Using SOLIDWORKS Education Edition software, Laney College is providing students in its Machine Technology Program with the CAD/CAM skills that they need to find employment as machinists, welders, and production personnel.
Serving an urban environment with a strong manufacturing infrastructure, Oakland-based Laney College helps students take advantage of educational opportunities and acquire the necessary skills to obtain employment in manufacturing. The largest of the four community colleges in the Peralta Community College District, Laney College provides an avenue to an exciting career for many East Bay Area residents.

By matching industry needs with skills taught through its educational training programs, Laney College supports a resurgence in manufacturing in the Bay Area while simultaneously helping students improve their way of life. According to Professor Louis Quindlen, chair of Peralta Community College District’s Machine Technology Department, Laney’s Machine Technology Program identified CAD/CAM skills as an emerging need for machinists, welders, and production personnel who work in the area’s machine shops, shipyards, and manufacturing facilities.

“We learned that area industries need machinists who have CAD/CAM skills, and more specifically, who know how to use SOLIDWORKS® software,” Quindlen recalls. “In building the program, we went from having no CAD instruction within Machine Technology to offering a full course on SOLIDWORKS and the opportunity to take the Certified SOLIDWORKS Associate (CSWA) exam. The program has produced positive results. All of our students who go through the entire program, have real talent, and a good work ethic, can find jobs.”

Laney College chose SOLIDWORKS Education Edition software for its Machine Technology Program because the software is easy to learn and use, and provides the skills most requested by machine-related companies in the Bay Area. The college recently increased its SOLIDWORKS licenses from 20 to 100 to expand use of the software in its engineering technology classes.

“Manufacturers say they want people who know how to use SOLIDWORKS,” notes Adjunct Professor Elise Moss, who teaches Laney’s 12-week SOLIDWORKS course. “We are training our students to use SOLIDWORKS as a way to help them find jobs.”

**IMPROVED EMPLOYMENT PLACEMENT**

Since Laney College began teaching SOLIDWORKS, the Machine Technology Program has increased employment placement from below 30 percent to over 90 percent. Placement of students who go on to pass the CSWA exam is nearly 100 percent.

“Clearly, students who pass the CSWA exam have the best chance of getting jobs,” Moss stresses. “The ability to use SOLIDWORKS is definitely a skill that employers want. Companies want their machinists to be able to use SOLIDWORKS so they can open and interrogate a model to gain an understanding of a design’s manufacturability. If a part needs to be modified for manufacturing, they want their machinists to be able to make the changes on the fly.

“As educators, we’re driven by what employers want and what students need to land jobs,” Moss adds. “The success of this program demonstrates that teaching SOLIDWORKS increases employment placement.”

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**Challenge:**
Incorporate 3D CAD instruction and certification to improve employment placement as machinists for students enrolled in Laney College’s Machine Technology Program.

**Solution:**
Incorporate 3D CAD instruction and certification to improve employment placement as machinists for students enrolled in Laney College’s Machine Technology Program.

**Results:**
- Increased employment placement to over 90 percent
- Graduated machinists with better skills
- Provided effective training program for East Bay residents
- Used 3D CAD training to help improve impoverished area

“As educators, we’re driven by what employers want and what students need to land jobs. The success of this program demonstrates that teaching SOLIDWORKS increases employment placement.”

—Elise Moss, Adjunct Professor
SUPPORTING A RESURGENCE IN MANUFACTURING

Laney College’s success is producing the trained professionals that local employers need to support a resurgence in manufacturing. Moss is convinced that the opportunity to acquire skills that lead to gainful employment is truly making a difference in her students’ lives and communities.

“A lot of my students initially feel as if they don’t have a chance at success in society,” Moss says. “By demonstrating that what they are learning is important and can lead to a good job, we teach them how to pull themselves up by their bootstraps. Their confidence goes through the roof and they put their hearts and souls into it. The fact that we can teach them how to use SOLIDWORKS in just 12 weeks, culminating in the completion of an actual design project, is a testament to how easy it is to learn SOLIDWORKS, especially when they start with no computer skills. It’s an amazing transformation.”

FUELING MANUFACTURING GROWTH

Graduates of Laney College’s Machine Technology Program are helping to fuel manufacturing growth in the Bay Area. Quindlen says the program’s success has prompted the college to acquire another 80 SOLIDWORKS licenses in response to additional industry demand for engineering technology graduates with SOLIDWORKS skills to fill woodworking-manufacturing jobs.

“What we’ve discovered is that SOLIDWORKS skills benefit graduates who work in manufacturing,” Quindlen explains. “SOLIDWORKS is much more than a design tool. It’s also a manufacturing tool that has become more and more important at the production/technical level.”