3rd Edition	Thomas Antoni	PUBLICIS	2008	109,00	ISBN: 978-3-89578-283-1 Siemens internal order via http://books.erm.siemens.de	LINK	The dictionary offers a comprehensive collection of terms for the areas of drive systems, automation, mechatronics, and related fields, e.g. field bus technology and electrical machines. For this edition, the number of entries has been enlarged by more than 20 percent, resulting in a total of nearly 74,000 entries with 145,000 translations. The large number of comments and well-conceived order of translations for each entry make this dictionary especially user-friendly.

Book	Title	Author	Publisher	Edition	Price in \$	Ordering	LINKS	Summary
	Dictionary of Electrical Engineering, Power Engineering and Automation, Part 1 German-English	Industry Automation Translation Services	PUBLICIS	6th revised and enlarged edition 2011	89,90	ISBN: 978-3-89578-313-5	LINK	With about 12,000 entries and 166,000 translations in Volume 1 (German-English) and 115,000 entries and 150,000 translations in Volume 2 (English-German) this worldwide-respected dictionary is the modern standard work for all those requiring a comprehensive and reliable compilation of terms from all fields of industrially applied electrical engineering.
	Dictionary of Electrical Engineering, Power Engineering and Automation, Part 2 English-German	Industry Automation Translation Services	PUBLICIS	6th revised and enlarged edition 2010	89,90	ISBN: 978-3-89578-314-2 Siemens internal order via http://books.erlm.siemens.de	LINK	With about 12,000 entries and 166,000 translations in Volume 1 (German-English) and 115,000 entries and 150,000 translations in Volume 2 (English-German) this worldwide-respected dictionary is the modern standard work for all those requiring a comprehensive and reliable compilation of terms from all fields of industrially applied electrical engineering.
	Wörterbuch Elektrotechnik, Energie- und Automatisierungs-technik (CD-ROM) Dictionary of Electrical Engineering, Power Engineering and Automation	Industry Automation Translation Services	PUBLICIS	2011	189,00	ISBN: 978-3-89578-315-9 Siemens internal order via http://books.erlm.siemens.de	LINK	With about 128,000 entries and 168,000 translations in Volume 1 (German-English) and 115,000 entries and 150,000 translations in Volume 2 (English-German) this worldwide-respected dictionary is the modern standard work for all those requiring a comprehensive and reliable compilation of terms from all fields of industrially applied electrical engineering.
	Optimizing Processes with RFID and Auto ID Fundamentals, Problems and Solutions, Example Applications E-BOOK	Norbert Bartneck Volker Klaas Holger Schoenherr (Eds.)	PUBLICIS	2009	33,99	ISBN: 978-3-89578-646-4 Siemens internal order via http://books.erlm.siemens.de	LINK	Radio Frequency Identification (RFID) is the technology applied for unambiguous and contactless identification of all types of objects. Varying magnetic fields or radio waves enable contactless data transfer as well as fast, automatic data collection. In addition, the importance of optical codes gains further importance due to their specific advantages. RFID and Auto ID systems are used in a wide range of sectors - from the consumer goods industry and trade via the automobile and aerospace industries to the chemicals and pharmaceuticals industries, logistics and transport facilities too. New potentials to secure competitive advantages can be utilized with early planning of the application of RFID and Auto ID in procurement, manufacturing and logistics. In addition to RFID and Auto ID technology, this book presents applications from different areas of application which have now already been tried and tested. They demonstrate the approach, the process and the selection of RFID and Auto ID systems for various problems. A perspective on trends and innovative security solutions shows possible future application options for this technology.
	Controlling with SIMATIC: Practice Book for SIMATIC S7 and SIMATIC PCS7 Control Systems	Jürgen Müller	PUBLICIS	2005	491,01	ISBN: 978-3895782558	LINK	This book discusses the practical aspects of control engineering as a subdomain of automation and control using as example the SIMATIC S7 control system. It is directed at people responsible for planning and configuration, working in marketing and sales, and at those involved in the implementation or commissioning of control systems in production engineering and industrial plant construction. It is equally suitable for engineers, configuring engineers and process engineers. Theoretical knowledge and practical experience from the world of control engineering are combined in such a way that they can be quickly and easily converted into automation solutions - both for control systems in production-related applications with SIMATIC S7 and for control systems in industrial installations with SIMATIC PCS7. The examples are based on existing industrial applications and offer readers valuable impulses and support for configuring and commissioning their own control applications.
	Automating with SIMATIC: Controllers, Software, Programming, Data Communication Operator Control and Process Monitoring	Hans Berger	PUBLICIS	2009	843,00	ISBN: 978-3895783333	LINK	Totally Integrated Automation is the concept by means of which SIMATIC controls machines, manufacturing systems and technical processes. Taking the example of the S7-300/400 programmable controller, this book provides a comprehensive introduction to the architecture and operation of a state-of-the-art automation system. It also gives an insight into configuration and parameter setting for the controller and the distributed I/O. Communication via network connections is explained, along with a description of the available scope for operator control and monitoring of a plant. As the central automation tool, STEP 7 manages all relevant tasks and offers a choice of various text and graphics-oriented PLC programming languages. The available languages and their respective different features are explained to the reader. The fourth edition describes the latest components and functions. The STEP 7 basic software is explained in its latest version. New functions for Profinet IO and the open communication over Industrial Ethernet have been added. The book is ideal for those who have no extensive prior knowledge of programmable controllers and wish for an uncomplicated introduction to this subject.
	Internet of Things - From Hype to Reality. The Road to Digitization	Ammar Rayes, Salam Samer	Springer	2017 NEW!	96,29	ISBN: 978-3-319-44858-9	LINK	This book comprehensively describes an end-to-end Internet of Things (IoT) architecture that is comprised of devices, network, compute, storage, platform, applications along with management and security components. It is organized into five main parts, comprising of a total of 11 chapters. Part I presents a generic IoT reference model to establish a common vocabulary for IoT solutions. This includes a detailed description of the Internet protocol layers and the Things (sensors and actuators) as well as the key business drivers to realize the IoT vision. Part II focuses on the IoT requirements that impact networking protocols and provides a layer-by-layer walkthrough of the protocol stack with emphasis on industry progress and key gaps. Part III introduces the concept of Fog computing and describes the drivers for the technology, its constituent elements, and how it relates and differs from Cloud computing. Part IV discusses the IoT services platform, the cornerstone of the solution followed by the Security functions and requirements. Finally, Part V provides a treatment of the topic of connected ecosystems in IoT along with practical applications. It then surveys the latest IoT standards and discusses the pivotal role of open source in IoT.

Book	Title	Author	Publisher	Edition	Price in \$	Ordering	LINKS	Summary
	Drives and Control for Industrial Automation	Kok Kiong Tan Andi Sudjana Putra	Springer	2012	11,05	ISBN: 978-1447126065	LINK	Drives and Control for Industrial Automation presents the material necessary for an understanding of servo control in automation. Beginning with a macroscopic view of its subject, treating drives and control as parts of a single system, the book then pursues a detailed discussion of the major components of servo control: sensors, controllers and actuators. Throughout, the mechatronic approach – a synergistic integration of the components – is maintained, in keeping with contemporary practice. The authors' holistic approach does not preclude the reader from learning in a step-by-step fashion – each chapter contains material that can be studied separately without compromising understanding. Drives are described in several chapters organized according to the way they are usually classified in industry, each comprised of its actuators and sensors. The controller is discussed alongside. Topics of recent and current interest – piezoelectricity, digital communications and future trends – are detailed in their own dedicated chapters. Drives and Control for Industrial Automation is primarily written for engineers and researchers interested in the applications of sensors, actuators and control systems in the automated environment. The discussion is thorough with the basics laid out succinctly but in sufficient detail to be useful to non-expert readers so students will also find this monograph a profitable source of information.
	Programmable Logic Controller (PLC) Tutorial, Siemens SIMATIC S7-1200	Stephen P. Tubbs	Stephen Philip Tubbs	2016	44,95	ISBN: 978-0981975368	LINK	This book teaches and demonstrates the basics of the Siemens S7-1200 family of programmable logic controllers. Information is provided to help the reader get and operate an inexpensive CPU 1212C programmable logic controller, associated hardware, and STEP 7 Basic software. Examples with circuit diagrams are provided to demonstrate CPU 1212C ladder logic program capabilities. Information is also provided to relate the CPU 1212C to other programmable logic controllers. The person completing the examples will be able to write useful ladder logic programs for the entire S7-1200 family of programmable logic controllers.
	MATLAB® for Electrical and Computer Engineering Students and Professionals. With Simulink® [E-Book]	Roland Priemer	Inst of Engineering & Technology	2013	71,33	ISBN: 9781613531884	LINK	This book combines the teaching of the MATLAB programming language with the presentation and development of carefully selected electrical and computer engineering (ECE) fundamentals. This is what distinguishes it from other books concerned with MATLAB: it is directed specifically to ECE concerns. Students will see, quite explicitly, how and why MATLAB is well suited to solve practical ECE problems. This book is intended primarily for the freshman or sophomore ECE major who has no programming experience, no background in EE or CE, and is required to learn MATLAB programming. It can be used for a course about MATLAB or an introduction to electrical and computer engineering, where learning MATLAB programming is strongly emphasized. A first course in calculus, usually taken concurrently, is essential. The book will also serve EE or CE professionals who need to learn MATLAB and who prefer learning via examples directly relevant to their work. The distinguishing feature of this MATLAB book is that about 15 per cent develops ECE fundamentals gradually, from very basic principles. Because these fundamentals are interwoven throughout, MATLAB can be applied to solve relevant, practical problems. The plentiful, in-depth example problems to which MATLAB is applied were carefully chosen so that results obtained with MATLAB also provide insights about the fundamentals.
	PLC-Basic Course with SIMATIC S7	Jürgen Kraftan	Vogel Business Media GmbH	1th edition 2011	49,80	ISBN: 978-3834332011	LINK	This PLC-basic course explains the logic control with SIMATIC S7-300. For all programming examples from the practice, also a solution is provided. This book is suitable for trade schools, technical colleges and others, as well as for private study. It contains: Arrangement and functioning of a PLC Program processing and programming Logic operations an program input Momentary impulses, timing functions, clock generators, comparators Practical examples with simulators Sequence control systems Safety regulations Appendix with solutions.