



Design of Machinery, 6th edition

Robert Norton

Copyright 2020

ISBN: 9781260113310 / 1260113310

Sixth edition changes

The principal changes in this edition are:

- In addition to the printed version of the text, digital e-book versions are also available. These have hotlinks to all the videos and to the downloadable content provided. There are 188 videos. All of these are marked in the print version as well, with their URLs provided, and they can be downloaded by print-book users. A **Video Contents** is provided, and all other downloadable items are listed in the **Downloads Index**.
- Over 50 new problem assignments have been added. The problem figures are included as downloadable PDF files so that students can easily print hard copies on which to work the solutions.
- The author-written programs that come with the book have been completely rewritten to improve their interface and usability, and they are now compatible with the latest operating systems and computers. The programs Fourbar, Fivebar, Sixbar, Slider, and engine have been combined in a new program called Linkages that does everything those programs collectively did with new features added. Program Dynacam also has been completely rewritten and is much improved. Program Matrix is updated. These computer programs undergo frequent revision to add features and enhancements. Professors who adopt the book for a course and students

using the print book may register to download the latest student versions of these programs from: <http://www.designofmachinery.com>. Click on the *Student* or *Professor* link.

- The *Working Model* program is needed to run the Working Model files included with this text. Some universities have site licenses for this program on their lab computers. The supplier, *Design Simulation Technologies*, offers student licenses for one-semester or one-year periods at moderate cost. These are available at <http://www.design-simulation.com/Purchase/studentproducts.php>.
- Many small improvements have been made to the discussion of a variety of topics in many chapters, based largely on user feedback, and all known errors have been corrected.

The extensive DVD content that was introduced in the Fifth Edition is now downloadable from a website. These downloads include:

- The entire *Hrones and Nelson Atlas of Coupler Curves* and the *Zhang et al Atlas of Geared Fivebar Coupler Curves*.
- Wang's *Mechanism Simulation in a Multimedia Environment* contains 105 Working Model (WM) files based on the book's figures with AVI files and 19 Matlab® models for kinematic analysis and animation. The AVI files are linked to their figures in the e-books.
- Videos of two "virtual laboratories" that replicate labs created by the author at WPI are provided. These include demonstrations of the lab machines used and spreadsheet files of the acceleration and force data taken during the experiments. The intent is to allow students at other schools to do these exercises as virtual laboratories.
- A series of 34 *Master Lecture Videos* by the author that cover most of the topics in the book as well as 39 shorter "snippets" from these lectures are woven into the chapters. Seven *Demonstration Videos* are also provided. These were recorded over the author's thirty-one years of teaching these subjects at WPI and are listed in the **Video Contents**.