

## Rumus Engineering

Materi pokok rekayasa fondasi mencakup pengetahuan dasar berupa teori-teori dan pengetahuan terapan, yaitu penyelesaian kasus-kasus perencanaan yang ada di lapangan. Pengetahuan dasar diperlukan karena merupakan hal dasar yang memengaruhi optimalisasi desain fondasi bangunan di lapangan. Pengetahuan terapan mencakup penjelasan metode perhitungan rumus-rumus yang relevan bagi perencanaan fondasi, meliputi desain dimensi fondasi, kedalaman, serta penurunan dan stabilitas terhadap gaya-gaya internal dan eksternal. Buku Rekayasa Fondasi untuk Program Vokasi disusun karena adanya keterbatasan referensi tentang materi fondasi dangkal dan fondasi dalam, yang mudah dipelajari mahasiswa. Untuk itu, ketika ada kesempatan untuk menyusun materi rekayasa fondasi, penulis beserta teman-teman pengajar yang sebidang, berusaha menyajikan materi buku ajar yang sesuai dengan kebutuhan silabus program vokasi. Mencakup materi fondasi dangkal (shallow foundation) dan fondasi dalam (depth foundation).

In this "powerful personal story woven with a rich analysis of what we all seek" (Sergey Brin, cofounder of Google), Mo Gawdat, Chief Business Officer at Google's [X], applies his superior logic and problem solving skills to understand how the brain processes joy and sadness—and then he solves for happy. In 2001 Mo Gawdat realized that despite his incredible success, he was desperately unhappy. A lifelong learner, he attacked the problem as an engineer would: examining all the provable facts and scrupulously applying logic. Eventually, his countless hours of research and science proved successful, and he discovered the equation for permanent happiness. Thirteen years later, Mo's algorithm would be put to the ultimate test. After the sudden death of his son, Ali, Mo and his family turned to his equation—and it saved them from despair. In dealing with the horrible loss, Mo found his mission: he would pull off the type of "moonshot" goal that he and his colleagues were always aiming for—he would share his equation with the world and help as many people as possible become happier. In *Solve for Happy* Mo questions some of the most fundamental aspects of our existence, shares the underlying reasons for suffering, and plots out a step-by-step process for achieving lifelong happiness and enduring contentment. He shows us how to view life through a clear lens, teaching us how to dispel the illusions that cloud our thinking; overcome the brain's blind spots; and embrace five ultimate truths. No matter what obstacles we face, what burdens we bear, what trials we've experienced, we can all be content with our present situation and optimistic about the future.

Given the improved analytical capabilities of Excel, scientists and engineers everywhere are using it--instead of FORTRAN--to solve problems. And why not? Excel is installed on millions of computers, features a rich set of built-in analyses tools, and includes an integrated Visual Basic for Applications (VBA) programming language. No wonder it's today's computing tool of choice. Chances are you already use Excel to perform some fairly routine calculations. Now the *Excel Scientific and Engineering Cookbook* shows you how to leverage Excel to perform more complex calculations, too, calculations that once fell in the domain of specialized tools. It does so by putting a smorgasbord of data analysis techniques right at your fingertips. The book shows how to perform these useful tasks and others: Use Excel and VBA in general Import data from a variety of sources Analyze data Perform calculations Visualize the results for interpretation and presentation Use Excel to solve specific science and engineering problems Wherever possible, the *Excel Scientific and Engineering Cookbook* draws on real-world examples from a range of scientific disciplines such as biology, chemistry, and physics. This way, you'll be better prepared to solve the problems you face in your everyday scientific or engineering tasks. High on practicality and low on theory, this quick, look-up reference provides instant solutions, or "recipes," to problems both basic and advanced. And like other books in O'Reilly's popular *Cookbook* format, each recipe also includes a discussion on how and why it works. As a result, you can take comfort in knowing that complete, practical answers are a mere page-flip away.

Make and test projects are used as introductory design experiences in almost every engineering educational institution world wide. However, the educational benefits and costs associated with these projects have been seldom examined. *Make and Test Projects in Engineering Design* provides a serious examination of the design of make and test projects and their associated educational values. A taxonomy is provided for the design of make and test projects as well as a catalogue of technical information about unconventional engineering materials and energy sources. Case studies are included based on the author's experience of supervising make and test projects for over twenty-five years. The book is aimed at the engineering educator and all those planning and conducting make and test projects. Up until now, this topic has been dealt with informally. *Make and Test Projects in Engineering Design* is the first book that formalises this important aspect of early learning in engineering design. It will be an invaluable teaching tool and resource for educators in engineering design.

*Engineering Psychology: Prinsip Dasar Rekayasa Kerja Berbasis Integrasi Fisik, Psikis, dan Teknik* merupakan buku pertama di Indonesia yang membahas mengenai keilmuan Engineering Psychology. Engineering psychology sendiri merupakan disiplin ilmu dengan konsep multidisiplin yang berfokus pada optimalisasi kinerja manusia melalui interaksi antara manusia dengan mesin, produk, objek, maupun teknologi yang berlandaskan integrasi aspek fisik, psikis dan teknik, dengan mempertimbangkan kelebihan dan keterbatasan manusia sebagai pusat dari rancangan. Buku ini terdiri dari 15 bab yang disusun oleh para penulis yang berasal dari disiplin ilmu yang berbeda yaitu psikologi, teknik dan kedokteran. Setiap bab ditulis secara spesifik oleh dosen yang sudah sangat berpengalaman di bidangnya. Buku ini dibagi atas empat bagian; bagian pertama terdiri dari dua bab yang membahas pengantar keilmuan dan dasar hubungan manusia mesin, bagian kedua terdiri dari empat bab yang ditulis oleh para ahli dari fakultas kedokteran membahas mengenai dasar-dasar pancaindra, memori, dan anatomi, bagian ketiga terdiri dari lima bab membahas mengenai manusia dan aktivitas kerja serta bagian keempat terdiri empat bab yang membahas mengenai human performance. Buku ini dapat menjadi pegangan utama untuk mata kuliah Engineering Psychology, suatu mata kuliah baru yang akan diperkenalkan di Unika Atma Jaya Jakarta. Karena isi buku secara ringkas membahas mengenai aspek manusia dari sisi pendekatan psikologi, fisik dan teknik yang disusun oleh para ahli dari tiga fakultas berbeda (psikologi, kedokteran dan teknik), sebagian besar materi dalam buku ini juga dapat menjadi pegangan untuk beberapa mata kuliah yang terkait di kedokteran, psikologi, dan teknik. Buku ini cocok menjadi buku pegangan bagi mahasiswa peserta kuliah, dosen, praktisi, maupun khalayak umum.

This new edition of the Standard Handbook of Petroleum and Natural Gas Engineering provides you with the best, state-of-the-art coverage for every aspect of petroleum and natural gas engineering. With thousands of illustrations and 1,600 information-packed pages, this text is a handy and valuable reference. Written by over a dozen leading industry experts and academics, the Standard Handbook of Petroleum and Natural Gas Engineering provides the best, most comprehensive source of petroleum engineering information available. Now in an easy-to-use single volume format, this classic is one of the true "must haves" in any petroleum or natural gas engineer's library. \* A classic for the oil and gas industry for over 65 years! \* A comprehensive source for the newest developments, advances, and procedures in the petrochemical industry, covering everything from drilling and production to the economics of the oil patch. \* Everything you need - all the facts, data, equipment, performance, and principles of petroleum engineering, information not found anywhere else. \* A desktop reference for all kinds of calculations, tables, and equations that engineers need on the rig or in the office. \* A time and money saver on procedural and equipment alternatives, application techniques, and new approaches to problems.

Engineers and Engineering Make and Test Projects in Engineering Design Creativity, Engagement and Learning Springer Science & Business Media

The ninth edition of the volume previously known as Daugherty, Franzini and Finnemore. This edition covers fluid system/control volume relationship analysis for continuum, energy and momentum study and looks at many cases drawn from the fields of civil, environmental and mechanical engineering.

A selection of annotated references to unclassified reports and journal articles that were introduced into the NASA scientific and technical information system and announced in Scientific and technical aerospace reports (STAR) and International aerospace abstracts (IAA).

The discipline of environmental engineering is young and rapidly evolving. Once viewed largely as a sub-set of civil engineering, with a particular focus on water sanitation, it has now grown to engage with all aspects of the human and terrestrial environment. Beyond this fact however, there is much debate on the definition of environmental engineering and on its intersections and overlaps with other more traditional fields of engineering. This development poses problems for those constructing programmes of study for the next generations of environmental engineers. These selected proceedings reflect the lively debate that started with differing views on the scope of environmental engineering. Though concentrating on environmental education in European countries, very fruitful comparisons were drawn with the situation in the USA and Japan. The differences in curricular content and educational philosophy are examined, as are attempts to overcome the barriers of culture, language and the varying modes of certification of practising engineers. These proceedings will help to set a framework that can move these debates forward and will be highly valuable to all engineers and educationalists concerned with the future of environmental engineering education and the wider role of the engineering profession.

A perfect guide to speed up the predicting power of machine learning algorithms Key Features Design, discover, and create dynamic, efficient features for your machine learning application Understand your data in-depth and derive astonishing data insights with the help of this Guide Grasp powerful feature-engineering techniques and build machine learning systems Book Description Feature engineering is the most important step in creating powerful machine learning systems. This book will take you through the entire feature-engineering journey to make your machine learning much more systematic and effective. You will start with understanding your data—often the success of your ML models depends on how you leverage different feature types, such as continuous, categorical, and more, You will learn when to include a feature, when to omit it, and why, all by understanding error analysis and the acceptability of your models. You will learn to convert a problem statement into useful new features. You will learn to deliver features driven by business needs as well as mathematical insights. You'll also learn how to use machine learning on your machines, automatically learning amazing features for your data. By the end of the book, you will become proficient in Feature Selection, Feature Learning, and Feature Optimization. What you will learn Identify and leverage different feature types Clean features in data to improve predictive power Understand why and how to perform feature selection, and model error analysis Leverage domain knowledge to construct new features Deliver features based on mathematical insights Use machine-learning algorithms to construct features Master feature engineering and optimization Harness feature engineering for real world applications through a structured case study Who this book is for If you are a data science professional or a machine learning engineer looking to strengthen your predictive analytics model, then this book is a perfect guide for you. Some basic understanding of the machine learning concepts and Python scripting would be enough to get started with this book.

Journal of Information System Engineering and Business Intelligence (JISEBI) focuses on Information System Engineering and its implementation, Business Intelligence, and its application. JISEBI is an international, peer review, electronic, and open access journal. JISEBI is seeking an original and high-quality manuscript. Information System Engineering is a multidisciplinary approach to all activities in the development and management of information system aiming to achieve organization goals. Business Intelligence (BI) focuses on techniques to transfer raw data into meaningful information for business analysis purposes, such as decision making, identification of new opportunities, and the implementation of business strategy. The goal of BI is to achieve a sustainable competitive advantage for businesses.

Although intended primarily for Indonesian users, the dictionary will be helpful to speakers of English who wish to know the Indonesian equivalent of an English word or phrase.

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