

Design the Future



Autodesk®

# Design What Matters

From a population boom and climate change to global commoditization and spiraling energy costs, the world is changing. Actions today will affect generations to come.



**Student Designer: Andrew Southwood-Jones**  
University of Technology, Sydney, Australia  
UniCube, a prototype of environmentally friendly campus residences, designed using Autodesk® Revit® Architecture software.

Amid these daunting challenges, innovators see an opportunity to make things better. Businesses, governments, and academic institutions alike need to address these challenges head-on using the best tools available. Now more than ever, design technology is helping to deliver new approaches and improve the way we live.

For more than 25 years, Autodesk has been a pioneer in the world of computer-aided design

(CAD). Now, as a world leader in 2D and 3D design, engineering, and entertainment software, Autodesk provides solutions for industrial design and manufacturing; architecture, engineering, and construction; and media and entertainment industries.

In the academic world, Autodesk partners with educational institutions and faculty to help prepare the next generation of architects, engineers, and digital artists for successful

careers. Autodesk provides the tools needed to seize opportunities created by the new global environment, as well as connections to industry and extensive resources that help ensure the next generation is ready to face these demands. In short, Autodesk helps educational institutions create a better learning experience for their students, so those students are not just prepared for the future—they are helping shape it.



**Student Designer: Jake Loniak**  
Art Center College of Design, California, United States  
Wearable motorcycle concept, designed using Autodesk® Alias® software.

It is critical that today's students gain the skills to become tomorrow's green building champions and professionals. This requires an understanding of cutting-edge innovation and interdisciplinary problem-solving.

—Julia Feder  
LEED Green Associate  
U.S. Green Building Council

Governments and organisations around the world realise the economic importance of creativity and innovation—as new products and services create jobs. It is vital that institutions prepare students with creative problem-solving skills in order to compete in a global economy.

—Bill Nicholl  
Lecturer of Design and  
Technology Education  
University of Cambridge

# The Power of Partnership

Autodesk offers the technology and partnership that help educators turn change into positive outcomes for the next generation of architects, engineers, and digital artists.

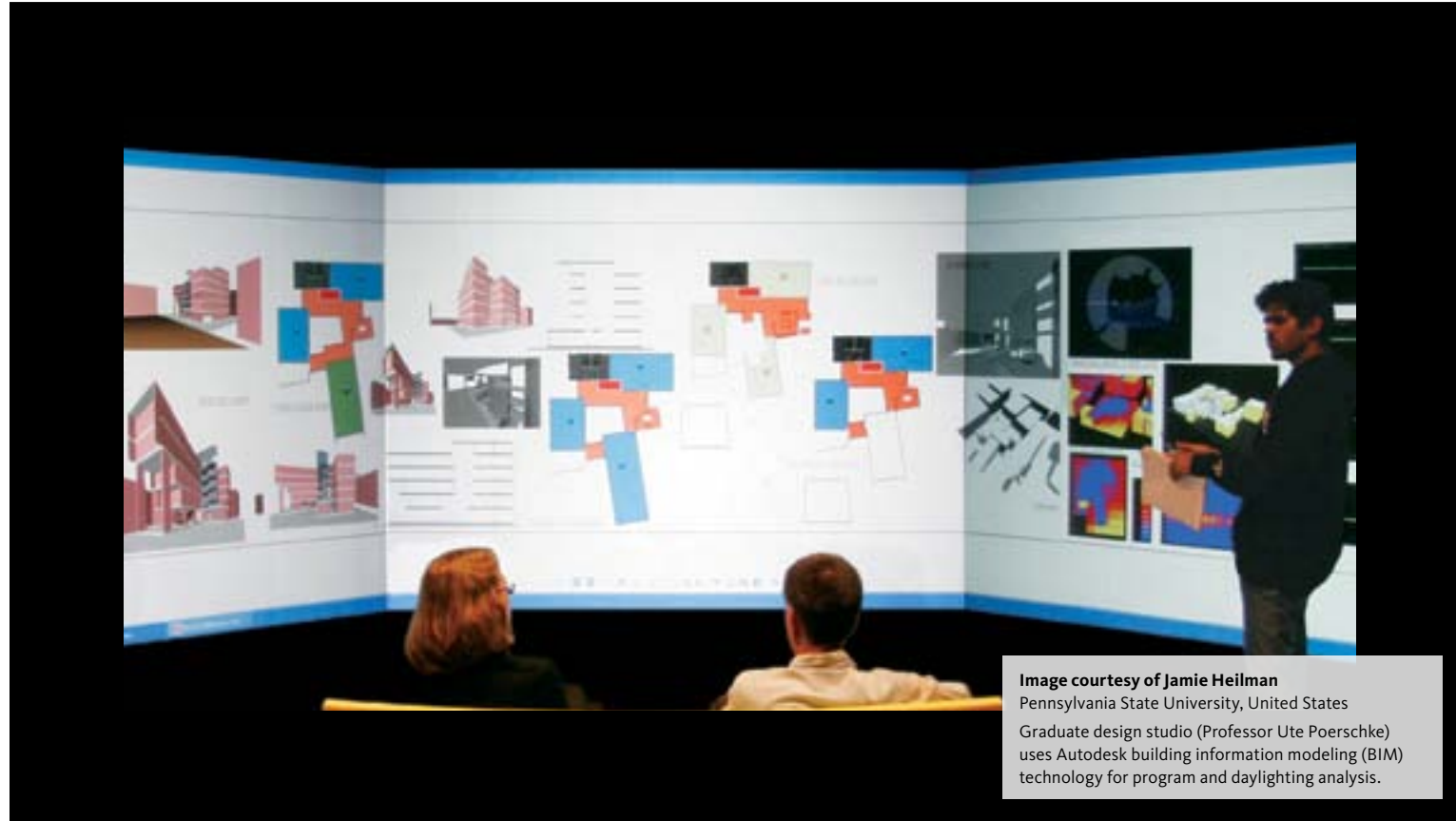


Image courtesy of Jamie Heilman  
Pennsylvania State University, United States  
Graduate design studio (Professor Ute Poerschke) uses Autodesk building information modeling (BIM) technology for program and daylighting analysis.

## Academic Leaders

Educational institutions must innovate to stay relevant in the increasingly competitive academic landscape. Autodesk helps institutions adapt the educational experience for today's students while getting the full benefit from technology and alignment with industry to compete for—and win—the top students. Using Autodesk tools and resources, institutions can differentiate themselves and shape the future of design and engineering education.

## Faculty

Helping students understand complex subjects, and the application of those concepts

in an evolving commercial space, is a challenge for all faculty members. Autodesk helps faculty use technology and the right learning resources to better engage and prepare students for today's careers, teaching them skills used by professionals every day.

## Students

Coursework, career preparation, and competition for jobs—the pressure on students has never been greater. Those who possess advanced skill sets and the confidence to innovate find an advantage when their coursework comes to an end. Autodesk helps students gain that advantage while inspiring them to pursue careers in science and technology.

## The Academic Community

Partnership and collaboration drive innovation across the educational experience. Autodesk strives to bring the academic community together, including educators, mentors, associations, government bodies, and industry experts. That commitment is demonstrated by the Autodesk Education Community ([www.autodesk.com/edcommunity](http://www.autodesk.com/edcommunity)), an online meeting place filled with valuable resources for students and instructors. The community grows every day with members and materials such as free\* product downloads, tutorials, curricula, job postings, discussion forums, certification opportunities, and more.



Student Designer: Antonio Iorio  
Università La Sapienza di Roma, Italy  
3D infrastructure containing roads and roundabouts created with AutoCAD® Civil 3D® software.

## Innovation in Action

The National Institute of Design (NID) in India formed a partnership with Autodesk to research and implement new design curriculum supporting the country's national design policy. Autodesk studios were established at NID campuses in Ahmedabad, Gandhinagar, and Bangalore to undertake the research and creation of the new curriculum, and to provide students and faculty access to cutting-edge design software on campus.

## Multidisciplinary Approach

Increasingly, products in the modern era combine engineering design and industrial design, but educational training for these professions is often segregated and incompatible. Partnering with the University of Illinois at Urbana-Champaign, Autodesk is spearheading a pilot program to integrate the education experiences of engineers and designers, enabling students to work in a collaborative environment similar to that of a successful business.

## Innovation Through Creativity

The use of computer imagery has become ubiquitous in the modern educational, commercial, and industrial landscapes. The University of Warwick (United Kingdom) is working with Autodesk to explore the power of creativity and innovation in its education program at the International Digital Laboratory, WMG, and in the end empowering students to realize the full potential of their skills and ideas.

My biggest thrill is to see students making it in the professional world. One is a head designer with a motorcycle manufacturer, another went into fashion design, and many others are successful architects.

—Mike Santolupo  
Instructor, John Paul II Catholic  
Secondary School  
Ontario, Canada



**Student Designer: Emilie Courcelles Petiteau**  
Le Centre NAD, Canada  
The Oracle designed with Autodesk® 3ds Max® software.

Autodesk solutions, such as Autodesk Inventor, provide a 3D design environment in which students can accelerate the process of experiencing their design ideas, improving their learning efficiency, and developing innovative design skills.

—Song Hongxia  
Director of Teaching and  
Research Section  
Dalian University of  
Technology, China

## Preparing Students for Success

Autodesk provides educators with technology solutions that support learning, engage students in complex concepts, inspire creativity, and help prepare students for successful careers.



**Student Designers: Team Eco Veículo**  
University of Coimbra, Portugal  
Shell Eco-marathon energy-efficient car, designed with Autodesk® Inventor® software.  
Credit: Reckimages/Shell

### Enabling Innovation Through Design

Autodesk offers institutions and educators comprehensive technology suites based on discipline-specific learning paths. The new Autodesk® Education Suites offer a broad range of 2D and 3D software tools that encourage multidisciplinary learning across the following fields of study:

- Architecture and engineering
- Civil and structural engineering
- Mechanical engineering
- Industrial design
- Film and games development

Developed for academic institutions, these suites provide aspiring architects, engineers, and digital artists access to industry tools used

by professionals around the world. Autodesk also provides access to resources and curricula to help faculty teach the skills most needed by industry.

### Launching Lifelong Interests and Compelling Careers

At the primary and secondary levels, schools and educators focus on inspiring and nurturing lifelong interests. Autodesk provides technology suites and project-based curricula that support how educators teach in the classroom. Designed to help turn interest into passion and potential careers, the curriculum sets encourage creativity, critical thinking, and problem-solving, and integrate design into science, technology, engineering, and math education.

At the postsecondary level, Autodesk collaborates with educators and technical experts to develop curricula that align classroom learning with industry trends, such as Digital Prototyping, Building Information Modeling, Digital Entertainment Creation, and Sustainable Design, to better reflect the workplace. Students and educators can also take certification exams that validate their industry-level skills.

Autodesk helps educators and students think beyond traditional academic borders, become engaged with the commercial sector, and explore ideas through the use of advanced technology. Autodesk works to help ensure that today's students can make a profound impact on the world through innovation, creativity, and smart design.

Working with an Autodesk mentor really complemented Stanford's educational experience. When I interviewed with Toyota, I mentioned the problems we had encountered in this project and described the solution we came up with. Having this kind of experience helped me get the job.

—Michael Situ  
Graduate Student, Mechanical Engineering  
Stanford University

Autodesk software has provided me with the inspiration and ability to produce award-winning work. Its powerful features allow me to deliver work that is at the cutting edge of the industry, propelling my coursework into the public arena. Quite simply, without Autodesk software, I wouldn't be on the path to success within my academic career or so well-prepared to carry my skills across to the industry.

—Mark Cronin  
Student, Architectural Technology  
University of Northumbria

We developed our vehicle using Autodesk software from the design stage, through manufacturing, and all the way to testing. By incorporating textbook knowledge with world-class design software, we saw groundbreaking new capabilities of our Eco-car project, and we are confident in tackling challenging design problems to come up with a real-world product.

—Tan Bor Yow  
Student, Mechanical Engineering  
National University of Singapore

Learn more about Autodesk solutions for education at  
[www.autodesk.com/education](http://www.autodesk.com/education).

Visit the Autodesk Education Community at  
[www.autodesk.com/edcommunity](http://www.autodesk.com/edcommunity).

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