BYU-Idaho decided to standardize on SOLIDWORKS Education Edition 3D design software for its mechanical engineering courses to give students a deeper experience in a single CAD system—instead of light experience in multiple CAD packages—to extend the reach of the engineering curriculum and better prepare students for employment.
SUPPORTING DEEP DIVE INTO ENGINEERING

With 1,150 mechanical engineering majors—as well as other students with an interest in CAD technology—BYU-Idaho acquired 2,000 SOLIDWORKS Student Engineering Kit and an unlimited number of SOLIDWORKS Student Design Kit licenses to support its freshman and sophomore courses. "The main reason that we standardized on SOLIDWORKS for our first two required classes is to allow students to delve deep and become proficient with the software," Miller notes.

"After those courses are completed, students have the freedom and flexibility to use the CAD system of their choice, but the thinking is that the more thorough exposure to SOLIDWORKS software will allow them to focus on learning and applying engineering principles in their third and fourth years, rather than continuing to learn how to use CAD tools," Miller adds.

"This way, students gain the SOLIDWORKS skills that they need to pursue employment opportunities, the majority of which require SOLIDWORKS experience."

"The implementation of SOLIDWORKS software and certification testing is helping us achieve our departmental and university goals while simultaneously helping students build their careers."

— Garth Miller, Professor

— Aaron Schellenberg, Professor
FACILITATING ONLINE LEARNING, LOCAL INTERNSHIPS

By standardizing on SOLIDWORKS software for its initial engineering courses, BYU-Idaho satisfies two additional objectives: extending its mission to its online global community of students and providing students with the skills that companies value in interns. “We have 40,000 students worldwide who are enrolled online or through our Pathway Program (a low-cost educational opportunity that combines online courses with local gatherings through which students earn college credits) and growing demand for students with certified SOLIDWORKS skills to work as interns,” Roach points out.

“Our sharpened focus on SOLIDWORKS software not only opens up internship possibilities for students, it advances educational and employment opportunities for students all over the world,” Roach adds.

RAISING GRADING BAR WITH CERTIFICATION

BYU-Idaho has also incorporated SOLIDWORKS certification testing into its grading system, compelling students to gain SOLIDWORKS skills to earn a high grade as well as obtain a marketable certification. In the freshmen Engineering Graphics course, students who choose not to take the certification exam earn a grade no higher than a C, while those who prep for and pass the Certified SOLIDWORKS Associate (CSWA) exam can earn a B. Those who prep for and pass the Certified SOLIDWORKS Professional (CSWP) exam can earn an A.

“We’re initiating this innovative approach to change the dynamic between teacher and student, while providing students with an industry-recognized certification,” Schellenberg says. “With this approach, the instructor serves more as a consultant who is helping students build their careers than in the traditional role. The implementation of SOLIDWORKS software and certification testing is helping us achieve our departmental and university goals while simultaneously helping students build their careers.”

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