

## Jntu Hyderabad College Of Engineering

Engineering Mathematics-I

The rise of disruptive technologies in various departments of engineering is set to dominate the industries in the upcoming years. Focus is being emerged to provide the latest developments of the cutting edge technologies that have immense applications in various fields of engineering sciences. There is an immense need to bridge the gap between the academia and industries that helps in overall development of the society. The conference aims to bring researchers, academicians, together to participate and showcase the results of their current research findings in the broad fields of Electrical Sciences.

The book covers a variety of topics which include data mining and data warehousing, high performance computing, parallel and distributed computing, computational intelligence, soft computing, big data, cloud computing, grid computing, cognitive computing, image processing, computer networks, wireless networks, social networks, wireless sensor networks, information and network security, web security, internet of things, bioinformatics and geoinformatics. The book is a collection of best papers submitted in the First International Conference on Computational Intelligence and Informatics (ICCI 2016) held during 28-30 May 2016 at JNTUH CEH, Hyderabad, India. It was hosted by Department of Computer Science and Engineering, JNTUH College of Engineering in association with Division V (Education & Research) CSI, India.

Machine learning was built from an engineering perspective, while machine learning was born out of a computer science approach. In the one side the operations may be looked at as two different areas, but they have grown in tandem over the past years and around the same period. Other than the univariate methodology (the conventional way of doing things), there has been a great rise in non-uniform approaches. . algorithmic and graphical simulations are being used for statistical and quantitative trading in all kinds of markets. Also, the functional applicability of Bayesian approaches has been significantly improved by the development of a variety of estimated inference algorithms such as variational Bayes and expectation propagation. Related to the effect of recent kernels, broader versions have had a huge impact on both algorithms and implementations. This textbook provides a detailed exploration of recent innovations in these fields thus describing the basic elements in these fields and thus offering a concise introduction to these fields. The book is accompanied by a great deal of supplementary content, example problems as well as the full collection of figures included in the book.

Proceedings of the 4th International Conference on Communications and Cyber Physical Engineering

Engineering Mathematics-I

National Conference on Electrical Sciences (NCES – 2021)

Second International Conference, CCSIT 2012, Bangalore, India, January 2-4, 2012. Proceedings, Part III

Proceedings of CIPR 2019

Processing and Properties of Advanced Ceramics and Composites VI

Proceedings of IC3T 2016

*Modern Engineering Physics Volume-I (For JNTU, Hyderabad) (Multicolour Edition)S. Chand Publishing*

*This book, Instrumentation: Operation, Measurement, Scope and Application of Instruments, provides various concepts, theoretical and practical knowledge and develops the techno-managerial skill in the field of instrumentation. Various possible methods of measurements of commonly used instruments for measuring various quantities often used in engineering and design are provided, presented and discussed sufficiently from fundamentals to advancements. It aims at providing an insight into various concepts and awareness as well as developments of the field. Numerical problems and examples and usual situations that occur in industries and daily life are presented as necessary.*

*This book is designed based on revised syllabus of JNTU, Hyderabad (AICTE model curriculum) for under-graduate (B.Tech/BE) students of all branches, those who study Basic Electrical Engineering as one of the subject in their curriculum. The primary goal of this book is to establish a firm understanding of the basic laws of Electric Circuits, Network Theorems, Resonance, Three-phase circuits, Transformers, Electrical Machines and Electrical Installation.*

*The book presents selected research papers on current developments in the field of soft computing and signal processing from the International Conference on Soft Computing and Signal Processing (ICSCSP 2018). It includes papers on current topics such as soft sets, rough sets, fuzzy logic, neural networks, genetic algorithms and machine learning, discussing various aspects of these topics, like technological, product implementation, contemporary research as well as application issues.*

ICACECS 2020

SOUVENIR of 3rd International Science Congress ISC-2013

*Modern Engineering Physics Volume-I (For JNTU, Hyderabad) (Multicolour Edition)*

*Engineering Physics (For 1st Year of JNTU, Anantapur)*

*Innovations in Computer Science and Engineering*

*Proceedings of the 9th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA 2021)*

*Advances in Computer Science, Engineering and Applications*

This book have been designed as a study material for Electrical, Electronics and Instrumentation students studying in various universities. This book attempt to provide simple explanations about measurements and instrumentation, throughout the book chosen examples (solved problem) and bits are presented with detailed explanations. The chapters in the book are arranged in a proper sequence i.e., Electrical, Electronics Measurements and Instrumentation. That permits each topic to build upon earlier studies, which is important in understanding the concept.

This book shares important findings on the application of robotics in industry using advanced mechanisms, including software and hardware. It presents a collection of recent trends and research on various advanced computing paradigms such as soft computing, robotics, smart automation, power control, and uncertainty analysis. The book constitutes the proceedings of the 1st International Conference on Application of Robotics in Industry using Advanced Mechanisms (ARIAM2019), which offered a platform for sharing original research findings, presenting innovative ideas and applications, and comparing notes on various aspects of robotics. The contributions highlight the latest research and industrial applications of robotics, and discuss approaches to improving the smooth functioning of industries. Moreover, they focus on designing solutions for complex engineering problems and designing system components or processes to meet specific needs, with due considerations for public health and safety, including cultural, societal, and environmental considerations. Taken together, they offer a valuable resource for researchers, scientists, engineers, professionals and students alike.

This Book Highlights The Procedures For 30 Tests Used To Measure The Engineering Properties Of Soil In Both Laboratory And Field Including Dynamic Testing Of Soils. All The Test Procedures Are Based On Indian Standard Practice And Are Very Close To Astm Standards. Features Of This Book Include: \* Test Procedures And Tabular Forms For A Maximum Number Of Field And Laboratory Tests. \* Classification Of The Soil Tests Based On Type Of Project And Type Of Soil. \* A Set Of Questions Is Presented At The End Of Each Chapter For Self Examination. \* For Each Test, Theoretical Principles And The Precautions To Be Followed During The Test Are Explained.This Book Will Be Useful To B.Tech./B.E. (Civil Engineering) And M.E./ M.Tech. (Geotechnical Engineering) Students As Laboratory Manual And Reference Book. It Is Hoped That This Book Will Also Be Useful To Field Engineers As Handbook In Soil Mechanics As It Helps In Deciding The Test Programme For A Given Project. Similarly, The Book Will Be Helpful For Quality Control Engineers.

The book is designed to serve as a textbook for the students of engineering.The book spread in fifteen chapters broadly discusses:" Convergence and divergence of the infinite series." Mean value theorems and expansions of functions." Functions of several variables." Curvature, evolutes and envelopes." Curve tracing." Lengths, curves, volumes and surfaces of revolution. " Multiple integrals." First order and first degree differential equations." Orthogonal trajectories and other geometrical application." Higher order differential equations." Linear differential equations with constant coefficients." Applications of differential equations." Laplace transforms." Vector calculus, gradient, divergence and curl of functions." Green s, Gauss s and Stoke s theorems.

OPTICAL FIBER COMMUNICATION

Computer Communication, Networking and Internet Security

Power System Analysis

Proceedings of ICDECT 2020

Proceedings of the First International Conference on Computational Intelligence and Informatics

Advances in Computer Science, Engineering & Applications

A Comprehensive Guide to Information Security Management and Audit

***Contains 32 papers from the following seven 2013 Materials Science and Technology (MS&T'13) symposia: Innovative Processing and Synthesis of Ceramics, Glasses and Composites Advances in Ceramic Matrix Composites Advanced Materials for Harsh Environments Advances in Dielectric Materials and Electronic Devices Controlled Synthesis, Processing, and Applications of Structure and Functional Nanomaterials Rustum Roy Memorial Symposium: Processing and Performance of Materials Using Microwaves, Electric and Magnetic Fields, Ultrasound, Lasers, and Mechanical Work Solution Based Processing for Ceramic Materials***

***The International conference series on Computer Science, Engineering & Applications (ICCSEA) aims to bring together researchers and practitioners from academia and industry to focus on understanding computer science, engineering and applications and to establish new collaborations in these areas. The Second International Conference on Computer Science, Engineering & Applications (ICCSEA-2012), held in Delhi, India, during May 25-27, 2012 attracted many local and international delegates, presenting a balanced mixture of intellect and research both from the East and from the West. Upon a strenuous peer-review process the best submissions were selected leading to an exciting, rich and a high quality technical conference program, which featured high-impact presentations in the latest developments of various areas of computer science, engineering and applications research.***

***This book on Basic Engineering Workshop Technology has been written as per curriculum of JNT University to help first Year B.Tech Students. This subject matter is presented in simple language and in a proper sequence so that an average student can be easily grasp the subject matter. At the end of each exercise, a model viva voice questions is given for the benefit of the book reader and appearing for their lab External examinations and other competitive examinations.***

***This book includes high-quality, peer-reviewed research papers from the 6thInternational Conference on Innovations in Computer Science & Engineering (ICICSE 2018), held at Guru Nanak Institutions, Hyderabad, India from August 17 to 18, 2018. The book discusses a wide variety of industrial, engineering and scientific applications of the emerging techniques and offers a platform for researchers from academia and industry to present their original work and exchange ideas, information, techniques and applications in the field of computer science.***

***Proceedings of the Second International Conference on Computer Science, Engineering and Applications (ICCSEA 2012), May 25-27, 2012, New Delhi, India, Volume 2***

***Computational Intelligence in Data Mining***

***Proceedings of the International Conference on ICCIDM 2018***

***Evolution in Computational Intelligence***

***Operation, Measurement, Scope and Application of Instruments***

***Advances in Computer Science and Information Technology. Computer Science and Information Technology***

***Advances in Computer Science and Information Technology. Networks and Communications***

The three volume set LNICST 84 - LNICST 86 constitute the refereed proceedings of the Second International Conference on Computer Science and InformationTechnology, CCSIT 2012, held in Bangalore, India, in January 2012. The 55 revised full papers presented in this volume were carefully reviewed andselected from numerous submissions. The papers are organized in topical sectionson advances in computer science and information technology; and ad hoc andubiquitous computing.

OPTICAL FIBER COMMUNICATIONbook was written by Dr. M.Satyanarayana, Dr. V.N.Lakshmana Kumar, Dr. P. Ujjvala Kanthi Prabha

This volume contains 70 papers presented at CSI 2014: Emerging ICT for Bridging the Future: Proceedings of the 49th Annual Convention of Computer Society of India. The convention was held during 12-14, December, 2014 at Hyderabad, Telangana, India. This volume contains

papers mainly focused on Machine Learning & Computational Intelligence, Ad hoc Wireless Sensor Networks and Networks Security, Data Mining, Data Engineering and Soft Computing.

Artificial intelligence is a constantly advancing field that requires models in order to accurately create functional systems. The use of natural acumen to create artificial intelligence creates a field of research in which the natural and the artificial meet in a new and innovative way. Critical Developments and Applications of Swarm Intelligence is a critical academic publication that examines developing research, technologies, and function regarding natural and artificial acumen specifically, in regards to self-organized systems. Featuring coverage on a broad range of topics such as evolutionary algorithms, optimization techniques, and computational comparison, this book is geared toward academicians, students, researchers, and engineers seeking relevant and current research on the progressive research based on the implementation of swarm intelligence in self-organized systems.

Innovations in Soft Computing and Information Technology

Electrical and Electronic Measurements and Instrumentation

A Text Manual of Engineering Workshop Technology

Emerging Trends in Electrical, Communications and Information Technologies

Emerging ICT for Bridging the Future - Proceedings of the 49th Annual Convention of the Computer Society of India CSI Volume 2

Data Engineering and Communication Technology

Soft Computing and Signal Processing

**The three volume set LNICST 84 - LNICST 86 constitute the refereed proceedings of the Second International Conference on Computer Science and InformationTechnology, CCSIT 2012, held in Bangalore, India, in January 2012. The 70 revised full papers presented in this volume were carefully reviewed and selected from numerous submissions and address all major fields of the Computer Science and Information Technology in theoretical, methodological, and practical or applicative aspects. The papers feature cutting-edge development and current research in computer science and engineering.**

**This book comprises the best deliberations with the theme “Smart Innovations in Mezzanine Technologies, Data Analytics, Networks and Communication Systems” in the “International Conference on Advances in Computer Engineering and Communication Systems (ICACECS 2020)”, organized by the Department of Computer Science and Engineering, VNR Vignana Jyothi Institute of Engineering and Technology. The book provides insights on the recent trends and developments in the field of computer science with a special focus on the mezzanine technologies and creates an arena for collaborative innovation. The book focuses on advanced topics in artificial intelligence, machine learning, data mining and big data computing, cloud computing, Internet on things, distributed computing and smart systems.**

Engineering Physics

Optics|Crystal Structures And X-Ray Diffraction |Principles Of Quantum Mechanics And Electron Theory |Semiconductors|Magnetic Properties|Dielectric Properties|Superconductivity|Laser|Fiber Optics |Nanotechnology|Review Questions|Multiple Choice Question

Proceedings of International Conference on Robotics and Its Industrial Applications 2019

11th International Conference, IACC 2021, Msida, Malta, December 18-19, 2021, Revised Selected Papers

Second International Conference, CCSIT 2012, Bangalore, India, January 2-4, 2012. Proceedings, Part II

Advanced Computing

Proceedings of International Conference on Advances in Computer Engineering and Communication Systems

Proceedings of ICSCSP 2018, Volume 1

Proceedings of 3rd ICDECT-2K19

This proceeding discuss the latest solutions, scientific findings and methods for solving intriguing problems in the fields of data mining, computational intelligence, big data analytics, and soft computing. This gathers outstanding papers from the fifth International Conference on “Computational Intelligence in Data Mining” (ICCIDM), and offer a “sneak preview” of the strengths and weaknesses of trending applications, together with exciting advances in computational intelligence, data mining, and related fields.

This volume constitutes reviewed and selected papers from the 11th International Advanced Computing Conference, IACC 2021, held in December 2021. The 47 full papers and 4 short papers presented in the volume were thoroughly reviewed and selected from 246 submissions. The papers are organized in the following topical sections: application of artificial intelligence and machine learning in healthcare; application of AI for emotion and behaviour prediction; problem solving using reinforcement learning and analysis of data; advance uses of RNN and regression techniques; special intervention of AI.

This book includes selected papers presented at the 3rd International Conference on Data Engineering and Communication Technology (ICDECT-2K19), held at Stanley College of Engineering and Technology for Women, Hyderabad, from 15 to 16 March 2019. It features advanced, multidisciplinary research towards the design of smart computing, information systems, and electronic systems. It also focuses on various innovation paradigms in system knowledge, intelligence, and sustainability which can be applied to provide viable solutions to diverse problems related to society, the environment, and industry.

The book is a compilation of high-quality scientific papers presented at the 3rd International Conference on Computer & Communication Technologies (IC3T 2016). The individual papers address cutting-edge technologies and applications of soft computing, artificial intelligence and communication. In addition, a variety of further topics are discussed, which include data mining, machine intelligence, fuzzy computing, sensor networks, signal and image processing, human-computer interaction, web intelligence, etc. As such, it offers readers a valuable and unique resource.

ICCC 2021

Introduction To Machine Learning

Critical Developments and Applications of Swarm Intelligence

A Perspective Approach

Instrumentation

Applications of Robotics in Industry Using Advanced Mechanisms

***The three volume set LNICST 84 - LNICST 86 constitute the refereed proceedings of the Second International Conference on Computer Science and InformationTechnology, CCSIT 2012, held in Bangalore, India, in January 2012. The 66 revised full papers presented in this volume were carefully reviewed andselected from numerous submissions. The papers are organized in topical sectionson networks and communications; wireless and mobile networks; and network security.***

***The book presents innovative scientific research works by academics, research scholars and students, presented at the 2017 International Conference on Energy, Materials and Information Technology at Amity University Jharkhand, India.***

*It includes contributions on system solutions based on soft computing techniques, and covers innovative soft computing techniques and tools with advanced applications. A major focus of the book is on presenting interdisciplinary problems and how they can be solved using information technology, together with innovative connections to other disciplines. It also includes papers on cloud computing and WSN-related real-time research.*

*Power System Analysis is a comprehensive text designed for an undergraduate course in electrical engineering. Written in a simple and easy-to-understand manner, the book introduces the reader to power system network matrices and power system steady-state stability analysis. The book contains in-depth coverage of symmetrical fault analysis and unbalanced fault analysis; exclusive chapters on power flow studies; a comprehensive chapter on transient stability; precise explanation supported by suitable examples and is replete with objective questions and review questions.*

*This book presents the proceedings of the 9th International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2021), held at NIT Mizoram, Aizwal, Mizoram, India, during June 25 – 26, 2021. FICTA conference aims to bring together researchers, scientists, engineers, and practitioners to exchange their new ideas and experiences in the domain of intelligent computing theories with prospective applications to various engineering disciplines. This volume covers broad areas of Evolution in Computational Intelligence. The conference papers included herein presents both theoretical as well as practical aspects of different areas like ANN and genetic algorithms, human-computer interaction, intelligent control optimization, evolutionary computing, intelligent e-learning systems, machine learning, mobile computing, multi-agent systems, etc. The volume will also serve as a knowledge centre for students of post-graduate level in various engineering disciplines.*

*ICCII 2016*

**Basic Electrical Engineering**

**Engineering Mathematics:Volume I (As Per Jntu Syllabus)**

**Proceedings of the Second International Conference on Computer Science, Engineering and Applications (ICSEA 2012), May 25-27, 2012, New Delhi, India, Volume 1**

**Measurement of Engineering Properties of Soils**

**Computational Intelligence in Pattern Recognition**

**Proceedings of the Sixth ICICSE 2018**

International Science Congress Association organized 3rd International Science Congress (ISC-2013), with "Innovation with Global Responsibility" as its Focal Theme. ISC-2013 is divided in 20 sections. A total number of 900 Research Papers and 1000 registrations from 36 countries all over the world have been received. They are mainly from India, Iran, Sudan, Iraq, South Africa, Phillipines, Pakistan, Nighana, Erode, Czech Republic, Bangladesh, Swaziland, Jordan, USA, Thailand, Japan, Malaysia, Kazakhstan, UK, Colombia, Nepal, Italy, Bulgariya, Cameroun, France, Greece, Kazakhstan, Korea, Lithuania, Nigeria, Poland, Romania, Slovakiya, Ukraine, Venezuela and Turkey.

This book includes the original, peer-reviewed research from the 2nd International Conference on Emerging Trends in Electrical, Communication and Information Technologies (ICECIT 2015), held in December, 2015 at Srinivasa Ramanujan Institute of Technology, Ananthapuramu, Andhra Pradesh, India. It covers the latest research trends or developments in areas of Electrical Engineering, Electronic and Communication Engineering, and Computer Science and Information.

The text is written to provide readers with a comprehensive study of information security and management system, audit planning and preparation, audit techniques and collecting evidence, international information security (ISO) standard 27001, and asset management. It further discusses important topics such as security mechanisms, security standards, audit principles, audit competence and evaluation methods, and the principles of asset management. It will serve as an ideal reference text for senior undergraduate, graduate students, and researchers in fields including electrical engineering, electronics and communications engineering, computer engineering, and information technology. The book explores information security concepts and applications from an organizational information perspective and explains the process of audit planning and preparation. It further demonstrates audit techniques and collecting evidence to write important documentation by following the ISO 27001 standards. The book- Elaborates on the application of confidentiality, integrity, and availability (CIA) in the area of audit planning and preparation. Covers topics such as managing business assets, agreements on how to deal with business assets, and media handling. Demonstrates audit techniques and collects evidence to write the important documentation by following the ISO 27001 standards. Explains how the organization's assets are managed by asset management, and access control policies. Presents seven case studies.

This book includes selected papers presented at the 4th International Conference on Data Engineering and Communication Technology (ICDECT 2020), held at Kakatiya Institute of Technology & Science, Warangal, India, during 25-6 September 2020. It features advanced, multidisciplinary research towards the design of smart computing, information systems and electronic systems. It also focuses on various innovation paradigms in system knowledge, intelligence and sustainability which can be applied to provide viable solutions to diverse problems related to society, the environment and industry.

Urban Ecology, Water Quality and Climate Change

Advances in Computer Science and Information Technology. Computer Science and Engineering

Proceedings of ICECIT-2015

Proceedings of ICEMIT 2017, Volume 3

Second International Conference, CCSIT 2012, Bangalore, India, January 2-4, 2012. Proceedings, Part I

Advancements in Applied Metaheuristic Computing

This unique book brings together high-quality research contributions on ecological aspects of urbanization, water quality concerns in an urban environment, and climate change issues with a strong Indian focus under one umbrella. It includes several case studies that discuss urban water management, particularly highlighting the quality aspects. Urbanization is an ecological disturbance that the modern world accepts as essential in the absence of a better alternative that could provide an equal level of comfort. The prohibitive costs of eco-friendly production technologies are forcing the developing world to generate industrial waste that is detrimental to the environment. At the same time, the availability of adequate fresh water is another challenge for our climate-change impacted world. The scientific community is, therefore, searching for ways towards ecologically sustainable urban development. Discussing all these issues, this book offers a useful guide for academicians, researchers, practicing engineers, and managers dealing with diverse water-related problems in urban areas.

This book presents practical development experiences in different areas of data analysis and pattern recognition, focusing on soft computing technologies, clustering and classification algorithms, rough set and fuzzy set theory, evolutionary computations, neural science and neural network systems, image processing, combinatorial pattern matching, social network analysis, audio and video data analysis, data mining in dynamic environments, bioinformatics, hybrid computing, big data analytics and deep learning. It also provides innovative solutions to the challenges in these areas and discusses recent developments.

Metaheuristic algorithms are present in various applications for different domains. Recently, researchers have conducted studies on the effectiveness of these algorithms in providing optimal solutions to complicated problems. Advancements in Applied Metaheuristic Computing is a crucial reference source for the latest empirical research on methods and approaches that include metaheuristics for further system improvements, and it offers outcomes of employing optimization algorithms. Featuring coverage on a broad range of topics such as manufacturing, genetic programming, and medical imaging, this publication is ideal for researchers, academicians, advanced-level students, and technology developers seeking current research on the use of optimization algorithms in several applications.

This book is a collection of research articles presented at the 4th International Conference on Communications and Cyber-Physical Engineering (ICCE 2021), held on April 9 and 10, 2021, at CMR Engineering College, Hyderabad, India. ICCE is one of the most prestigious conferences conceptualized in the field of networking and communication technology offering in-depth information on the latest developments in voice, data, image, and multimedia. Discussing the latest developments in voice and data communication engineering, cyber-physical systems, network science, communication software, image, and multimedia processing research and applications, as well as communication technologies and other related technologies, it includes contributions from both academia and industry. This book is a valuable resource for scientists, research scholars, and PG students working to formulate their research ideas and find the future directions in these areas. Further, it may serve as a reference work to understand the latest engineering and technologies used by practicing engineers in the field of communication engineering.