

Training
Solutions

Mastercam®



In-House
Solutions

X4 Training Tutorials

Our popular line of Training Tutorials covers every Mastercam application, offering the most extensive collection of training solutions available. Each book contains a series of tutorials that guide the reader through creating geometry, applying then verifying toolpaths and generating G-Code. A variety of helpful hints, review exercises and quizzes are provided for a complete learning experience.

Mastercam Instructor Kit



- Designed specifically to facilitate teaching Mill Level 1 and Level 3 applications.
- Kit includes:
 - Enhanced Instructor Guides for Mill Level 1 and Level 3.
 - Set of Mill Level 1 and Level 3 Training Tutorials.
 - 39 Lesson Plans outlining over 65 hours of content.
 - 35 PowerPoint presentations.

- Multimedia Training CDs.
 - Quizzes testing both geometry and toolpath knowledge.
 - Geometry exercises & practice part drawings.
 - Geometry files (MCX) for toolpath practice.
- ISBN: 978-1-926566-29-0 Price: \$195.00

Mastercam Mill Level 1 Training Tutorial



- Quickly familiarizes the reader with Mastercam's User Interface and 2D features.
 - 10 part-oriented tutorials plus 17 practice exercises totaling over 735 pages.
 - Greater emphasis on machinability of parts with suggested fixtures, setup sheets & more.
 - Topics covered include: 2D Geometry and Solids creation; Dynamic Plane, Dynamic Mill, Drilling, Tapping, Contouring, Pocketing, Circle Milling, Slot Milling and 2D high Speed Toolpaths; Stock Setup, Tool Settings and WCS in multiple fixture applications.
 - General Notes chapter with useful tools, shortcuts and 2D toolpath parameter descriptions.
 - Includes Multimedia Training CD & Mastercam Demo CD.
- ISBN: 978-1-926566-22-1 Price: \$65.00



Mastercam Instructor Kit with Lathe



- Designed to facilitate teaching Mill Level 1, Level 3 and Lathe.
- Kit Includes:
 - Newly developed Lathe Instructor Guide as well as Mill Level 1 and Level 3.
 - Set of Mill Level 1, Level 3 and Lathe Training Tutorials.
 - 51 Lesson plans out-

- lining over 85 hours of content.
 - 46 PowerPoint presentations and Multimedia Training CDs for each application.
 - Quizzes, geometry exercises, practice drawings and geometry files.
- ISBN: 978-1-926566-35-1 Price: \$225.00

Mastercam Mill Level 3 Training Tutorial



- Provides a comprehensive approach to learning 3D Milling applications.
- 8 part-oriented tutorials plus 8 practice exercises totaling over 600 pages.
- Greater emphasis on machinability of parts with suggested fixtures, setup sheets & more.
- Topics covered include: 3D Wireframe and Surface geometry creation, Surface Finish and Roughing Toolpaths, advanced Surface High Speed Toolpaths, advanced Toolpath Refinement, C-Hooks, STL stock creation and its use in solid model verification.
- General Notes chapter with useful tools, shortcuts and 3D toolpath parameter descriptions.
- Includes Multimedia Training CD & Mastercam Demo CD.

ISBN: 978-1-926566-23-8 Price: \$55.00

Mastercam Lathe Training Tutorial



- Everything needed to learn Mastercam Lathe.
- 7 part-oriented tutorials plus 7 practice exercises totaling over 415 pages.
- Greater emphasis on machinability of parts with suggested fixtures, setup sheets & more.
- Topics covered include: 2D toolpaths such as Face, Rough, Finish, Drilling, Inside Boring, Cutoff, Threads and Canned Cycles for Rough and Finish.
- Also Covers 3D geometry creation

- and C-Axis toolpaths such as Face, Cross Contouring, C-Axis Drilling and C-Axis Contouring.
 - Includes Multimedia Training CD & Mastercam Demo CD.
- ISBN: 978-1-926566-24-5 Price: \$40.00

Mastercam Solids Training Tutorial



- Concise, step-by-step instruction on creating 3D Wireframe and Solid geometry within Mastercam.
- 7 tutorials and 6 practice exercises illustrating Solid commands totaling over 300 pages.
- Topics covered include: Extrude, Revolve, Sweep and Boolean.
- Create Solid geometry from Surfaces; use Loft commands, Shell, Chamfer and Fillet features.

ISBN: 978-1-926566-25-2 Price: \$35.00

Did You Know?

Many of our books are still available for Mastercam V8 - X3.

Mastercam Beginner Training Tutorial



- The perfect starting point for a new Mastercam user.
 - Greater emphasis on machinability of parts with suggested fixtures, setup sheets & more.
 - 6 Mill, 2 Lathe & 3 Solid tutorials plus 17 practice exercises totaling over 525 pages.
 - Topics covered include: 2D geometry and Solids creation, Dynamic Pocket, Drilling, Tapping, Contouring, Pocketing, Circle Milling, Slot Milling and 2D High Speed Toolpaths.
 - Explanations for transforming toolpaths, proper Stock Setup and Tool Settings.
 - General Notes chapter with useful tools, shortcuts and 2D toolpath descriptions.
 - Includes Mastercam Demo CD.
- ISBN: 978-1-926566-27-6 Price: \$60.00

Mastercam Design Training Tutorial



- Complete Mastercam Design training now including clearly laid out objectives and dimensioned step pre-views.
 - 18 mechanical part tutorials plus 25 dimensioned practice drawings totaling over 540 pages.
 - Topics covered include: 2D features such as Arcs, Fillets, Lines, Trim and Mirror. 3D surface modeling features such as Revolved Surfaces, Ruled Surfaces, Coon Surfaces, Swept Surfaces and Curve creation.
 - Includes Mastercam Demo CD
- ISBN: 978-1-926566-40-5 Price: \$40.00

Mastercam Router Training Tutorial



- A comprehensive guide for learning Mastercam Router.
 - 9 part-oriented tutorials now featuring one in metric units.
 - Topics covered include: 2D geometry creation, Drilling, Pocketing, Contouring, Nesting, cabinet door creation, Engraving, Raster to Vector Translation, custom Tool Profiles and 3D Surface Machining.
- ISBN: 978-1-926566-38-2 Price: \$60.00

Mastercam Art Training Tutorial



- 6 step-by-step tutorials detailing how to easily create 3D sculpted images from simple 2D artwork.
 - Includes instructions for importing a scanned bitmap, clipart or a CAD file and converting it to machinable geometry.
- ISBN: 978-1-926566-43-6 Price: \$35.00

Mastercam 4/5 Axis Training Tutorial



- Now featuring 11 tutorials intended for the advanced Mastercam user.
 - Topics covered include: 3D Geometry creation, Circle Milling operation, Axis Substitution, Rotary Axis Positioning, 5-Axis Drilling, Rotary 4-Axis, Swarf 5-Axis, Flow 5-Axis, Curve 5-Axis, Multi-surface 5-Axis and Port 5-Axis toolpaths.
 - A look at Rolldie C-Hooks.
 - General Notes pertaining to 4/5 Axis Milling.
- ISBN: 978-1-926566-41-2 Price: \$90.00

Mastercam Advanced Multiaxis Training Tutorial



- Intended for the advanced Mastercam user.
 - Sample projects cover Advanced Multi Axis Milling.
 - Topics include: Advanced Multi Axis Swarf & Pencil toolpaths, Advanced Multi Axis Surface Roughing and Finishing toolpaths and Gouge Check strategies.
- ISBN: 978-1-926566-42-9 Price: \$80.00

Did You Know?

You can sample our publications online at www.inhousesolutions.com/books

Mastercam for SolidWorks



- Comprehensive step-by-step approach to learning Mastercam for SolidWorks.
- Topics covered include: how to prepare the part for machining on a vertical CNC machining center; using both SolidWorks commands and Mastercam WCS as well as the proper use of Stock Setup and Tool Settings.
- Each project is either machined with Feature Based Machining or Surface High Speed Toolpaths.

- Tutorials start with geometry creation and end with verifying and posting your code.

ISBN: 978-1-926566-46-7

Price: \$40.00

Mastercam Wire Training Tutorial



- A great resource for anyone learning Wire.
- 7 mechanical part tutorials.
- Topics covered include: 2D & 3D geometry, Wirepath creation such as Contour, Multiple Contours, 4-Axis Wirepath and No Core Wirepath.
- Screenshots demonstrate Start, Thread, Cut, Work (STCW) parameters, Wire parameters, Lead In/Out, Contour parameters, Tabs and more.
- Covers new support for Agie EDM through Agievision controls.

ISBN: 978-1-926566-39-9

Price: \$35.00

Indexing Projects (Tombstone & Chuck)



- A variety of topical projects describe the use of the View Manager for working with Cplanes and work offsets; contain useful information for defining and working with different standard and non-standard planes and take a look at using Mastercam's Transform Toolpaths in a multiple fixture environment.
- Projects explain horizontal machining using the WCS, chuck indexing using a vertical machine with a rotary table and how to complete a Tombstone

project with multiple fixtures on each face.

ISBN: 978-1-926566-45-0

Price: \$35.00

X4 Project Workbook



- Ideal for High School students yet practical for hobbyists and those who prefer project based learning.
- 11 projects, some consisting of multiple parts.
- Includes overviews of CAD/CAM and basic machining; includes pages of part projects and helpful hints.

ISBN: 978-1-926566-44-3

\$ 60.00

“The Mastercam Training Solutions published by In-House Solutions are a must for any company or learning center looking to quickly become proficient with the software. They are essential teaching tools for us here at Haas Automation. The learning experience provided through text and multimedia, we have found, is truly second to none.”

Tavi Udrea, Director Of Training, Haas Automation

Looking for project based curriculum?

Check out our CNC/Mastercam Kit!

- Projects that your students can design, machine and bring home!
- Complete with material list, part drawings, Mastercam files, design and toolpath instructions, post processor* & installation instructions.
- Includes instructions for part design, toolpaths, verification, posting G-Code, fixturing and machining.*
- Available with photocopy rights and the “Quick Fix Fixture”.

*Machining instructions & post processor for Techno machines.

Example: Sunglasses Case



Available for X, X2, X3 and X4

Did You Know?

The best place to get the latest scoop on products, contests, free training videos and more is our Mastercam Training Solutions blog: www.blog.inhousesolutions.com



Multimedia Training CDs are an excellent starting point or addition to any Mastercam learning aspiration! They can be used on their own or along with the appropriate Training Tutorials. For X4, the Mill Level 1 and Mill Level 3 Training CDs have been completely updated along with added content while our video library expands even further to include a Lathe Training CD.

Each CD contains anywhere from 18-26 Training Exercises that demonstrate key geometry creation functions within each Mastercam application - over and above what is contained in the books. These video exercises are accompanied by MCX files so the student can easily follow along.

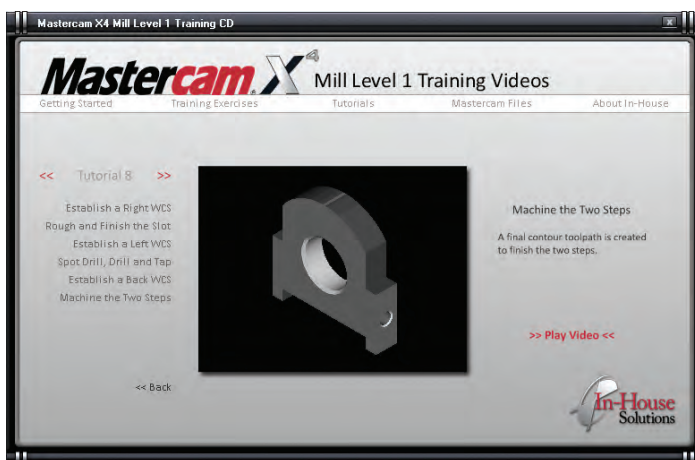
The Mastercam Training Tutorial books offer a series of tutorials each followed by a couple of practice exercises. The Training CDs complement the books by offering narrated walkthroughs of each tutorial, giving explanations for why certain parameters are chosen and showing how the parts are successfully created. This in turn, better prepares the student for tackling the practice exercises on their own.

Geometry files are also provided for those that wish to skip geometry creation and focus on the toolpath section of each tutorial.

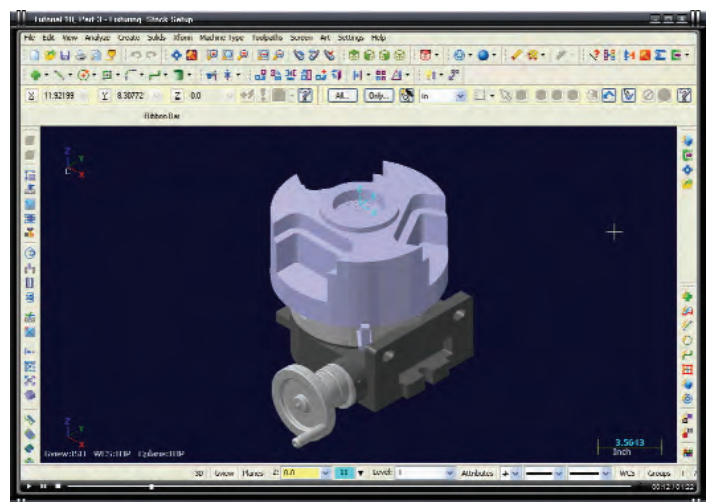
Mastercam X4 Training CDs will be included with respective Mill Level 1, Mill Level 3 and Lathe Training Tutorials. Alternatively, they can be purchased as a stand-alone CD bundle that includes Mastercam X4 demo software.

Multimedia CD Bundle

Price: \$75.00



Each CD features a graphic interface that puts all the content at your fingertips.



X4 CDs now offer video walkthroughs of each tutorial in the book.

Did You Know?

Our books are backed by over a decade of publishing experience - longer than any other Mastercam publisher!

X4 Professional Courseware



The Professional Courseware line offers a detailed look at Mastercam functionality ideal for industrial training settings. They take an exercise based approach to teaching where concepts learned are then put to practice with part drawings and toolpath creation guidelines. Mastercam Demo CDs are included.

Mastercam X4 Mill Level 1 Professional Courseware

Mastercam Mill Level 1 Professional Courseware offers a guided look at 2D geometry and toolpaths. Geometry creation is explored through hands-on training exercises using concept based Mastercam files that are designed to help trainees explore and understand geometry functions.

Supplementary files and accompanying guidelines are provided that cover each of the features available for contour, pocket, drilling, circle milling and slot milling toolpaths. Dynamic Planes, Dynamic Xform and Dynamic Mill are introduced. In addition, this book contains more advanced exercises that explain the use of the Work Coordinate System, 2D High Speed toolpaths, Feature Based Machining, Transform toolpaths and Wireframe toolpaths for machining basic 3D parts.

ISBN: 978-1-926566-30-6

\$65.00

Mastercam X4 Mill Level 3 Professional Courseware

Mastercam Mill Level 3 Professional Courseware covers a multitude of features that allow the trainee to create 3D Wireframe and surfaces for 3D modeling. Training exercises and drawings are provided to teach 3D geometry functionality. Surface and Advanced High Speed machining toolpaths are covered and instructions detail how to set Advanced Toolpath Refinement. Additional Mastercam files are included along with guidelines for creating the toolpaths to successfully machine each part.

ISBN: 978-1-926566-31-3

\$55.00

Mastercam X4 4/5 Axis Professional Courseware

Mastercam Mill 4/5 Axis Professional Courseware covers the multitude of toolpaths that allow the trainee to machine 4-axis and 5-axis parts. Specific exercises are provided along with instructions on how to define the toolpath geometry, the tool axis orientation and the tip control. Direction on how to use advanced multi axis toolpaths for more complex parts are also provided.

ISBN: 978-1-926566-34-4

\$70.00

Mastercam X4 Lathe Professional Courseware

Mastercam Lathe Professional Courseware offers an in-depth look at Mastercam lathe geometry and toolpath creation. Training exercises and drawings covering the 2D geometry functionality are provided to promote learning through practice. Additional Mastercam files are also provided along with guidelines for creating the toolpaths to machine each part. Advanced toolpaths such as stock flip, stock advanced and stock transfer are also covered in this book.

ISBN: 978-1-926566-32-0

\$35.00

Mastercam X4 Router Professional Courseware

Now featuring 4 new projects, the Router Professional Courseware offers an in-depth look at Mastercam 2D geometry and 2D toolpaths for router applications. Training exercises and drawings covering 2D geometry functionality are provided for the trainee to learn and practice. Additional Mastercam files are also provided along with guidelines for creating the toolpaths to machine each part. Advanced features such as nesting, block drilling and machining with aggregates are also covered.

ISBN: 978-1-926566-33-7

\$60.00



Volume 1

Teaches the basics of 2D modeling and machining; computer fundamentals, basic and advanced CAD drawing, working with CAD data, basic solid modeling, basic 2D toolpaths: Mill Contour, Pocket and Drill, 2D High Speed Toolpaths, Featured Based Machining Toolpaths, Toolpath modification, Toolpath verification and Post Processing. Demo CD included.

ISBN: 978-1-926566-26-9

\$ 98.00



Volume 2

Illustrates surface and solid modeling and advanced machining techniques and includes; 2D and 3D splines, 3D wireframe construction, Surface creation, Blending splines and surfaces, Solid modeling, Multisurface roughing & finishing, Toolpath projections, High-speed machining and Post processing. Demo CD included.

ISBN: 978-1-926566-47-4

\$ 98.00



Volume 3

The Mastercam Handbook Volume 3 covers all multiaxis machining functions, including Drill 5-axis, Curve 5-axis, Swarf 5-axis, Multiaxis Flowline and Multiaxis Multi-surfaces. The book also covers useful information about Advanced Multiaxis Toolpaths and the Multiaxis Post processor.

ISBN: 978-1-926566-48-1

\$ 98.00



Mastercam Handbook Curriculum

The Mastercam Handbook Curriculum includes:

- 2 Student Handbooks
- Student Application CD
- Instructor Application CD
- Learning Objectives
- Extensive PowerPoint lectures
- Practical and written tests with corresponding answers
- Additional exercises

Price: \$995



Peter Smid's “Exploring Mastercam X3 for 2-1/2 Axis Milling Applications”

Peter Smid's “Exploring Mastercam X3 for 2-1/2 Axis Milling Applications” is like none other available on the market. In a very easy to comprehend style, it provides detailed coverage of virtually all menus, settings, and parameters required to understand Mastercam X3, with a focus on toolpath strategies for 2-1/2 axis machining. The major strength of the book is its profound coverage of CNC knowledge that forms the basis for working with Mastercam. Many programming subjects are explained not just for ‘what’ they represent but also ‘why’. Attention to detail is shown on every page. This book is an ideal desk companion for new and current Mastercam users as well as CNC programmers at all skill levels, who want to uncover the many hidden treasures in Mastercam. Includes Mastercam Demo CD.

X3 - ISBN: 978-1-894487-89-4

X2 - ISBN: 978-1-926566-19-1

\$ 70.00