

Pro/ENGINEER Schools and Schools Advanced Editions

Transform Your Classroom by Teaching the World's Leading 3D Product Design Software

Across the globe, more than 1,500 colleges and universities, 12,000 secondary schools, and four million students are learning PTC's Pro/ENGINEER Wildfire software in their engineering and technical courses.

Educators prefer to teach Pro/ENGINEER not only because it's easy and affordable, but because it's the leading 3D CAD solution in the industry, with more than 49,000 companies and 600,000 engineers using it every day. Students with Pro/ENGINEER skills are among the most sought after designers and engineers in global industry.

If your goal is to give your students the tools they need to be successful professionals – then make Pro/ENGINEER an integral part of your curriculum.

The Choice of the World's Best Firms

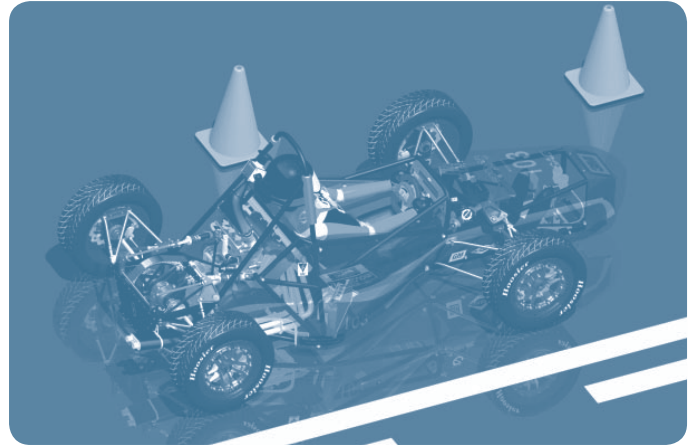
PTC is the market leader in mechanical design. Industry-leading customers, such as Toyota, HP, Lockheed Martin, Sony, U.S. Surgical, Caterpillar, Ferrari, and Motorola use our software to create innovative new products. And yet PTC isn't just committed to our customers. We are also committed to education on all levels, from secondary school through university. Our goal is to inspire students to design the products of the future.

What is Pro/ENGINEER?

Pro/ENGINEER is a 3D CAD (computer-aided design) parametric design software created by PTC that provides solid modeling, assembly modeling and drafting functionality for engineers and designers. Pro/ENGINEER enables students to quickly and easily create complex 3D models, assemblies and 2D measured drawings, and was the first tool to introduce the concept of Parametric Modeling. Attributes of features within the model are 'parameterized', which means that any changes made to a design are automatically disseminated to all facets of the model – enabling students to design with confidence.

The Right Education Solution – Without Compromise

Pro/ENGINEER lets educators and students explore science, math, engineering and technology by creating designs in 3D. Students are able to model parts and assemblies, test their theories, and explore their creativity, simultaneously. PTC provides the same software package to your education students that is used in industry – not a scaled down version or different interface for education. That means your students are learning the exact same tools as used by professionals worldwide.



The DesignQuest Schools Program

Teachers that want to bring Pro/ENGINEER into their classroom can choose from two editions: Pro/ENGINEER Schools Edition, or Pro/ENGINEER Schools Advanced Edition. Both editions are part of PTC's DesignQuest Schools Program, which provides teachers with a complete program – software, training and support – for bringing 3D design into the classroom. The DesignQuest Schools Program includes: donated or low-cost software, classroom curriculum (mapped to national and international standards), project-based tutorials, training opportunities, student assessments, and certification.

Schools Edition: The Complete Package with Up to 300 Licenses

Teachers who choose the Pro/ENGINEER Schools Edition must attend an introductory workshop to be certified on Pro/ENGINEER software. After the teacher has completed the course, PTC donates up to 300 licenses of Pro/ENGINEER Schools Edition to their secondary school. Teachers can use these licenses both in their classroom, and for student use at home.

Schools Advanced Edition: 25 Additional Modules

PTC's Pro/ENGINEER Schools Advanced Edition includes an additional 25 design modules covering the entire design-through-manufacturing process. Teachers choosing Schools Advanced edition are not required to complete an introductory workshop. Instead, they receive enhanced technical support and additional training opportunities, including access to web-based, distance learning classes. Pro/ENGINEER Schools Advance Edition is offered with a low-cost, per-seat fee.

Product Features

With so many options available to your students, which Pro/ENGINEER edition is right for your classroom? Look through the table below to compare the Schools Edition and the Schools Advanced Edition.

	Pro/ENGINEER Schools Edition	Pro/ENGINEER Schools Advanced Edition
Cost	Free	Two-year license: low per-seat fee (seat minimums apply)
Pro/ENGINEER Product Features		
Solid Part and Assembly Modeling—Create precise 3D parametric models	●	●
Real-Time and Advanced Photorendering—Create accurate, photorealistic images of products, quickly	●	●
Revolutionary “Warp” Technology—Dynamically scale, stretch, bend, and twist models, giving students freedom to design	●	●
Behavioral Modeling—Measure how the product design will react to various real-world elements, such as different environmental conditions	●	●
Mechanism Design—Simulate the mechanism’s range of motion, so you can detect and, therefore, prevent interferences and clashes	●	●
Design Animation—Create assembly/disassembly animations directly from the modeling environment	●	●
Detailed Documentation and 2-Dimensional Drafting—Create 2D drawings and an associative bill of materials (BOM)	●	●
Interactive Surface Design—Build free-form geometry at any point in the design, using as many or as few constraints as desired, for maximum design flexibility		●
Mechanica—Analyze structural and thermal simulations with test models to help discover design flaws		●
Advanced Mechanica - evaluate and optimize designs, improve product quality and reduce prototyping expense		●
Mechanism Dynamics—Virtually simulate reactions to accelerations and the weight of moving components		●
Piping and Cabling Design—Virtual prototyping and automated routing of pipes and cables		●
Production Machining—Provides robust NC programming capabilities, including: 2.5- to 3-axis Milling, 2- to 4-axis turning, and 2- to 4-axis wire EDM, with the ability to post-process a program to the manufacturing equipment		●
Advanced Assembly Modeling—Apply tools such as skeleton models, and copy geometry features to facilitate top-down design		●
Sheetmetal Design—create walls, flanges, hems, notches and other sheetmetal features easily to speed through your design task. (Check both Boxes)	●	●
NC Sheetmetal—Create, verify and post-process toolpaths for turret punch presses and contouring laser/flame machines. (Check only Advanced Edition Box)		●
Tool Design—Automated parting surface creation and automated splitting make it easy to create complex tooling quickly		●
Teacher Support and Training		
Training Workshop for Teachers, PTC Web Based Training through an Educational COACH Learning Management System (LMS) Portal	●	●
PTC Training Materials and Tutorials	●	●
Installation, Registration and Technical Support via Phone or Internet		●
Access to PTC University and Pro/ENGINEER Wildfire Skills Evaluator for Certified Teachers		●

Key Benefits

- Promotes interest in engineering, math and science by enabling students to apply principles learned in the classroom to real-world situations
- Prepares young students for careers in engineering by helping them learn the same technology used by colleges, universities and professional engineers
- Promotes creativity – there's no limit to what students can create and visualize using 3D tools, such as real-time photorendering
- Encourages independent study – PTC provides free software for students to install at home
- Grows with students – students can begin using basic 3D modeling techniques in elementary school, and then gradually learn more advanced design techniques throughout high school

“The success of this program goes beyond statistics and grades; I have seen a tremendous change in interpersonal relationships among the students and with other teachers. In some cases, we practically had to chase the students out of the classroom. This kind of motivation and enthusiasm was just not there before using the software.”

“With PTC’s Pro/ENGINEER, students understand not only academic concepts, but gain experience and sometimes for the first time, academic success. This platform of knowledge, confidence, and experience prepares students to extend their success, and problem-solving capabilities, into the real world.”