NEW CLASS HELPS BUILD ENGINEERS

Cabrillo machine shop course launches students toward design careers

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APRIL 28, 2014 - SANTA CRUZ SENTINEL

A new machine shop class, the first of its kind at Ca-
brillo College, has students cut-
ing, drilling and smoothing chunks of metal, while spend-
ing their way toward engineering.

The three-hour night class, offered both fall and spring

semester, launched this year thanks to a U.S. Department of Education, grant and a dona-
tion of equipment and funds from Santa Cruz’s Advanced Ex-
trusion Services.

A year in the making, the shop was built and equipped

with more than $300,000 worth of business, tools and

letter, on budget of less than

$300,000.

Engineering students learn theory, but never before have

they learned to bring their designs to life in metal, said

Jo-Ann Pamukri, Cabrillo en-

gineering department head.

“A machine shop class could

help students transferring in

engineering, but also just com-

munity members who want to

get skills to work in the

industry,” she said.

Unlike machining classes at other local colleges, the class is matched to courses at San Jose State and Cal Poly San Luis Obispo, required for a four-year mechanical engineer-

ing degree.

Students can check off the requirement at Cabrillo for less money.

Federal Fund

Brigitte Brennan, 36, swept each of metal and

flying from one-ten mill as students perfected their first

project: a two-inch cube embossed like a Russian
doll with smaller cubes.

Brennan, a machining asso-

ciate at Haas Automation, said she wants to be a pro-

fessional machinist and work computer-controlled

machines.

“Everything in the world is created with machines,” said Brennan, who said she hopes to find a job security in the machining field.

Karen Groppi, a former civil engineer, also attends the class, which is now a prerequisite for a design class she teaches at Ca-
brillo. Understanding how things are built will help

engineers design efficiently, she said. Early in their career,

engineers are often tasked with building their own prototypes in company man-

ufacture classes, she said.

“It’s a big step between what you can conceive of, and what you can actually build,” Groppi

said.

Roy MacLeod, the course’s instructor, said machining is a science and an art.

The machines can shape metal with an accu-

rate error of less than two state mil-

es—about the thickness of a human hair, he said.

“What you feel, what you feel the vibrations of the machine tell you; new things are going and what you need to change,” Ma-

cleod said.

Aaron Schmitz, Aaron Tijula and Thomas Martinez are taking the first machine shop class offered at Cabrillo College.

Aptos resident and third-

year Cabrillo student Chris Yudake, 33, said the class has given him a respect for

machinists.

“You cannot just come in and play with these things,” Yudake said. “They’ve been

some.

Yudake, who wants to eventually design prosthetic, said he remembers

MacLeod’s instruction as a big help.