

# Engineering Reference Materials

## Textbooks

**Title** - Introduction to Engineering

**Author** – Paul H. Wright

**Copyright** – 2002

**ISBN** – 0-471-05920-X

**Publisher** – John Wiley & Sons

**Title** – Integrating Mathematics, Science, and Technology

**Author** – Diana Mason, Kathleen Cage Mittag, Sharon E. Taylor

**Copyright** – 2003

**ISBN** – 0-205-34994-3

**Publisher** – Allyn & Bacon

**Title** – High School Mathematics at Work

**Author** – National Research Council

**Copyright** – 1998

**ISBN** – 0-309-06353-1

**Publisher** – National Academy Press

**Title** – Engineering Your Future

**Author** – William Oakes, Les Leone, Craig Gunn

**Copyright** – 2002

**ISBN** – 1-881018-90-3

**Publisher** – Great Lakes Press, Inc.

Attn. John Gruender

P.O. Box 550

Wildwood, MO 63040

(636) 273-6016

**Title** – The Mechanical Design Process (3<sup>rd</sup> Edition)

**Author** – David Ullman

**Copyright** – 2003

**ISBN** – 0-07-237338-5

**Publisher** – McGraw-Hill, Inc.

**Title** – Creative Problem Solving and Engineering Design

**Author** – Edward Lumsdaine, Monika Lumsdaine, J. William Shelnett

**Copyright** – 1999

**ISBN** – 0-07-235909-9

**Publisher** – McGraw-Hill, Inc.

**Title** – Introduction to Engineering Design and Problem Solving  
**Author** – Arvid Eide, Roland Jenison, Lane Mashaw, Larry Northup  
**Copyright** – 1998  
**ISBN** – 0-07-240221-0  
**Publisher** – McGraw-Hill, Inc.

**Title** – Introduction to Engineering (3<sup>rd</sup> Edition)  
**Author** – Paul Wright  
**Copyright** – 2002  
**ISBN** – 0-471-05920-X  
**Publisher** – McGraw-Hill, Inc.

**Title** – Introduction to Engineering Design and Problem Solving  
**Author** – M. David Burghardt  
**Copyright** – 1999  
**ISBN** – 0-07-012188-5  
**Publisher** – McGraw-Hill, Inc.

**Title** – Engineering Problem Solving for Mathematics, Science, and Technology Education  
**Author** – Ellen Frye  
**Copyright** – 1997  
**URL** – <http://engineering.dartmouth.edu/~teps/book.html>  
**Publisher** – Dartmouth Project for Teaching Engineering Problem Solving  
Thayer School of Engineering  
8000 Cummings  
Dartmouth College  
Hanover, NH 03755-8000

**Title** – Introduction to Engineering: A Standards-Based High School Model Course Guide  
**Author** – ITEA-CATTS Consortium  
**Copyright** – 2003  
**URL** – [www.itea.org](http://www.itea.org)  
**Publisher** – International Technology Education Association

## Internet Sources

**Title** – Interaction: The Relationship Between Science and Design and Technology in the Secondary School Curriculum  
**Author** – David Barlex, James Pitt  
**URL** – [http://www.engc.org.uk/publications/pdf/Interaction\\_Report.pdf](http://www.engc.org.uk/publications/pdf/Interaction_Report.pdf)

**Title** – Design and Discovery  
**Author** – Intel Corp.  
**URL** – <http://www.intel.com/education/design/index.htm>

**Title** – West Point Bridge Design  
**Author** – West Point Military Academy  
**URL** – <http://bridgecontest.usma.edu/>

**Title** – Madison West High School Engineering  
**Author** – Alan Gomez  
**URL** – <http://www.imagine101.com/>

**Title** - A Guide to High School Programs in Science and Engineering  
**Author** - Tau Beta Pi, Massachusetts Beta Chapter, MIT  
**URL** – <http://edward4.mit.edu/highschool/>

**Title** – ASME Best Practices in High School Engineering  
**Author** – American Society of Mechanical Engineering  
**URL** – <http://www.asme.org/education/precollege/bestpractice/>

**Title** – Engineering Your Future  
**Author** – American Society of Engineering Education  
**URL** – <http://www.asee.org/precollege/>

**Title** – K-12 Students and Teachers  
**Author** – College of Engineering and Applied Sciences, University of Colorado  
**URL** – <http://ecadw.colorado.edu/engineering/k12/index.htm>

**Title** – George Washington Carver High School of Engineering and Science  
**Author** – George Washington Carver High School of Engineering and Science  
**URL** – <http://www.phila.k12.pa.us/schools/carver/>

**Title** – Project Lead the Way  
**Author** – Project Lead the Way  
**URL** – <http://www.pltw.org/hsprogram.shtml>

## **Articles**

**Title** – The Engineering Design Method  
**Author** – Elsa Garmire  
**Journal** – The Technology Teacher, December/January 2003

**Title** – Teaching Design: Taking the First Steps  
**Author** – Scott Warner  
**Journal** – The Technology Teacher, December/January 2003

**Title** – Blame it On The Engineers  
**Author** – Harry Roman  
**Journal** – The Technology Teacher, March 2004

**Title** – Infinity Project: A High School Engineering Curriculum

**Author** – Mark Yoder

**Journal** – ASEE/IEEE Frontiers in Education Conference, 2001

**Title** – 5 Good Reasons for Engineering Design as the Focus for Technology Education

**Author** – Robert Wicklein

**Journal** – The Technology Teacher, In-Press

**Title** – The Status of Design in Technology Teacher Education in the United States

**Author** – Scott Warner, Laura Morford

**Journal** – Journal of Technology Education

## **Multi-Media**

**Title** – Collapse: Failure By Design

**Publisher** – Discovery Channel School

**Date** – 2000

**Title** – Engineering Design

**Publisher** – Insight Media

**Date** – 2001