

# Curriculum

Easy to Use, Learn, and Teach.

Dassault Systèmes SolidWorks Corp. recognizes that today's students are tomorrow's decision-makers and industry leaders. As the leader in 3D modeling software, we are committed to providing the best learning resources and the most innovative CAD software solutions to students and educators worldwide.



## SOLIDWORKS TEACHER AND STUDENT GUIDES

The SolidWorks Teacher Guide provides an introduction to engineering design and features 12 lessons that correspond to the SolidWorks Tutorials. This fully reproducible document incorporates lesson plans, presentations, student goals, vocabulary, and answers to student assessments. Other exercises stimulate students' imagination with real-world applications. A corresponding SolidWorks Student Guide provides exercises and assessments for your students.

Languages: Chinese, Dutch, English, French, German, Italian, Japanese, Korean, Portuguese, Spanish, Swedish

## SOLIDWORKS SIMULATION TEACHER AND STUDENT GUIDES FOR FINITE ELEMENT ANALYSIS (FEA), MOTION, AND FLOW ANALYSIS

The SolidWorks Simulation and Motion Guides features an introduction to the principles of analysis. Fully integrated with SolidWorks®, design analysis is an essential part of completing a product. With SolidWorks tools, you can simulate the testing of your model's working environment. SolidWorks Flow Simulation is an analysis tool for predicting the characteristics of various internal and external flows, thereby solving various hydraulic and gas dynamic engineering problems.

Languages for SolidWorks Flow Simulation: English, Japanese

Languages for SolidWorks Simulation and Motion: Chinese, English, French, German, Italian, Japanese, Portuguese, Spanish

## SOLIDWORKS SUSTAINABILITY

SolidWorks Sustainability considers how and where materials are produced, parts are manufactured, and products are used and discarded. SolidWorks Sustainability empowers your students to analyze the future environmental impact of their designs.

Languages: Chinese, English, French, German, Japanese, Spanish



## SOLIDWORKS BRIDGE DESIGN PROJECT

The Bridge Design Project steps a student through the engineering method of constructing a trussed wooden bridge. Students utilize SolidWorks Simulation to analyze the different loading conditions of the bridge.

Languages: Chinese, English, French, German, Japanese, Spanish

## RACE CAR DESIGN PROJECT

Explore the concepts of 3D modeling, production drawing, animation, rendering, and force analysis in the Race Car Design Project. Students gain a better understanding of theory and basic engineering design principles.

Languages: Chinese, English, French, German, Japanese, Portuguese, Spanish

## NEW SOLIDWORKS TUTORIALS

SolidWorks Tutorials and Curriculum—easy-to-follow independent exercises and project-based activities cover design, modeling, and visualization, making math, science, and engineering relevant. New tutorials in assemblies, routing, and motion studies are available.

Languages: Chinese, Czech, English, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Turkish

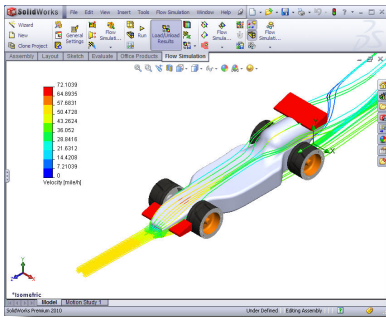
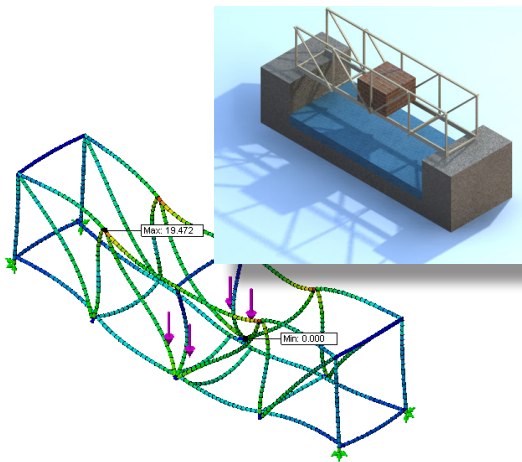
## NEW SOLIDWORKS SIMULATION TUTORIALS

SolidWorks Simulation Tutorials, in terms of design validation and simulation, allow you to be certain that your design is going to work the way you envisioned it the first time. Verification problems and National Agency for Finite Elements Methods and Standards (NAFEMS) enable students to explore the concepts you teach. The easy-to-use interface allows you to quickly define the constraints and criteria to ensure your design will perform in the real world.

Languages: Chinese, Czech, English, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Turkish

## CSWA PROGRAM

The SolidWorks Education Program is committed to providing Certified SolidWorks Associate (CSWA) candidates with innovative and effective learning materials. You'll find the solutions, training, tools, and support you need to help your students—and distinguish your institute from the competition.



### Additional Curriculum/Resources Available

- Mountain Board Design Project
- Trebuchet Design Project
- SAE® Design Project
- Hands-On Test Drive
- Projects for all Grade Levels
- SolidWorks Teacher Blog
- Online Resources