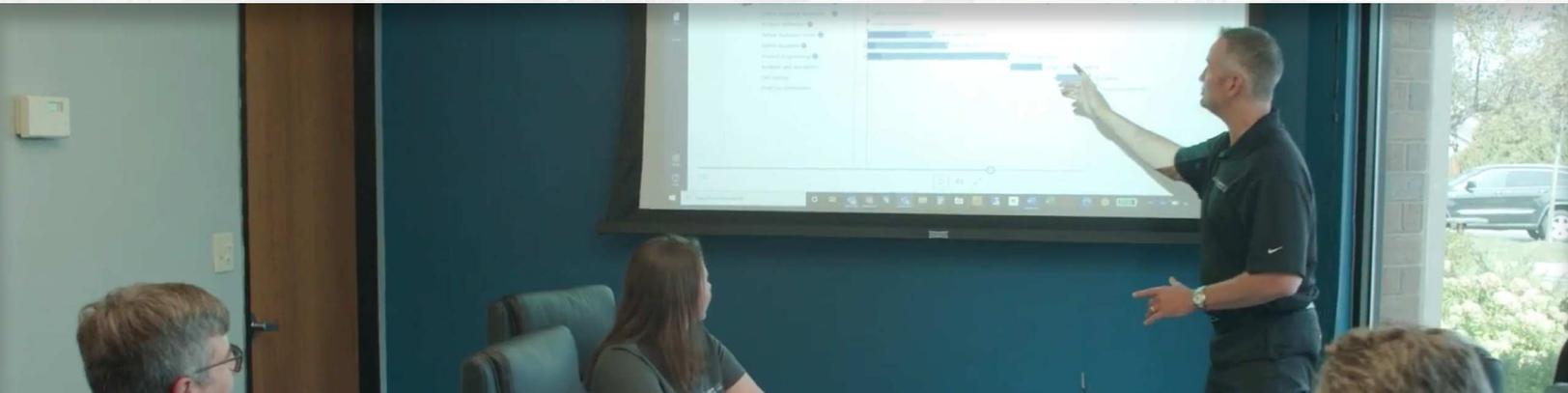# SOLIDWORKS TRAINING

The *CATI Essentials* for *3D CAD Success*

THE IMPORTANCE OF TRAINING

THE VALUE OF THE CLASSROOM

There are many examples of high-skill, self-taught SOLIDWORKS users. But how long did it take for them to get there? And what did they miss along the way? What does that mean for not only their own productivity, but the productivity of anyone downstream of them or even trained by them?

You don't have to wonder with official SOLIDWORKS training from a SOLIDWORKS-certified CATI instructor. **Our training program is a SOLIDWORKS expert assembly line.** Whether online, in-house, or on-site, you and your team will receive a **full understanding** — from official sources, no less — of how the software was **best meant to be operated**.

THE ULTIMATE GOAL

Give your team an expanded skillset, greater role flexibility, improved productivity, increased confidence, and more. Give yourself the security that they are doing their best work and reaching their full potential. An empowered, confident, **can-do design team** ultimately **makes better products**, faster, with fewer headaches.

That is the benefit of SOLIDWORKS (and other) training from CATI.

TRAINING FACTS

LOCATIONS: At CATI, at client, online

PACKAGES: À la carte, subscription

SOLIDWORKS TOPICS: Design, Electrical, Simulation, PDM, Manufacturing (CAM & CAMWorks), Routing, Fabrication, Administration, API, Technical Communication

OTHER TOPICS: Design automation (DriveWorks), Advanced simulation (SIMULIA & FEMFAT), 3DEXPERIENCE, PLM (ENOVIA), 3D printing, 3D scanning

SOLIDWORKS ESSENTIAL CORE:
- CAD110: SOLIDWORKS Essentials
- CAD205: SOLIDWORKS Drawings
- CAD210: SOLIDWORKS Advanced
- CAD215: SOLIDWORKS Assembly

CATI SOLIDWORKS CORE: CAD110
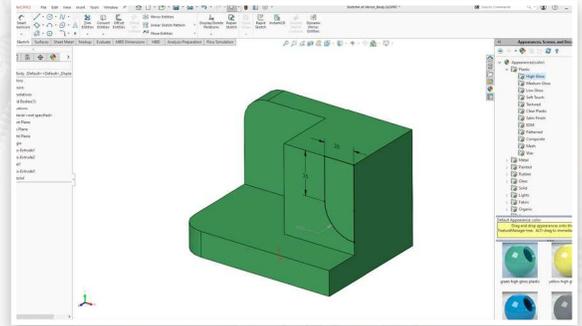# SOLIDWORKS ESSENTIALS

THE FUNDAMENTALS FOR SUCCESS

Learn how to use SOLIDWORKS to build parametric models of parts and assemblies, and how to make simple drawings of those parts and assemblies.

Upon completion, you will know how to create production-level parametric models. You will be familiar with simple drawings, simple assemblies, the SOLIDWORKS UI, feature manager, sketching tools, and various modeling techniques.

Topics covered:

- *SOLIDWORKS basics and the user interface*
- *Introduction to sketching*
- *Basic part modeling*
- *Symmetry and draft*
- *Patterning*
- *Revolved features*
- *Shelling and ribs*

- *Editing: repairs*
- *Editing: design changes*
- *Configurations*
- *Global variables and equations*
- *Using drawings*
- *Bottom-up assembly modeling*
- *Using assemblies*

LEARN MORE

CATI SOLIDWORKS CORE: CAD205
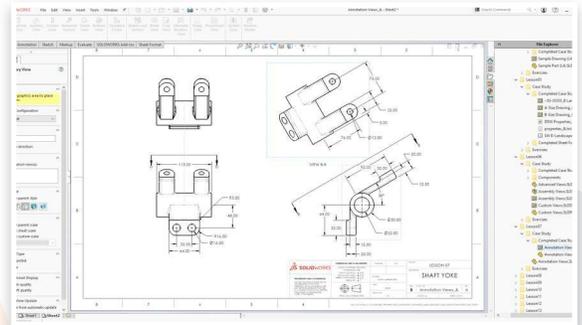# SOLIDWORKS DRAWINGS

DETAILING, IN DETAIL

Learn the fundamental skills and concepts of SOLIDWORKS detailing, which are central to successfully make engineering drawings of parts and assemblies.

Upon completion, you will know how to create 2D drawings of production-level parametric models. You will be familiar with the SOLIDWORKS UI and the tools and techniques for creating quality 2D representations of 3D solid models. You will also learn to create and maintain custom drawing templates.

Topics covered:

- *Review of the basics*
- *Understanding drawing templates*
- *Customizing the sheet format*
- *Saving and testing the sheet format file*
- *Creating additional sheet formats/templates*
- *Advanced options for drawing views*
- *Understanding annotation views*

- *Advanced detailing tools*
- *Using layers*
- *Styles and the design library*
- *Advanced options for BOM tables*
- *Additional SOLIDWORKS tables*
- *Additional drawing tools*
- *Managing performance*

LEARN MORE

CATI SOLIDWORKS CORE: CAD210
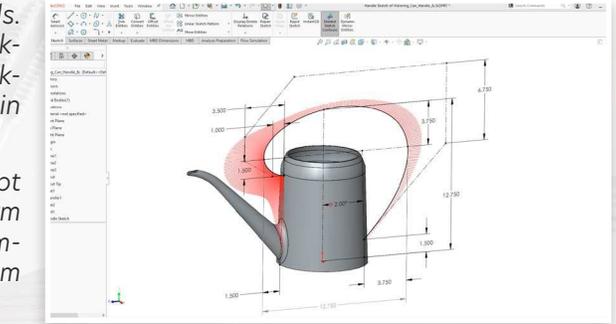# ADVANCED PART MODELING

GETTING COMPLEX

Learn to build multi-body and complex shape solid models. Most of the case studies and exercises in this course are taken from industrial type applications, and center around working with solids. (Surfacing functions are covered in depth in the Advanced Surface Modeling course.)

Upon completion, you will be able to create solids from swept profiles and surface geometry; loft complex shapes; deform faces utilizing the "shape" and "dome" features; create compound and projected 3D curves; and utilize visible-spectrum curvature analysis of complex face geometry.

Topics covered:

- *Multibody design techniques*
- *Saving solid bodies*
- *Sketching with splines*
- *Introduction to sweeping*
- *3D sketching and curve features*

- *Introduction to lofts and boundary features*
- *Threads and library feature parts*
- *Advanced sweeping*
- *Advanced lofts and boundary features*
- *Advanced filleting and other features*

LEARN MORE

CATI SOLIDWORKS CORE: CAD215
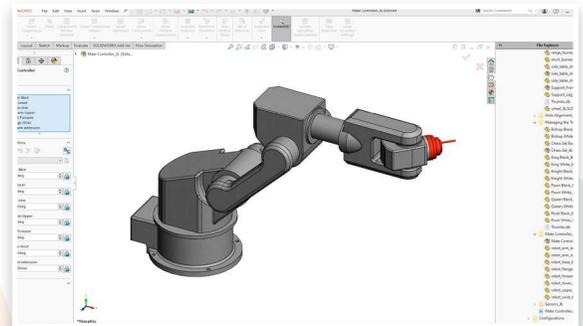# ASSEMBLY MODELING

PUTTING IT ALL TOGETHER

Learn to maximize your use of the assembly modeling capabilities of SOLIDWORKS.

Upon completion, you will be able to do top-down assembly modeling; execute bottom-up assembly mating techniques; understand, troubleshoot, and work with external references; and implement design tables within assemblies.

Topics covered:

- *Advanced mate techniques*
- *Top-down assembly modeling*
- *Assembly features and smart components*
- *Assembly editing*
- *Using configurations with assemblies*

- *Display states and appearances*
- *Large assemblies*
- *Facility layout*
- *Using SOLIDWORKS Treehouse*

LEARN MORE

▶ **SEE FULL SOLIDWORKS COURSE LIST @ CATI.COM**

THE CATI DIFFERENCE

SOLIDWORKS AND CATI: MORE THAN 25 YEARS TOGETHER

Computer Aided Technology (CATI) is **North America's very first SOLIDWORKS partner** and a top performer in the space since 1995. You won't find a more experienced company to help you make the very most of SOLIDWORKS and its vast array of related products.

THE PERSONAL TOUCH

Our instructors are **certified SOLIDWORKS experts** and are ready to share their valuable insights with you. We strive to ensure that **every single student receives the attention that they need** and can leave with even more than they bargained for. To do that, we keep class sizes small, which allows us to cover the core curriculum as well as explore your specific questions and design challenges.

Our instructors encourage you to **bring your own files** that are giving you problems and they'll work with you to find solutions. The process often leads to great collaboration amongst the class.

Our Buffalo Grove, IL, headquarters

MEETING YOU WHEREVER YOU ARE

CATI has **training facilities all across America** to provide you with the personal face-to-face interaction that will get you productive fast. All of CATI's facilities have state-of-the-art equipment to ensure you have the best training experience.

CATI's nationwide locations

Can't make it to a CATI campus? **We can come to you**, or you can **attend online versions of the same training courses** from right where you are, without the travel expenses. Our online classroom is based on WebEx Online Classroom, the award winning system from Cisco Systems.

LIMITLESS GROWTH

Our **CATalyst NOW Program** is an **annual training membership** that makes it easy to get the quality training you need with minimum hassle. Choose **any or all of our wide variety of SOLIDWORKS core and industry-specific classes** for one full year. The program can be approached as a step-by-step integrated training curriculum to prepare students for the worldwide-recognized suite of SOLIDWORKS certifications. Choose from four CATalyst levels to match your budget and needs, including a credit-based option.

TRAINING TESTIMONIALS

Great class! A must have for any industrial designer. Should have taken it earlier...that is my only regret.

—Mark Krasne

Just one of the many classes I plan on taking to streamline our operation. This was very helpful and I look forward to putting what I have learned to use!

—Isaac Lemmenes

Exceptional class. I had little to no CAD experience when I started, and I now understand a great deal about SOLIDWORKS.

—Scott Joji

NEXT STEPS

ADDITIONAL RESEARCH

Visit our training page to find out all there is to know about what courses CATI carries and how to take them, or follow the links below:

| COURSE SCHEDULE | ONLINE TRAINING |
| COURSE CATALOGUE | CATALYST PROGRAM |

TALK TO AN ADVISOR

Got questions? Talk to one of our training experts today.

EMAIL TRAINING@CATI.COM

REQUEST A COURSE

Is your course not on the schedule yet? Let us know so we can make it happen.

EMAIL A COURSE REQUEST

REQUEST A QUOTE

Know what you want to take? We'll get you in the classroom!

EMAIL A QUOTE REQUEST

WE EMPOWER THE INNOVATORS

Complete Hardware, Software, & Service **Solutions** for **CAD-CAE-CAM-PLM** & **Additive Manufacturing**

SOLIDWORKS   DASSAULT SYSTEMES   stratasys   CREAFORM   POSTPROCESS
Automated. Intelligent. Comprehensive.