#### Civil Engineering Formulas Pocket Guide

Structural Composite Materials Failure Case Studies in Civil EngineeringMechanical Engineer's Pocket BookCivil Engineering FormulasEngineers Black BookHandbook of Machining and Metalworking CalculationsBasic Civil and Mechanical Engineering I Mech Engineers' Databook Field Engineer's ManualStatistics and Probability for Engineering Applications Advanced Building MaterialsCivil Engineer's Reference BookMathematics Pocket Book for Engineers and ScientistsStandard Handbook of Engineering CalculationsCivil Engineering Formulas Handbook of Civil Engineering Calculations, Third EditionFundamentals of AstrodynamicsHandbook of Energy Engineering CalculationsNewnes Engineering Science Pocket BookGeotechnical Engineering Calculations and Rules of ThumbThe Handbook of Highway EngineeringStructural Engineering FormulasCivil Engineering FormulasMechanical Engineering Formulas Pocket GuideBasic Civil EngineeringCivil Engineers' Pocket BookHow to Make Millions in Real Estate in Three Years Startingwith No CashCivil **Engineering Formulas Mechanical Engineering** Formulas Pocket GuideCivil Engineering Systems AnalysisRailway Locomotives and CarsCarbon Dioxide Capture and StorageGuide to Reference BooksPocket Book of Electrical Engineering FormulasMathematical Handbook for Scientists and EngineersThe Civil Engineering Handbook, Second EditionHandbook of Civil Engineering Calculations, Second

EditionEngineering FormulasConcrete Portable HandbookStructural Engineer's Pocket Book

#### **Structural Composite Materials**

Statistics and Probability for Engineering Applications provides a complete discussion of all the major topics typically covered in a college engineering statistics course. This textbook minimizes the derivations and mathematical theory, focusing instead on the information and techniques most needed and used in engineering applications. It is filled with practical techniques directly applicable on the job. Written by an experienced industry engineer and statistics professor, this book makes learning statistical methods easier for today's student. This book can be read sequentially like a normal textbook, but it is designed to be used as a handbook, pointing the reader to the topics and sections pertinent to a particular type of statistical problem. Each new concept is clearly and briefly described, whenever possible by relating it to previous topics. Then the student is given carefully chosen examples to deepen understanding of the basic ideas and how they are applied in engineering. The examples and case studies are taken from real-world engineering problems and use real data. A number of practice problems are provided for each section, with answers in the back for selected problems. This book will appeal to engineers in the entire engineering spectrum (electronics/electrical, mechanical, chemical, and civil engineering); engineering students and students taking computer science/computer
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engineering graduate courses; scientists needing to use applied statistical methods; and engineering technicians and technologists. \* Filled with practical techniques directly applicable on the job \* Contains hundreds of solved problems and case studies, using real data sets \* Avoids unnecessary theory

#### **Failure Case Studies in Civil Engineering**

Indispensable portable reference for all practicing civil engineers and students Now you can get a single compilation of all essential civil engineering formulas and equations in one easy-to-use portable reference. More than three-quarters of the material in Tyler Hicks Civil Engineering Formulas Pocket Guide is in the form of formulas, tables, and graphs, presented in SI and USCS formats. Each chapter, offering collections of problems and calculations, gives you quick reference to a well-defined topic: Conversion Factors for Civil Engineering Practice Beam Formulas Column Formulas Piles and Piling Formulas Concrete Formulas Timber Engineering Formulas Surveying Formulas Soil and Earthwork Formulas Building and Structures Formulas Bridge and Suspension-Cable Formulas Highway and Road Formulas Hydraulics and Waterworks Formulas

#### Mechanical Engineer's Pocket Book

THOUSANDS OF MECHANICAL ENGINEERING FORMULAS IN YOUR POCKET AND AT YOUR FINGERTIPS! This portable find-it-now reference contains thousands of indispensable formulas

mechanical engineers need for day-to-day practice. It's all here in one compact resource -- everything from HVAC to stress and vibration equations -- measuring fatigue, bearings, gear design, simple mechanics, and more. Compiled by a professional engineer with many years' experience, the Pocket Guide includes common conversions, symbols, and vital calculations data. You'll find just what you need to solve your problems quickly, easily, and accurately.

#### **Civil Engineering Formulas**

Civil Engineer's Reference Book, Fourth Edition provides civil engineers with reports on design and construction practices in the UK and overseas. It gives a concise presentation of theory and practice in the many branches of a civil engineer's profession and it enables them to study a subject in greater depth. The book discusses some improvements in earlier practices, for example in surveying, geotechnics, water management, project management, underwater working, and the control and use of materials. Other changes covered are from the evolving needs of clients for almost all forms of construction, maintenance and repair. Another major change is the introduction of new national and Eurocodes based on limit state design, covering most aspects of structural engineering. The fourth edition incorporates these advances and, at the same time, gives greater prominence to the special problems relating to work overseas, with differing client requirements and climatic conditions. Chapters 1 to 10 provide engineers, at all levels of development,

with 'lecture notes' on the basic theories of civil engineering. Chapters 11 to 44 cover the practice of design and construction in many of the fields of civil engineering. Civil engineers, architects, lawyers, mechanical engineers, insurers, clients, and students of civil engineering will find benefit in the use of this text.

#### **Engineers Black Book**

Whether or not, you are on the job site or back in the office, this book will help you to avoid mistakes, code violations, and wasted time and money. The book's four part treatment begins with constituent materials followed by self contained parts on Concrete Properties, Processes, and Concrete Repair and Rehabilitation. Designed to be an "all in one" reference, the author includes a wealth information for the most popular types of testing. This includes: Analysis of Fresh Concrete; Testing Machines; Accelerated Testing Methods; Analysis of Hardened Concrete and Mortar; Core Sampling and Testing; Assessment of Concrete Construction; Repair; Quality Concepts; Quality Control; Statistics; Standards, Specifications, and Codes of Practice. With this book in hand, construction engineers and even technicians find valuable information regarding Exposed Concrete Finishes, Repairing Concrete, Formwork, Precast Concrete, Concrete Roads, and Industrial Floors. Project managers and owners will find this reference a valuable guide to concrete both in terms of its applications in construction projects and the science and chemistry of concrete for its own sake.

Fundamentals of Concrete Chemistry Handy at your figure tip calculations Tips for working with all types of concretes Covers Roads, floors, and finishes Principles of Precast, Reinforced and Prestressed Concrete

# Handbook of Machining and Metalworking Calculations

Teaching text developed by U.S. Air Force Academy and designed as a first course emphasizes the universal variable formulation. Develops the basic two-body and n-body equations of motion; orbit determination; classical orbital elements, coordinate transformations; differential correction; more. Includes specialized applications to lunar and interplanetary flight, example problems, exercises. 1971 edition.

#### **Basic Civil and Mechanical Engineering**

Convenient access to information from every area of mathematics: Fourier transforms, Z transforms, linear and nonlinear programming, calculus of variations, random-process theory, special functions, combinatorial analysis, game theory, much more.

#### **IMechE Engineers' Databook**

A fully revised BusinessWeek bestseller that will help even beginning investors cash in on the 21st-century real estate boom.

#### Field Engineer's Manual

Up-To-Date Techniques for Solving Any Civil Engineering Problem Perform complex design and construction calculations quickly and accurately with help from this thoroughly revised guide. Handbook of Civil Engineering Calculations, Third Edition, features more than 3,000 logically organized calculations that align with the latest practices, codes, and standards. You will get start-to-finish calculation procedures for Load Resistance Factor Design (LRFD), anti-terrorism components, enhanced building security, green construction, safe bridge design, and environmentally sound water treatment. All-new steps to improve indoor air quality and protect structures from hurricanes, tornadoes, floods, and waves are also discussed in this on-the-job resource. This fully updated third edition covers: · Structural Steel Engineering and Design · Reinforced and Pre-stressed Concrete Engineering and Design · Timber Engineering · Soil Mechanics · Surveying, Route Design, and Highway Bridges · Fluid Mechanics, Pumps, Piping, and Hydro Power · Water Supply and Storm Water System Design · Sanitary Wastewater Treatment and Control · Engineering Economics

# Statistics and Probability for Engineering Applications

#### **Advanced Building Materials**

Instant Access to Civil Engineering Formulas Fully
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updated and packed with more than 500 new formulas, this book offers a single compilation of all essential civil engineering formulas and equations in one easy-to-use reference. Practical, accurate data is presented in USCS and SI units for maximum convenience. Follow the calculation procedures inside Civil Engineering Formulas, Second Edition, and get precise results with minimum time and effort. Each chapter is a quick reference to a well-defined topic, including: Beams and girders Columns Piles and piling Concrete structures Timber engineering Surveying Soils and earthwork Building structures Bridges and suspension cables Highways and roads Hydraulics, drams, and waterworks Power-generation wind turbines Stormwater Wastewater treatment Reinforced concrete Green buildings Environmental protection

#### **Civil Engineer's Reference Book**

IPCC Report on sources, capture, transport, and storage of CO2, for researchers, policy-makers and engineers.

## Mathematics Pocket Book for Engineers and Scientists

This collection of papers, which was subjected to strict peer-review by 2 to 4 expert referees, aims to collect together the latest advances in, and applications of, traditional constructional materials, advanced constructional materials and green building materials. It cannot fail to suggest new ideas and strategies to

be tried in this field.

## Standard Handbook of Engineering Calculations

Functions as a Day-to-Day Resource for Practicing Engineers The hugely useful Structural Engineer's Pocket Book is now overhauled and revised in line with the Eurocodes. It forms a comprehensive pocket reference guide for professional and student structural engineers, especially those taking the IStructE Part 3 exam. With stripped-down basic material—tables, data, facts, formulae, and rules of thumb—it is directly usable for scheme design by structural engineers in the office, in transit, or on site. And a Core Reference for Students It brings together data from many different sources, and delivers a compact source of job-simplifying and time-saving information at an affordable price. It acts as a reliable first point of reference for information that is needed on a daily basis. This third edition is referenced throughout to the structural Eurocodes. After giving general information and details on actions on structures, it runs through reinforced concrete, steel, timber, and masonry. Provides essential data on steel, concrete, masonry, timber, and other main materials Pulls together material from a variety of sources for everyday work Serves as a first point of reference for structural and civil engineers A core structural engineering book. Structural Engineer's Pocket Book: Eurocodes. Third Edition benefits both students and industry professionals.

#### **Civil Engineering Formulas**

Manage everyday calculations instantly and accurately-saving you time in the design, construction, and maintenance of all types of structures Covering all aspects of civil engineering calculations in an easy-to-understand format, the new edition of the Handbook of Civil Engineering Calculations is now revised and updated with over 500 key calculations that show you exactly how to compute the desired values for a particular designgoing quickly from data to finished result. Using both customary and SI units, this comprehensive engineer's must-have resource is exactly what you need to solve the civil engineering problems that come your way. From structural steel to reinforced concrete, from bridges and dams to highways and roads, Handbook of Civil Engineering Calculations, 2e, lets you handle all of these design calculations guicklyand more importantly, correctly. NEW TO THIS EDITION: Updated calculation procedures using the latest applicable design codes for everything-from structural steel to reinforced concrete, from water supply to highways, freeways, roads, and more A wealth of new illustrated calculation procedures to provide better guidance for the design engineer New civil-engineering data on "green" buildings and their design, better qualifying them for LEED (Leadership in Energy and Environmental Design) ratings Inside This Cutting-Edge Engineering Calculations Guide-Structural Steel Engineering and Design • Reinforced and Prestressed Concrete Engineering and Design • Timber Engineering • Soil Mechanics • Surveying,

Route Design, and Highway Bridges • Fluid Mechanic, Pumps, Piping, and Hydro Power • Water Supply

# Handbook of Civil Engineering Calculations, Third Edition

This book is designed for course on Basic Civil and Mechanical Engineering. The book closely follows the undergraduate engineering syllabus. The text has been infused with several short answer questions, fill in the blanks and true or false statements which will provide competitive edge to students and prove instrumental in preparation of competitive and university examinations.

#### **Fundamentals of Astrodynamics**

"This easy-to-use pocket book contains a wealth of upto-date, useful, practical and hard-to-find information. With 160 matt laminated, greaseproof pages you'll enjoy glare-free reading and durability. Includes: data sheets, formulae, reference tables and equivalent charts. New content in the 3rd edition includes; Reamer and Drill Bit Types, Taper Pins, Tslot sizing, Counterboring/Sinking, Extended Angles Conversions for Cutting Tapers, Keyways and Keyseats, Woodruff Keys, Retaining Rings, 0-Rings, Flange Sizing, Common Workshop Metals, Adhesives, GD&T, Graph and Design Paper included at the back of the book. Engineers Black Book contains a wealth of up-to-date, useful, information within over 160 matt laminated grease proof pages. It is ideal for engineers, trades people, apprentices, machine

shops, tool rooms and technical colleges." -- publisher website.

## Handbook of Energy Engineering Calculations

Instant Access to Civil Engineering Formulas Fully updated and packed with more than 500 new formulas, this book offers a single compilation of all essential civil engineering formulas and equations in one easy-to-use reference. Practical, accurate data is presented in USCS and SI units for maximum convenience. Follow the calculation procedures inside Civil Engineering Formulas, Second Edition, and get precise results with minimum time and effort. Each chapter is a quick reference to a well-defined topic. including: Beams and girders Columns Piles and piling Concrete structures Timber engineering Surveying Soils and earthwork Building structures Bridges and suspension cables Highways and roads Hydraulics, drams, and waterworks Power-generation wind turbines Stormwater Wastewater treatment Reinforced concrete Green buildings Environmental protection

## Newnes Engineering Science Pocket Book

Geotechnical Engineering Calculations Manual offers geotechnical, civil and structural engineers a concise, easy-to-understand approach the formulas and calculation methods used in of soil and geotechnical engineering. A one stop guide to the foundation

design, pile foundation design, earth retaining structures, soil stabilization techniques and computer software, this book places calculations for almost all aspects of geotechnical engineering at your finger tips. In this book, theories is explained in a nutshell and then the calculation is presented and solved in an illustrated, step-by-step fashion. All calculations are provided in both fps and SI units. The manual includes topics such as shallow foundations, deep foundations, earth retaining structures, rock mechanics and tunnelling. In this book, the author's done all the heavy number-crunching for you, so you get instant, ready-to-apply data on activities such as: hard ground tunnelling, soft ground tunnelling, reinforced earth retaining walls, geotechnical aspects of wetland mitigation and geotechnical aspects of landfill design. Easy-to-understand approach the formulas and calculations • Covers calculations for foundation, earthworks and/or pavement subgrades • Provides common codes for working with computer software • All calculations are provided in both US

## **Geotechnical Engineering Calculations** and Rules of Thumb

and SI units

Pocket Book of Electrical Engineering Formulas provides key formulas used in practically all areas of electrical engineering and applied mathematics. This handy, pocket-sized guide has been organized by topic field to make finding information quick and easy. The book features an extensive index and is an excellent quick reference for electrical engineers,

educators, and students.

#### The Handbook of Highway Engineering

This report provides short descriptions of 50 realworld examples of performance failures designed specifically for classroom use.

#### **Structural Engineering Formulas**

This book deals with all aspects of advanced composite materials; what they are, where they are used, how they are made, their properties, how they are designed and analyzed, and how they perform inservice. It covers both continuous and discontinuous fiber composites fabricated from polymer, metal, and ceramic matrices, with an emphasis on continuous fiber polymer matrix composites.

#### **Civil Engineering Formulas**

Modern highway engineering reflects an integrated view of a road system's entire lifecycle, including any potential environmental impacts, and seeks to develop a sustainable infrastructure through careful planning and active management. This trend is not limited to developed nations, but is recognized across the globe. Edited by renowned authority

## **Mechanical Engineering Formulas Pocket Guide**

FORMULAS IN YOUR POCKET AND AT YOUR FINGERTIPS! This portable find-it-now reference contains thousands of indispensable formulas mechanical engineers need for day-to-day practice. It's all here in one compact resource -- everything from HVAC to stress and vibration equations -- measuring fatigue, bearings, gear design, simple mechanics, and more. Compiled by a professional engineer with many years' experience, the Pocket Guide includes common conversions, symbols, and vital calculations data. You'll find just what you need to solve your problems quickly, easily, and accurately.

#### **Basic Civil Engineering**

The Newnes Mechanical Engineer's Pocket Book is a comprehensive collection of data for mechanical engineers and students of mechanical engineering. Bringing together the data and information that is required to-hand when designing, making or repairing mechanical devices and systems, it has been revised to keep pace with changes in technology and standards. The Pocket Book emphasises current engineering practice and is supported by clear accounts of the fundamental principles of mechanical engineering. Key features include the latest BSI engineering data; focus on engineering design issues; enhanced coverage of roller chain drives, pneumatic and hydraulic systems; and expanded and more accessible detail on statics, dynamics and mathematics. \* Over 300 pages of new material, including the latest standards information from BSI \* Exhaustive collection of data for mechanical

engineers and students of mechanical engineering \* Unique emphasis on engineering design, theory, materials and properties

#### **Civil Engineers' Pocket Book**

#### How to Make Millions in Real Estate in Three Years Startingwith No Cash

Newnes Engineering Science Pocket Book provides a readily available reference to the essential engineering science formulae, definitions, and general information needed during studies and/or work situation. This book consists of three main topics general engineering science, electrical engineering science, and mechanical engineering science. In these topics, this text specifically discusses the atomic structure of matter, standard quality symbols and units, chemical effects of electricity, and capacitors and capacitance. The alternating currents and voltages, three phase systems, D.C. machines, and A.C. motors are also elaborated. This compilation likewise covers the linear momentum and impulse, effects of forces on materials, and pressure in fluids. This publication is useful for technicians and engineers, as well as students studying for technician certificates and diplomas, GCSE, and A levels.

#### **Civil Engineering Formulas**

SOLVE ENERGY PROBLEMS QUICKLY AND ACCURATELY Filled with step-by-step procedures for Page 16/24

performing hundreds of calculations, this practical guide helps you solve a variety of applied energy engineering design and operating problems. Handbook of Energy Engineering Calculations features worked-out examples and enables you to obtain accurately results with minimum time and effort. Calculation procedures emphasize greenhouse gas and carbon dioxide emissions control as well as energy conservation and reuse. This is an invaluable, time-saving resource for anyone involved in energy engineering. Comprehensive coverage includes: Energy conversion engineering Steam power generation Gas-turbine power generation Internalcombustion engine energy analysis Nuclear energy engineering Hydroelectric energy power plants Wind power energy design and application Solar power energy application and usage Geothermal energy engineering Ocean energy engineering Heat transfer and energy conservation Fluid transfer engineering Interior climate control energy economics Energy conservation and environmental pollution control

## **Mechanical Engineering Formulas Pocket Guide**

Comprehensive yet compact, this is a user-friendly time-saving reference packed with key engineering formulas for a wide variety of applications. Featuring introductory material on use and application of each formula, along with appendices covering metric conversion information, and selected mathematical formulas and symbols, this is a unique resource no civil engineer should be without.

#### **Civil Engineering Systems Analysis**

ESSENTIAL MACHINING AND METAL WORKING CALCULATIONS IN THE PALM OF YOUR HAND Solve virtually any problem involving metalworking and machining tools and applications -- guickly and easily with the help of one convenient hands-on resource ready-made for your benchtop or workstation . It's Ronald A. Walsh's Handbook of Machining and Metalworking Calculations, and it puts design, operations, repair, and maintenance answers right where you want them—close at hand. You get: Basic to advanced calculation procedures Latest ANSI and ISO specifications Examples of solved problems Calculations for gears, sprockets, springs, screws, threads, ratchets, cams, linkages, notches, flanges, holes, broaching, boring, reaming, turning, pitch, torsion, tension, and more Fit classes and their calculations Easy-to-use tables, charts, listings, and formulas

#### **Railway Locomotives and Cars**

#### **Carbon Dioxide Capture and Storage**

NEW IN THIS EDITION Complying with the latest environmental regulations Design code changes LEED design considerations HVAC procedures Mobile and inthe-field methods "A classic compendium of step-by-step calculations for solving the most frequently encountered engineering problems in many engineering disciplines." —dianahacker.com 5000

Essential Calculations for Engineers Packed with new data and methods, this invaluable handbook provides professionals with more than 5000 direct and related calculation procedures for solving common engineering problems quickly and easily. Now thoroughly revised and updated. Standard Handbook of Engineering Calculations, Fourth Edition covers seven engineering disciplines: civil, architectural, mechanical, electrical, chemical and process plant, sanitary, and environmental. Written in the popular "cookbook" format, the handbook describes each problem to be solved; provides numbered calculation procedures to be followed; works out an actual problem; and presents related calculations in most instances. This fourth edition features numerous new topics from design code changes in civil engineering to composite usage in engineering design. Inside, you'll find new problem-solving coverage of: Antiterrorism structural building changes Power-plant costcutting Efficient compliance with environmental regulations Wind energy systems LEED considerations in building design Developments in pumps and related calculations Freon-replacing refrigerants Computer programs that automate repetitive calculations Finite element analytic methods The fourth edition of Standard Handbook of Engineering Calculations is a reference engineers will thank for answers time after time. Open this book for all the calculations you need in: Civil Engineering \* Architectural Engineering \* Mechanical Engineering \* Electrical Engineering \* Chemical and Process Plant Engineering \* Sanitary Engineering \* Environmental **Engineering** 

#### **Guide to Reference Books**

This textbook covers tools and applications in civil engineering systems. It begins by revising the mathematical and statistical background for the adequate formulation of civil engineering problems. Then it examines a series of topics required to understand infrastructure, facilities and transportation networks, and their planning, maintenance, upgrading and expansion. It covers problem definition, model formulation and decision making systems, including optimization, estimation and prediction. The applications deal with some of the challenges that civil engineers will typically encounter during their professional lives, ranging from municipal planning and infrastructure management to transportation analysis. The treatment of the topics is integral. Tools and examples from real life situations are combined to illustrate the use of methods and principles. Students will learn to understand a system, conceptualize a model, analyse it and make decisions or draw conclusions, just as practising engineers do. A final chapter introduces methods for expanding simple models, adding complexity and incorporating uncertainty. Instructors can chose to cover some of the material from the foundation chapters on mathematics and statistics or directly concentrate on the tools and applications.

## Pocket Book of Electrical Engineering Formulas

Presents an engineering guide containing a variety of

mathematical and technical formulas and equations.

# Mathematical Handbook for Scientists and Engineers

This compendium of essential formulae, definitions, tables and general information provides the mathematical information required by engineering students, technicians, scientists and professionals in day-to-day engineering practice. A practical and versatile reference source, now in its fifth edition, the layout has been changed and streamlined to ensure the information is even more quickly and readily available - making it a handy companion on-site, in the office as well as for academic study. It also acts as a practical revision guide for those undertaking degree courses in engineering and science, and for BTEC Nationals, Higher Nationals and NVQs, where mathematics is an underpinning requirement of the course. All the essentials of engineering mathematics - from algebra, geometry and trigonometry to logic circuits, differential equations and probability - are covered, with clear and succinct explanations and illustrated with over 300 line drawings and 500 worked examples based in real-world application. The emphasis throughout the book is on providing the practical tools needed to solve mathematical problems guickly and efficiently in engineering contexts. John Bird's presentation of this core material puts all the answers at your fingertips.

## The Civil Engineering Handbook, Second Edition

\*Provides engineers with the basic technical data they need to solve a wide range of field problems \*Includes new sections on sewage treatment, streets and roads, and rope tying and splicing \*Expanded sections on field inspection, electricity, HVAC, surveying, drainage, sewage collection, water supply, water storage, fire protection, and safety and first aid

# Handbook of Civil Engineering Calculations, Second Edition

First published in 1995, the award-winning Civil Engineering Handbook soon became known as the field's definitive reference. To retain its standing as a complete, authoritative resource, the editors have incorporated into this edition the many changes in techniques, tools, and materials that over the last seven years have found their way into civil engineering research and practice. The Civil Engineering Handbook, Second Edition is more comprehensive than ever. You'll find new, updated, and expanded coverage in every section. In fact, more than 1/3 of the handbook is new or substantially revised. In particular you'll find increased focus on computing reflecting the rapid advances in computer technology that has revolutionized many aspects of civil engineering. You'll use it as a survey of the field, you'll use it to explore a particular subject, but most of all you'll use The Civil Engineering Handbook to answer the problems, questions, and conundrums you encounter in practice.

#### **Engineering Formulas**

#### **Concrete Portable Handbook**

This book provides a concise and useful source of upto-date essential information for the student or practising engineer.

#### **Structural Engineer's Pocket Book**

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION