Educational institutions face many obstacles to keep up with the ever evolving needs of industry. De Anza College relies on Creo and their state-of-the-art CAD facility to increase productivity among their students and to give graduates an advantage in Silicon Valley.

Silicon Valley is home to many of the world’s largest technology corporations as well as thousands of small startups. De Anza College is conveniently located right in the middle of this high-tech hub, adjacent to the first Apple buildings and complex.

Since 1984, the Design and Manufacturing (CAD/CAM) program at De Anza College has met the ever changing requirements of local Silicon Valley engineering and design firms, training over 15,000 students and professionals in that time.
A variety of additive manufacturing machines in De Anza's CAD facility.

An example product engineering students designed and created with Creo.

Formlabs' Form 2 3D Printers are used in additive manufacturing lessons.

3D printers bring students' Creo models to life.

## CAD in the Classroom

De Anza has offered Creo software classes since 1994. Since it was implemented, Creo has increased student productivity and decreased the learning curve that professors previously saw in their classes.

Currently, there are four Creo courses available: Beginner, Intermediate, Advanced, and Surface & ISDX. These courses are also offered online to accommodate local and statewide students and professionals.

The curriculum follows a Creo Parametric textbook authored by Louis Gary Lamit who has been an instructor at De Anza since 1984 and is supplemented with eLearnings from PTC University.

Creo View is utilized by instructors to make grading assignments quick and easy. With this program, educators avoid having to load an entire CAD model in Creo for each project and it is therefore possible to provide extremely fast feedback to students.

## State-of-the-Art CAD Facility

The De Anza CAD facility consists of three rooms with 110 Dell Precision CAD/CAM/AM workstations, and multiple CNC machines and 3D printing options that work seamlessly with Creo.

Using 3D printing and additive manufacturing allows students to bring digital Creo models into the physical world and gain a full perspective on how design work translates into a finished product. This is an added benefit to Silicon Valley companies that have integrated these capabilities into their own design methodology and are looking to hire students with related experience.