

Aktu B Tech 1st Year Syllabus

This book is intended as a textbook for the first-year undergraduate engineering students of all disciplines. The text, written in a student-friendly manner, covers a wide range of topics of engineering interest both from the domains of applied and modern physics. It is meticulously tailored to cover the syllabi needs of almost all the Indian universities and institutes. With its exhaustive treatment of different topics in one volume, it relieves the engineering students of the arduous task of referring to several books. Besides engineering students, this book will be equally useful to the BSc (Physics) students of different universities. **KEY FEATURES** Simple and clear diagrams throughout the book help students in understanding the concepts clearly. Numerous in-chapter solved problems, chapter-end unsolved problems (with answers) and review questions assist students in assimilating the theory comprehensively. A large number of objective type questions at the end of each chapter help students in testing their knowledge of the theory.

Every few generations, there is a 'killer app' (i.e. the spreadsheet, email, etc.). These are apps that change the industry in such a way that changes the way people work. The current killer app is Bitcoin, because it is essentially allowing software to generate money from 'mined' data. Bitcoin also started the cryptocurrencies and Blockchain movement that is revolutionizing the financial industry. Each of these two technologies has started whole new movements that are creating new companies, wealth, and products.

Programming for Problem Solving (All India)

This Book Is Based On The Common Core Syllabus Of Up Technical University. It Explains, In A Simple And Systematic Manner, The Basic Principles And Applications Of Engineering Physics. After Explaining The Special Theory Of Relativity, The Book Presents A Detailed Analysis Of Optics. Scalar And Vector Fields Are Explained Next, Followed By Electrostatics. Magnetic Properties Of Materials Are Then Described. The Basic Concepts And Applications Of X-Rays Are Highlighted Next. Quantum Theory Is Then Explained, Followed By A Lucid Account Of Lasers. After Explaining The Basic Theory, The Book Presents A Series Of Interesting Experiments To Enable The Students To Acquire A Practical Knowledge Of The Subject. A Large Number Of Questions And Model Test Papers Have Also Been Added. Different Chapters Have Been Revised And More Numerical Problems As Per Requirement Have Been Added. The Book Would Serve As An Excellent Text For First Year Engineering Students. Diploma Students Would Also Find It Extremely Useful.

For B.E./B.Tech. / B.Arch. Students for First Semester of all Engineering Colleges of Maha Maya Technical University, Noida and Gautam Buddha Technical University, Lucknow

Dr. APJ. Abdul Kalam Technical University (Formerly Known as Uttar Pradesh Technical University) conducts a state level entrance examination called UPSEE

also known as Uttar Pradesh State Entrance Exam for both UG and PG courses, each year it shortlist students as per their rankings and accordingly allocates them colleges. In order to get admissions in UPTU Engineering Stream it is mandatory to have good ranking in the written examination. The present edition of "15 YEARS' SOLVED PAPERS UPTU/UPSEE" provides the complete package of Physics, Chemistry and Mathematics Questions which gives the exact idea of the examination pattern and the answer writing skills in the paper. Authentic and Complete Solutions are given of each question of 15 Years' [2005-2019] Papers in lucid language that clears all the concepts, doubts of the students and easily understood by the candidates. Ample amount of questions are provided for thorough practice so that candidates will be able to qualify the exam with good rankings. Preparation from this book help students to step ahead towards their goal. TABLE OF CONTENT Solved Papers 2005-2019.

The book is designed to help the first year engineering students in building their concepts in the course on Programming for Problem Solving. It introduces the subject in a simple and lucid manner for a better understanding. It adopts a student friendly approach to the subject matter with many solved examples and unsolved questions, illustrations and well-structured C programs.

Vidya Academy of Science & Technology (VAST) is a state-of-the-art engineering college conforming to international standards. This model engineering college is approved by AICTE and affiliated to the University of Calicut & APJ AKTU, Kerala. In few years VAST has evolved and achieved recognition as a notable School of Engineering with its competent and committed faculty, high quality infrastructure and high technology teaching aids, and by providing a serene atmosphere that complements academic life. VAST has a holistic approach to education where academic training goes hand in hand with offerings that develop the body, mind and soul to prepare its graduates to be future leaders..

Fundamentals of Object-Oriented Design in UML shows aspiring and experienced programmers alike how to apply design concepts, the UML, and the best practices in OO development to improve both their code and their success rates with object-based projects.

Modern Engineering Physics S. Chand Publishing

This book doesn't assume any programming background. It begins with the basics and steadily builds the pace so that the reader finds it easy to handle advanced topics towards the end of the book. Each chapter contains:--Lucid explanation of the concept -Well thought-out, fully working programming examples -End-of-chapter exercises that would help you practise the skills learned in the chapter. CONTENTS Fundamentals of Computers Programming Basics Digital Computers Problem Solving Approaches Basic Operations Algorithms Functional Components Flowcharts Numbering Systems Types of Languages Binary Arithmetic Assembler, Compiler, Linker, Loader Fundamentals of C Programming Building Blocks of C Programming Structure of a C Program Decision Control Instruction Writing & Executing Programs Loop Control Instruction Standard I/O Operations Case Control Instruction Fundamental Data Types Break & Continue Keywords Storage Classes Functions Types of Operators Parameter Passing Types of Expressions Recursive Functions Arrays & Other Data Types Pointers and Their

Usage Array Notation & representation
Introduction to Pointers
Manipulating Array Elements
Types of Pointers
Multi-dimensional Arrays
File Pointers
Structures
File Operations
Unions
Command-line Arguments
Enums
Preprocessor Directives

A textbook of Engineering Physics is written with two distinct objectives: to provide a single source of information for engineering undergraduates of different specializations and provide them a solid base in physics. Successive editions of the book incorporated topics as required by students pursuing their studies in various universities. In this new edition the contents are fine-tuned, modernized and updated at various stages.

Introduction to modeling and simulation - Models for dynamic systems and systems similarity - Modeling of engineering systems - Mechanical systems - Electrical systems - Fluid systems - Thermal systems - Mixed discipline systems - System dynamic response analysis - Frequency response - Time response and digital simulation - Engineering applications - System design and selection of components.

Any good text book, particularly that in the fast changing fields such as engineering & technology, is not only expected to cater to the current curricular requirements of various institutions but also should provide a glimpse towards the latest developments in the concerned subject and the relevant disciplines. It should guide the periodic review and updating of the curriculum.

This book is a sequel to the author's Engineering Physics Part I and is written to address the course curriculum in Engineering Physics-II (Course Code EAS-102) of the B.Tech syllabus of the Uttar Pradesh Technical University. The book is designed to meet the needs of the first-year undergraduate students of all branches of engineering. It provides a sound understanding of the important phenomena in physics.

Solving circuit problems is less a matter of knowing what steps to follow than why those steps are necessary. And knowing the why stems from an in-depth understanding of the underlying concepts and theoretical basis of electric circuits. Setting the benchmark for a modern approach to this fundamental topic, Nassir Sabah's Electric Circuits and Signals supplies a comprehensive, intuitive, conceptual, and hands-on introduction with an emphasis on creative problem solving. A Professional Education Ideal for electrical engineering majors as a first step, this phenomenal textbook also builds a core knowledge in the basic theory, concepts, and techniques of circuit analysis, behavior, and operation for students following tracks in such areas as computer engineering, communications engineering, electronics, mechatronics, electric power, and control systems. The author uses hundreds of case studies, examples, exercises, and homework problems to build a strong understanding of how to apply theory to problems in a variety of both familiar and unfamiliar contexts. Your students will be able to approach any problem with total confidence. Coverage ranges from the basics of dc and ac circuits to transients, energy storage elements, natural responses and convolution, two-port circuits, Laplace and Fourier transforms, signal processing, and operational amplifiers. Modern Tools for Tomorrow's Innovators Along with a conceptual approach to the material, this truly modern text uses PSpice simulations with schematic Capture® as well as MATLAB® commands to give students hands-on experience with the tools they will use after graduation. Classroom Extras When you adopt Electric Circuits and Signals, you will receive a complete solutions manual along with its companion CD-ROM supplying additional material. The CD contains a Word™ file for each chapter providing bulleted, condensed text and figures that can be used as class slides or lecture notes.

Engineering Mathematics (Conventional and Objective Type) completely covers the subject of Engineering Mathematics for engineering students (as per AICTE) as well as engineering entrance exams such as GATE, IES, IAS and Engineering Services Exams. Though a first

edition, the book is enriched by 50 years of Academics and professional experience of the Author(s) and the experience of more than 85 published books.

This comprehensive book with a blend of theory and solved problems on Basic Electrical Engineering has been updated and upgraded in the Second Edition as per the current needs to cater undergraduate students of all branches of engineering and to all those who are appearing in competitive examinations such as AMIE, GATE and graduate IETE. The text provides a lucid yet exhaustive exposition of the fundamental concepts, techniques and devices in basic electrical engineering through a series of carefully crafted solved examples, multiple choice (objective type) questions and review questions. The book covers, in general, three major areas: electric circuit theory, electric machines, and measurement and instrumentation systems.

Slowly, silently, now the moon Walks the night in her silver shoon; This way, and that, she peers, and sees Silver fruit upon silver trees; One spring evening, the fairies gather in the woods. Two sleepy children join in the parade to a wonderful, dream-like fairy party. Illustrated by bright new talent, Carolina Rabei, this Walter de la Mare poem is brought to life with shimmery, ethereal illustrations, making it the perfect book for bedtime. One of four seasonal Walter de la Mare picture books that form a set, each with complementing colour palates and illustrations by rising young star Carolina.

The Book Thoroughly The Following: Physical Chemistry With Detailed Concepts And Numerical Problems. Organic Chemistry With More Chemical Equations. Inorganic Chemistry With Theory And Examples. In Addition To A Well Explained Theory The Book Includes Well Categorized Classified And Sub-Classified Questions On The Basis Of Latest Trends Of Examination Papers. Salient Features As Per The Syllabus Of Engineering And Medical Entrance Examinations Previous Years Solved Papers Every Unit Contains (I) Main Highlights; (Ii) Multiple Choice Questions; (Iii) True And False Statements; (Iv) Hints And Solutions. Keeping in view the limited time at the disposal of engineering students preparing for university examination, the book contains fairly large number of solved examples taken from various recently examination papers of different universities and Engineering colleges so that they may not find any difficulty while answering these problems in their final examination. Latest question papers upto summer 2006 of A.M.I.E. have been added for the readers to understand the latest trend.

Designed as a text for the students of various engineering streams such as electronics/electrical engineering, electronics and communication engineering, computer science and engineering, IT, instrumentation and control and mechanical engineering, this well-written text provides an introduction to electronic devices and circuits. It introduces to the readers electronic circuit analysis and design techniques with emphasis on the operation and use of semiconductor devices. It covers principles of operation, the characteristics and applications of fundamental electronic devices such as p-n junction diodes, bipolar junction transistors (BJTs), and field effect transistors (FETs), and special purpose diodes and transistors. In its second edition, the book includes a new chapter on "special purpose devices". What distinguishes this text is that it explains the concepts and applications of the subject in such a way that even an average student will be able to understand working of electronic devices, analyze, design and simulate electronic circuits. This comprehensive book provides:

- A large number of solved examples.
- Summary highlighting the important points in the chapter.
- A number of Review Questions at the end of each chapter.
- A fairly large number of unsolved problems with answers.

Manufacturing Processes is meant for the students of B.Tech. in all branches of

engineering, namely, Mechanical, Electronics, Computer, Information Technology, Electrical and Civil. This book aims to fulfill specific need. Effective from 2008-09 sessions

Maintaining a practical perspective, Python Programming: A Practical Approach acquaints you with the wonderful world of programming. The book is a starting point for those who want to learn Python programming. The backbone of any programming, which is the data structure and components such as strings, lists, etc., have been illustrated with many examples and enough practice problems to instill a level of self-confidence in the reader. Drawing on knowledge gained directly from teaching Computer Science as a subject and working on a wide range of projects related to ML, AI, deep learning, and blockchain, the authors have tried their best to present the necessary skills for a Python programmer. Once the foundation of Python programming is built and the readers are aware of the exact structure, dimensions, processing, building blocks, and representation of data, they can readily take up their specific problems from the area of interest and solve them with the help of Python. These include, but are not limited to, operators, control flow, strings, functions, module processing, object-oriented programming, exception and file handling, multithreading, synchronization, regular expressions, and Python database programming. This book on Python programming is specially designed to keep readers busy with learning fundamentals and generates a sense of confidence by attempting the assignment problems. We firmly believe that explaining any particular technology deviates from learning the fundamentals of a programming language. This book is focused on helping readers attempt implementation in their areas of interest through the skills imparted through this book. We have attempted to present the real essence of Python programming, which you can confidently apply in real life by using Python as a tool. Salient Features ? Based on real-world requirements and solution. ? Simple presentation without avoiding necessary details of the topic. ? Executable programs on almost every topic. ? Plenty of exercise questions, designed to test readers' skills and understanding. Purposefully designed to be instantly applicable, Python Programming: A Practical Approach provides implementation examples so that the described subject matter can be immediately implemented due to the well-known versatility of Python in handling different data types with ease.

Encouraged by the response to the first edition and to keep pace with recent developments, Fundamentals of Electrical Drives, Second Edition incorporates greater details on semi-conductor controlled drives, includes coverage of permanent magnet AC motor drives and switched reluctance motor drives, and highlights new trends in drive technology. Contents were chosen to satisfy the changing needs of the industry and provide the appropriate coverage of modern and conventional drives. With the large number of examples, problems, and solutions provided, Fundamentals of Electrical Drives, Second Edition will continue to be a useful reference for practicing engineers and for those preparing for Engineering Service Examinations.

Basic Of Concepts • D.C. Circuit Analysis • Network Theorem • A. C. Fundamentals • Analysis Of Single Phase A.C. Circuit • Three Phase A.C. Circuit • Measuring Instruments • Introduction To Power System • Magnetic Circuits • Single Phase Transformer • D.C. Machines • Induction Motors • Three Phase Synchronous Machines
Papers Index

This book introduces students to the basics of computers, software and internet along with how to program computers using the C language. It is intended for an introductory course that gives beginning engineering and science students a firm rooting in the fundamental principles of computers and information technology, and also provides invaluable insights into key concepts of computing through development of skills in programming and problem solving using C language. To this end, the book is eminently suitable for the first-year engineering students of all branches and MCA students, as per the prescribed syllabus of several universities. C is a difficult language to learn if it is not methodically introduced. The book explains C and its basic programming techniques in a way suitable for beginning students. It begins by giving students a solid foundation in algorithms to help them grasp the overall concepts of programming a computer as a problem-solving tool. Simple aspects of C are introduced first to enable students to quickly start writing programs. More difficult concepts in the latter parts of the book, such as pointers and their use, have been presented in an accessible manner making the learning of C an exciting and interesting experience. The methodology used is to illustrate each new concept with a program and emphasize a good style in programming to allow students to gain sufficient skills in problem solving. **KEY FEATURES** Self-contained introduction to both computers and programming for beginners All important features of C illustrated with over 100 examples Good style in programming emphasized Laboratory exercises on applications of MS Office, namely, Word processing, Spreadsheet, PowerPoint are included.

Introduces the features of the C programming language, discusses data types, variables, operators, control flow, functions, pointers, arrays, and structures, and looks at the UNIX system interface

New edition of a text intended primarily for the undergraduate courses on the subject which are frequently found in electrical engineering curricula--but the concepts and techniques it covers are also of fundamental importance in other engineering disciplines. The book is structured to develop in parallel the methods of analysis for continuous-time and discrete-time signals and systems, thus allowing exploration of their similarities and differences. Discussion of applications is emphasized, and numerous worked examples are included. Annotation copyrighted by Book News, Inc., Portland, OR

The book in its present form is due to my interaction with the students for quite a long time. It had been my long-cherished desire to write a book covering most of the topics that form the syllabi of the Engineering and Science students at the degree level. Many students, although able to understand the various topics of the books, may not be able to put their knowledge to use. For this purpose a number of questions and problems are given at the end of each chapter.

Appropriate for one- or two-semester Advanced Engineering Mathematics courses in departments of Mathematics and Engineering. This clear, pedagogically rich book develops a strong understanding of the mathematical principles and practices that today's engineers and scientists need to know. Equally effective as either a textbook or reference manual, it approaches mathematical concepts from a practical-use perspective making physical applications more vivid and substantial. Its comprehensive instructional framework supports a conversational, down-to-earth narrative style offering easy accessibility and frequent opportunities for application and reinforcement.

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