

# Access Free Arunoday Kumar Engineering Graphics Pdf File Free

Engineering Graphics **Engineering Graphics & Design: With Demonstrations of AutoCAD, CATIA & ANSYS Engineering Graphics** *Fundamentals of Engineering Drawing* **Engineering Graphics & Design | AICTE Prescribed Textbook - English** *Engineering Drawing & Graphics Using Autocad, 3rd Edition* **Engineering Drawing And Graphics + Autocad** Engineering Mechanics Statics And Dynam *Engineering Graphics and Design* Fluid Mechanics (Vol. 2) **ENGINEERING GRAPHICS FOR DEGREE** Engineering Graphics **ENGINEERING GRAPHICS** *Indian Books in Print* **Graphics Recognition. Current Trends and Evolutions** *Emerging Technology in Modelling and Graphics* **Advanced Fuzzy Logic Approaches in Engineering Science** *Basic Electronics - Second Edition* **Advanced Computing** *International Books in Print* **Geometry of Design** Engineering Drawing A Text Book of Engineering Drawing *Bulletin of the Institution of Engineers (India)*. **Indian National Bibliography Information** **Security and Digital Forensics** **Fluid Mechanics (Vol. 1)** **Public Transportation: On the Move** **Computer Vision and Image Processing** **Who's who in Technology Today** *Second International Conference on Networks and Advances in Computational Technologies* **Manual of Engineering Drawing** *The 30th SIAR International Congress of Automotive and Transport Engineering* **Who's who in Technology Today: The expertise index to Who's who in technology today** **Innovative Teaching Strategies and New Learning Paradigms in Computer Programming** **ENGINEERING GRAPHICS WITH AUTOCAD** **A Computational Approach to Digital Chinese Painting and Calligraphy** **Science and Engineering of Small Arms** **Machine Drawing Resources in Education**

**Engineering Drawing And Graphics + Autocad** Apr 26 2022 This Book Provides A Systematic Account Of The Basic Principles Involved In Engineering Drawing. The Treatment Is Based On The First Angle

Projection.Salient Features: \* Nomography Explained In Detail. \* 555 Self-Explanatory Solved University Problems. \* Step-By-Step Procedures. \* Side-By-Side Simplified Drawings. \* Adopts B.I.S. And I.S.O. Standards. \* 1200 Questions Included For Self Test.The Book Would Serve As An Excellent Text For B.E., B. Tech., B.Sc. (Ap. Science) Degree And Diploma Students Of Engineering. Amie Students Would Also Find It Extremely Useful.

**Advanced Computing** Apr 14 2021 This two-volume set (CCIS 1367-1368) constitutes reviewed and selected papers from the 10th International Advanced Computing Conference, IACC 2020, held in December 2020. The 65 full papers and 2 short papers presented in two volumes were thoroughly reviewed and selected from 286 submissions. The papers are organized in the following topical sections: Application of Artificial Intelligence and Machine Learning in Healthcare; Using Natural Language Processing for Solving Text and Language related Applications; Using Different Neural Network Architectures for Interesting applications; ?Using AI for Plant and Animal related Applications.- Applications of Blockchain and IoT.- Use of Data Science for Building Intelligence Applications; Innovations in Advanced Network Systems; Advanced Algorithms for Miscellaneous Domains; New Approaches in Software Engineering.

Engineering Mechanics Statics And Dynam Mar 26 2022 Explains the fundamental concepts and principles underlying the subject, illustrates the application of numerical methods to solve engineering problems with mathematical models, and introduces students to the use of computer applications to solve problems. A continuous step-by-step build up of the subject makes the book very student-friendly. All topics and sequentially coherent subtopics are carefully organized and explained distinctly within each chapter. An abundance of solved examples is provided to illustrate all phases of the topic under consideration. All chapters include several spreadsheet problems for modeling of physical phenomena, which enable the student to obtain graphical representations of physical quantities and perform numerical analysis of problems without recourse to a high-level computer language. Adequately equipped with numerous solved problems and exercises, this book provides sufficient material for a two-semester course. The book is essentially designed for all engineering students. It would also serve as a ready reference for practicing engineers and for those preparing for competitive examinations. It includes previous years' question papers and their solutions.

Fluid Mechanics (Vol. 2) Jan 24 2022 This book has been written for the

introductory course of fluid mechanics for students at the undergraduate and postgraduate levels. It provides the fundamental knowledge allowing students in engineering and natural sciences to enter fluid mechanics and its applications in various fields where fluid flows need to be dealt with. Volume 2 of this book contains ten chapters to help build the basic understanding of the subject matter. It adequately addresses the more complex and advanced issues on fluid mechanics in simplest of manners. The book covers laminar flow (viscous flow), turbulent flow, boundary layer theory, flow through pipe, pipe flow measurement, orifices and mouthpieces, flow past submerged bodies, flow through open channels, notches and weirs, and compressible flows. The concepts are supported by numerous solved examples and multiple-choice questions to aid self-learning in students. The book also contains illustrated diagrams for better understanding of the concepts. The book is extremely useful for the undergraduate and postgraduate students of engineering and natural sciences.

**Computer Vision and Image Processing** Jun 04 2020 This two-volume set (CCIS 1567-1568) constitutes the refereed proceedings of the 6th International Conference on Computer Vision and Image Processing, CVIP 2021, held in Rupnagar, India, in December 2021. The 70 full papers and 20 short papers were carefully reviewed and selected from the 260 submissions. The papers present recent research on such topics as biometrics, forensics, content protection, image enhancement/super-resolution/restoration, motion and tracking, image or video retrieval, image, image/video processing for autonomous vehicles, video scene understanding, human-computer interaction, document image analysis, face, iris, emotion, sign language and gesture recognition, 3D image/video processing, action and event detection/recognition, medical image and video analysis, vision-based human GAIT analysis, remote sensing, and more.

*Basic Electronics - Second Edition* May 16 2021 This is an established textbook on Basic Electronics for engineering students. It has been revised according to the latest syllabus. The second edition of the book includes illustrations and detailed explanations of fundamental concepts with examples. The entire syllabus has been covered in 12 chapters.

**Indian National Bibliography** Oct 09 2020

*Emerging Technology in Modelling and Graphics* Jul 18 2021 The book covers cutting-edge and advanced research in modelling and graphics. Gathering high-quality papers presented at the First International Conference on Emerging Technology in Modelling and Graphics, held from 6 to 8

September 2018 in Kolkata, India, it addresses topics including: image processing and analysis, image segmentation, digital geometry for computer imaging, image and security, biometrics, video processing, medical imaging, and virtual and augmented reality.

*Engineering Drawing & Graphics Using Autocad, 3rd Edition* May 28 2022

The study of engineering drawing builds the foundation of analytical capabilities for solving a wide variety of engineering problems and has real-time applications in all branches of engineering. Student-friendly, lucid and comprehensive, this book adopts step-by-step instructions to explain and solve problems. A major highlight of this book is that all the drawings are prepared using the latest AutoCAD software.

**Science and Engineering of Small Arms** Aug 26 2019 This book initiates with the story of the evolution of firearms to enable the reader to appreciate the sequence of the development of firearms. It discusses different classes of small arms, their mechanics, internal and external ballistics. Further, it covers the design idea of barrels and actions, various operating principles and relevant discussion on ammunition and propellants. The principle of quality in the design of the small arms is also elaborated in the desired degree. The book brings out the relevance of modern manufacturing technologies like MIM and various surface treatments, and polymers for enhancement of product quality. To appreciate the sophistication of the architecture, the book presents the anatomical details of a few small arms of repute. Provides complete understanding of overall small weapon systems Explores mechanics and physics of small arms Discusses proper design, quality control, and manufacturing process selections for a good weapon Covers common type of weapon failures and catastrophic failure Includes relevance of manufacturing processes The book is aimed at professionals and graduate students in Mechanical Design, Armament Design, Gun Design including personnel in the military, paramilitary, police, and all other armed forces and their maintenance crews.

Engineering Graphics Nov 02 2022 Engineering Graphics

Engineering Graphics Nov 21 2021 "Written for the first year engineering students of all branches, this text covers the basic principles of Engineering Graphics course. Simple and easy-to-understand language is provide a firm understanding of the fundamental concepts. Systematic introduction of concepts, variety of solved examples, practice questions and excellent 2D & 3D illustrations make this text very useful for students." - From cover.

*Bulletin of the Institution of Engineers (India).* Nov 09 2020

**ENGINEERING GRAPHICS WITH AUTOCAD** Oct 28 2019 Designed as a text for the undergraduate students of all branches of engineering, this compendium gives an opportunity to learn and apply the popular drafting software AutoCAD in designing projects. The textbook is organized in three comprehensive parts. Part I (AutoCAD) deals with the basic commands of AutoCAD, a popular drafting software used by engineers and architects. Part II (Projection Techniques) contains various projection techniques used in engineering for technical drawings. These techniques have been explained with a number of line diagrams to make them simple to the students. Part III (Descriptive Geometry), mainly deals with 3-D objects that require imagination. The accompanying CD contains the animations using creative multimedia and PowerPoint presentations for all chapters. In a nutshell, this textbook will help students maintain their cutting edge in the professional job market. **KEY FEATURES :** Explains fundamentals of imagination skill in generic and basic forms to crystallize concepts. Includes chapters on aspects of technical drawing and AutoCAD as a tool. Treats problems in the third angle as well as first angle methods of projection in line with the revised code of Indian Standard Code of Practice for General Drawing.

A Text Book of Engineering Drawing Dec 11 2020 this book includes Geometrical Drawing & Computer Aided Drafting in First Angle Projection. Useful for the students of B.E./B.Tech for different Technological Universities of India. Covers all the topics of engineering drawing with simple explanation.

**International Books in Print** Mar 14 2021

**Machine Drawing** Jul 26 2019 About the Book: Written by three distinguished authors with ample academic and teaching experience, this textbook, meant for diploma and degree students of Mechanical Engineering as well as those preparing for AMIE examination, incorporates the latest st

**Public Transportation: On the Move** Jul 06 2020 Transportation Design showcases the innovative design work evident in some of today's transportation areas and facilities. Projects include airport terminals, bus and train/subway stations, seaport passenger facilities, bridges and walkways, pedestrian tunnels, and more. Plus, full-color photos, engineering renderings, and informative text show how leading architectural and design firms facilitate the efficient and safe arrival of commuters and recreational travelers.

**Engineering Graphics & Design: With Demonstrations of AutoCAD, CATIA & ANSYS** Oct 01 2022 This book is developed from the ground up

to cover the syllabus announced by the AICTE in its latest model curriculum. It provides insights into traditional engineering graphics as well as treats of the subject using software AutoCAD, CATIA and ANSYS, through simple and well-explained examples along with an ample number of unsolved problems and MCQs. Screenshots have been provided after every step, making it simple to learn how to use the software for a specific solution. It targets all academics—students, and researchers as well as industry practitioners and engineers, involved in engineering drafting. The book begins by introducing the role and application of engineering drawing and describing such basics as the types of drawing sheets, lines, planes, quadrants and angles of projection, and national and international drawing standards which it calls the basic grammar for engineering graphics as a language. The book introduces the software—AutoCAD, CATIA and ANSYS emphasizing on their specific features. Equipping the reader with this ground knowledge it comes to the nitty-gritty of drawing various curves, projection of points in separate quadrants, projection of straight lines in various positions, various projections of plane surfaces, and solids like prism, pyramid, cylinder and cone. It then goes further to sections of solids wherein the placements of the cutting planes have been explained in various positions like perpendicular, parallel, and inclined to HP and VP. Having thus trained the drafter in handling the drafting tools the book graduates to more complicated material like fusion of one solid shape into another. It explores various types of them so that development of lateral surfaces of solids can be made and depicted isometrically and projected orthographically. Lastly, the book describes 3D modelling using CATIA, where solid models are drawn, and how 2D analysis is done using ANSYS.

*Engineering Graphics and Design* Feb 22 2022 This book covers complete syllabus of Engineering Graphics and Design along with AUTOCAD catering requirements of B.Tech. in Engineering The book is in easy to understand, simple English. It provides step-by-step solutions to problems along with suitable example and proper drawings. Using AutoCAD and Solid Work. All chapter make learning easy with unique features such as Summary, Solved examples and Practice Problems. Chapters have been organised to present data in concise format with suitable tables, diagrams, drawings and illustration.

**A Computational Approach to Digital Chinese Painting and Calligraphy** Sep 27 2019 "A Computational Approach to Digital Chinese Painting and Calligraphy" is a technical book on computer science and its applications in

the arts. It focuses on Oriental digital arts, in particular Chinese arts and painting, offering a multi-disciplinary treatment from the angles of computer graphics, interactive techniques, human-computer interaction, and artificial intelligence. The book also discusses the unique difficulties and challenges of using the computer to produce Oriental arts, including research results by the authors and their lessons and engineering experiences behind these efforts. Songhua Xu is a computer scientist of Zhejiang University and Yale University, as well as an honorary researcher of the University of Hong Kong. Francis C.M. Lau is Professor at the University of Hong Kong where he leads the Systems Research Group in the Department of Computer Science. Yunhe Pan is Professor of Computer Science at Zhejiang University as well as Deputy President of Chinese Academy of Engineering.

**Who's who in Technology Today** May 04 2020

**Engineering Graphics** Aug 31 2022 This text aims to explain the principles and construction of engineering graphics in an elementary manner. It covers drawing instruments, lettering and dimensioning, geometrical construction, isometric projections, and computer aided drafting.

*Fundamentals of Engineering Drawing* Jul 30 2022 This volume presents a solid fundamental treatment of engineering graphics, geometry and modeling suitable for engineers and technologists. It reflects the most modern drafting procedures from the fundamentals (for the beginner), to techniques and practices of drawing in specialized fields. This book is an Engineering Drawing Book, named Fundamentals of Engineering Drawing- Scales where author has given complete detail about the topic that is not easily found in general books. Author believes that chapters should have completeness of information which in most cases is compromised to procure a light weight and affordable book by publishing and book should be written separately with lucid and easy to learn content. Also complete Engineering Drawing book will have around 20 chapters and area specific syllabus is limited to only 6 -12 chapters out of 20 chapters that means it is a waste of money buying a book with loads of content that is not useful. Also Youtube video lecture of this book is available for free for the buyers of the book. This volume presents a solid fundamental treatment of engineering graphics, geometry and modeling suitable for engineers and technologists. It reflects the most modern drafting procedures from the fundamentals (for the beginner), to techniques and practices of drawing in specialized fields.

*Indian Books in Print* Sep 19 2021

**ENGINEERING GRAPHICS** Oct 21 2021 This book provides a detailed

study of geometrical drawing through simple and well-explained worked-out examples and exercises. This book is designed for students of first year Engineering Diploma course, irrespective of their branches of study. The book is divided into seven modules. Module A covers the fundamentals of manual drafting, lettering, freehand sketching and dimensioning of views. Module B describes two-dimensional drawings like geometrical constructions, conics, miscellaneous curves and scales. Three-dimensional drawings, such as projections of points, lines, plane lamina, geometrical solids and their different sections are well-explained in Module C. Module D deals with intersection of surfaces and their developments. Drawing of pictorial views is illustrated in Module E, which includes isometric projection, oblique projection and perspective projections. The fundamentals of machine drawing are covered in Module F. Finally, in Module G, the book introduces computer-aided drafting (CAD) to make the readers familiar with the state-of-the-art techniques of drafting. **KEY FEATURES :** Follows the International Standard Organization (ISO) code of practice for drawing. Includes a large number of dimensioned illustrations, worked-out examples, and Polytechnic questions and answers to explain the geometrical drawing process. Contains chapter-end exercises to help students develop their drawing skills.

Engineering Drawing Jan 12 2021 Engineering Drawing is a textbook designed for the students of all engineering disciplines to develop a spatial bent of mind to observe, visualize, and understand the structure of objects from different perspectives. This ability forms the central idea of design and development of all engineering products. Beginning with the basics, such as BIS conventions, geometrical constructions, and scales, the book presents a detailed chapter on Visualization Concepts and Freehand Sketching, which lays the foundation to understand the subsequent chapters on orthographic projections, projection of points, lines, planes, and solids. These chapters ease the complexity of understanding further chapters such as intersection of solids, surfaces, and development of surfaces. The last few chapters discuss isometric projections, transformation of projections, perspective projections, and finally computer-aided drafting that briefs the reader about the utility of AutoCAD 2015 tools in drawing. The book provides a number of example problems, step-by-step procedure for solutions, numerous graded practice exercises, and multiple-choice questions.

**Information Security and Digital Forensics** Sep 07 2020 ISDF 2009, the First International Conference on Information Security and Digital Forensics,

was held at City University London during September 7-8, 2009. The conference was organized as a meeting point for leading national and international experts of information security and digital forensics. The conference was rewarding in many ways; ISDF 2009 was an exciting and vibrant event, with 4 keynote talks, 25 invited talks and 18 full-paper presentations and those attending had the opportunity to meet and talk with many distinguished people who are responsible for shaping the area of information security. This conference was organized as part of two major research projects funded by the UK Engineering and Physical Sciences Research Council in the areas of Security and Digital Forensics. I would like to thank all the people who contributed to the technical program. The most apparent of these are the Indian delegates who all accepted our invite to give presentations at this conference. Less apparent perhaps is the terrific work of the members of the Technical Program Committee, especially in reviewing the papers, which is a critical and time-consuming task. I would like to thank Raj Rajarajan (City University London) for making the idea of the ISDF 2009 conference a reality with his hard work. Last but not least, I would like to thank all the authors who submitted papers, making the conference possible, and the authors of accepted papers for their cooperation. Dasun Weerasinghe

**Resources in Education Jun 24 2019**

**ENGINEERING GRAPHICS FOR DEGREE** Dec 23 2021 This book provides a detailed study of geometrical drawing through simple and well-explained worked-out examples. It is designed for first-year engineering students of all branches. The book is divided into seven modules. A topic is introduced in each chapter of a module with brief explanations and necessary pictorial views. Then it is discussed in detail through a number of worked-out examples, which are explained using step-by-step procedure and illustrating drawings. Module A covers the fundamentals of manual drafting, lettering, freehand sketching and dimensioning of views. Module B describes two-dimensional drawings like geometrical constructions, conics, miscellaneous curves and scales. Three-dimensional drawings, such as projections of points, lines, plane lamina, geometrical solids and sections of them are well explained in Module C. Module D deals with intersection of surfaces and their developments. Drawing of pictorial views is illustrated in Module E, which includes isometric projection, oblique projection and perspective projections. Module F covers the fundamentals of machine drawing. Finally, in Module G the book introduces computer-aided drafting (CAD) to make the readers familiar with the state-of-the-art techniques of drafting. Key Features

: Follows the International Standard Organization (ISO) code of practice for drawing. Includes a large number of dimensioned illustrations, worked-out examples, and university questions and answers to explain the geometrical drawing process. Contains chapter-end exercises to help students develop their drawing skills.

**Graphics Recognition. Current Trends and Evolutions** Aug 19 2021 This book constitutes the thoroughly refereed post-conference proceedings of the 12th International Workshop on Graphics Recognition, GREC 2017, held in Kyoto, Japan, in November 2017. The 10 revised full papers presented were carefully reviewed and selected from 14 initial submissions. They contain both classical and emerging topics of graphics recognition, namely analysis and detection of diagrams, search and classification, optical music recognition, interpretation of engineering drawings and maps.

*Second International Conference on Networks and Advances in Computational Technologies* Apr 02 2020 This book presents the proceedings of the 2nd International Conference on Networks and Advances in Computational Technologies (NetACT19) which took place on July 23-25, 2019 at Mar Baselios College of Engineering and Technology in Thiruvananthapuram, India. The conference was in association with Bowie State University, USA, Gannon University, USA and Malardalen University, Sweden. Papers presented were included in technical programs that were part of five parallel tracks, namely Computer Application, Image Processing, Network Security, Hardware & Network Systems and Machine Learning. The proceedings brings together experts from industry, governments and academia from around the world with vast experiences in design, engineering and research. Presents the proceedings of the 2nd International Conference on Networks and Advances in Computational Technologies (NetACT19); Includes research in Computer Application, Image Processing, Network Security, Hardware & Network Systems and Machine Learning; Provides perspectives from industry, academia and government.

**Who's who in Technology Today: The expertise index to Who's who in technology today** Dec 31 2019

**Manual of Engineering Drawing** Mar 02 2020 The Manual of Engineering Drawing has long been recognised as the student and practising engineer's guide to producing engineering drawings that comply with ISO and British Standards. The information in this book is equally applicable to any CAD application or manual drawing. The second edition is fully in line with the requirements of the new British Standard BS8888: 2002, and will help

engineers, lecturers and students with the transition to the new standards. BS8888 is fully based on the relevant ISO standards, so this book is also ideal for an international readership. The comprehensive scope of this book encompasses topics including orthographic, isometric and oblique projections, electric and hydraulic diagrams, welding and adhesive symbols, and guidance on tolerancing. Written by a member of the ISO committee and a former college lecturer, the Manual of Engineering Drawing combines up-to-the-minute technical accuracy with clear, readable explanations and numerous diagrams. This approach makes this an ideal student text for vocational courses in engineering drawing and undergraduates studying engineering design / product design. Colin Simmons is a member of the BSI and ISO Draughting Committees and an Engineering Standards Consultant. He was formerly Standards Engineer at Lucas CAV. \* Fully in line with the latest ISO Standards \* A textbook and reference guide for students and engineers involved in design engineering and product design \* Written by a former lecturer and a current member of the relevant standards committees

**Fluid Mechanics (Vol. 1)** Aug 07 2020 This book provides the fundamental knowledge allowing students in engineering and natural sciences to enter fluid mechanics and its applications in various fields where fluid flows need to be dealt with. This textbook is written for the introductory course of fluid mechanics for students at the undergraduate and postgraduate levels. Volume 1 of this textbook contains seven chapters to help build the basic understanding of the subject matter. It adequately covers the properties of fluids, pressure and its measurement, hydrostatic forces on surface, buoyancy, and floatation, kinematics of fluid motion, dynamics of fluid flow, and dimensional and model analysis. The concepts are supported by numerous solved examples and multiple-choice questions to aid self-learning in students. The textbook also contains illustrated diagrams for better understanding of the concepts. The book is extremely useful for the undergraduate and postgraduate students of engineering and natural sciences.

**Advanced Fuzzy Logic Approaches in Engineering Science** Jun 16 2021 Fuzzy logic techniques have had extraordinary growth in various engineering systems. The developments in engineering sciences have caused apprehension in modern years due to high-tech industrial processes with ever-increasing levels of complexity. Advanced Fuzzy Logic Approaches in Engineering Science provides innovative insights into a comprehensive range of soft fuzzy logic techniques applied in various fields of engineering problems like fuzzy sets theory, adaptive neuro fuzzy inference system, and

hybrid fuzzy logic genetic algorithms belief networks in industrial and engineering settings. The content within this publication represents the work of particle swarms, fuzzy computing, and rough sets. It is a vital reference source for engineers, research scientists, academicians, and graduate-level students seeking coverage on topics centered on the applications of fuzzy logic in high-tech industrial processes.

### **Engineering Graphics & Design | AICTE Prescribed Textbook - English**

Jun 28 2022 This textbook “Engineering Graphics and Design” is based on the latest outcome based model curriculum of the AICTE. The book covers complete syllabus catering requirements of all major technical universities and institutes and provides insights into traditional engineering graphics as well as treats of the subject using 2D and 3D design software. It offers technical details, current standard, real world examples and clearly explains theory and technique in highly visual and concise format. The topic covered in this book are arranged into 9 chapters comprising self-explanatory diagrams and solved examples. Salient Features: 1 Introduction of Engineering Drawing 1 Orthographic Projection 1 Projection of Solids 1 Section of Solids and Development of Surfaces 1 Isometric Projection 1 Overview of Computer Graphics 1 CAD Drawing 1 Solid Modelling 1 Team Design Project.

### **Innovative Teaching Strategies and New Learning Paradigms in**

**Computer Programming** Nov 29 2019 Courses in computer programming combine a number of different concepts, from general problem-solving to mathematical precepts such as algorithms and computational intelligence. Due to the complex nature of computer science education, teaching the novice programmer can be a challenge. Innovative Teaching Strategies and New Learning Paradigms in Computer Programming brings together pedagogical and technological methods to address the recent challenges that have developed in computer programming courses. Focusing on educational tools, computer science concepts, and educational design, this book is an essential reference source for teachers, practitioners, and scholars interested in improving the success rate of students.

### *The 30th SIAR International Congress of Automotive and Transport*

*Engineering* Jan 30 2020 This proceedings book includes papers that cover the latest developments in automotive vehicles and environment, advanced transport systems and road traffic, heavy and special vehicles, new materials, manufacturing technologies and logistics and advanced engineering methods. Authors of the papers selected for this book are experts from research,

industry and universities, coming from different countries. The overall objectives of the presentations are to respond to the major challenges faced by the automotive industry, and to propose potential solutions to problems related to automotive technology, transportation and environment, and road safety. The congress is organized by SIAR (Society of Automotive Engineers from Romania) in cooperation with SAE International. The purpose is to gather members from academia, industry and government and present their possibilities for investigations and research, in order to establish new future collaborations in the automotive engineering and transport domain. This proceedings book is just a part of the outcomes of the congress. The results presented in this proceedings book benefit researchers from academia and research institutes, industry specialists, Ph.D. students and students in Automotive and Transport Engineering programs.

**Geometry of Design** Feb 10 2021 Engineering drawing is the "instrument of communication" upon which the designer must place all information necessary to define a new product. Computer-aided design (CAD) courses often involve teaching solid modelling software, and we view CAD as an engineering communication tool for manufacturing. As the technology of engineering design is in transition from paper drawings to solid models, its education must address the challenge of covering both technologies. Geometry of design integrates drafting technology based on experience with engineering design education. This workbook has evolved from the course "Computer-Aided Graphics and Design" at the University of Florida, and many pages of this textbook can be used for student assignments. In order to help students to familiarize themselves with the manufacturing field experience, most assignments are to be submitted in the form of complete working drawings of the parts and assembly. The first three chapters introduce basic engineering drawing definitions and practices. The following four chapters cover design and descriptive geometry, and subsequent chapters move on to dimensions, assembly line design and surface development.