

Books on Civil Engineering

If you are interested in civil engineering and would like to find out more, there's lots of information out there. Here are a few suggestions to get you started.

Civil Engineering: A Very Short Introduction

This book explores nature and the importance of civil engineering in the history of civilization and urbanization. It also looks at the social and environmental considerations and the challenges facing civil engineers of the future.

By David Muir Wood

ISBN: 9780199578634

Engineering: A Very Short Introduction

This book explores the nature and practice of engineering, its history, its scope, and its relationship with art, craft, science, and technology. It considers the role of engineering in the modern world and explores how engineers use natural phenomena to embrace human needs.

By David Blockley

ISBN: 9780199578696

Rosie Revere, Engineer

This rhyming text tells the story of Rosie, who dreams of becoming a great engineer. It's Inspiring bed-time reading for young potential engineers.

By Andrea Beaty illustrations by David Roberts

ISBN: 9781419708459

Built: The Hidden Stories Behind our Structures

Structural engineer Roma Agrawal takes a unique look at how construction has evolved from the mud huts of our ancestors to skyscrapers of steel that reach hundreds of metres into the sky.

By Roma Agrawal

ISBN: 9781408870365

Engineering in Society

An e-book published by the Royal Academy of Engineering that is available as a free (pdf) download.

<http://www.raeng.org.uk/publications/reports/engineering-in-society>

Science and the City

By exploring cutting-edge research from labs across the world, you'll build your own vision of the megacity of tomorrow, based on science fact rather than science fiction. Science and the City is the perfect read for anyone curious about the world they live in.

By Laurie Winkless

ISBN: 9781472913227

Think Like An Engineer

Guru Madhavan reveals the extraordinary influence of engineering on society, not just today but throughout history. Drawing on a cast of star engineers including Steve Jobs, the Wright brothers and Thomas Edison, Madhavan explores aspects of this mindset and shows its usefulness to life and business.

By Guru Madhavan

ISBN: 1780746377

The New Science of Strong Materials – or Why You Don't Fall Through the Floor

Why isn't wood weaker than it is? Why isn't steel stronger? Why does glass sometimes shatter and sometimes bend like spring? Using both SI and imperial units, Professor Gordon's account of material science is a demonstration of the sometimes curious and entertaining ways in which scientists isolate and solve problems.

By J.E. Gordon

ISBN: 0140135979

Structures – or Why Things Don't Fall Down

Do you want to understand how structures work without having to go into all the maths and detailed calculations? This book explains the theory, helping you to develop the kind of understanding of structures that civil engineers need.

By J.E. Gordon

ISBN: 0306812835

Invention by Design – How Engineers get from Thought to Thing

Petroski takes us through the thinking that goes into an object as humble as the simple paperclip, right the way through to citywide mass infrastructure and aerospace engineering.

By Henry Petroski

ISBN: 0674463684

Why Buildings Fall Down

In this book, two of the world's premier structural engineers take us on a journey through the history of architectural and structural catastrophes, from the Parthenon and Rome's Coliseum to more recent disasters such as the Ronan Point Tower in London, the Hyatt Regency in Kansas City and the Malpasset Dam in France.

By Matthys Levy and Mario Salvadori

ISBN: 039331152X

Why Buildings Stand Up

By Mario Salvadori

ISBN: 0393306763

Collapse: Why Buildings Fall Down

By S Wearne

ISBN: 9781575001449

Sustainable Energy – Without the Hot Air

By David J.C. MacKay

ISBN: 0954452933

The Bridge: How the Roeblings Connected Brooklyn to New York

The Brooklyn Bridge was originally designed by John Augustus Roebling, but it was his son, Washington, and his daughter-in-law, Emily, who oversaw the bridge's construction. This graphic novel tells the back story of this iconic structure.

By Peter Tomasi

ISBN: 9781419728525

Making the Metropolis – Creators of Victorian London

This book chronicles the lives of eight men who created the Victorian capital. It gives an insight as to the critical role that civil engineers play in shaping our environment.

By Stephen Haliday

ISBN 978-1-78091-144-1

How to Read Bridges

A practical pocket guide to looking at the structure and purpose of bridges.

By Edward Denison and Ian Stewart

ISBN 978-1-4081-7176-9

Engineering – A Beginner's Guide

This book explains how engineers think and demonstrates how every aspect of our lives, from fun gadgets to vital infrastructure, has been engineered.

By Natasha McCarthy

ISBN 978-1-85168-622-9

In the Footsteps of IK Brunel

Brunel was one of the UK's great early engineers. This book celebrates his amazing engineering projects, both the successes and the failures. There is also a useful guide to where his work can still be seen.

By Jonathan Falconer

ISBN 978-0-7110-3798-4

Super structures: the science of bridges, buildings, dams, and other feats of engineering

Ever wonder how a graceful and slender bridge can support enormous loads over truly astonishing spans? Why domes and free-standing arches survive earthquakes that flatten the rest of a city? This book will answer your questions.

By Mark Denny

Published by Johns Hopkins Press, 2010

Engineering the City: How Infrastructure Works, Projects and Principles for Beginners

How does a city obtain water, gas, and electricity? Where do these services come from? How are they transported? The answer is infrastructure, or the inner, and sometimes invisible, workings of the city. Read on to find out more.

By Matthys Levy and Richard Panchyk

ISBN 1-55652-419-6-51495