

DMT CAD: (\$49,520) 86.33 FTES 8 AWARDS

Q: Is lab/work space available for the 6 3D printers?

Yes, since taking over the cad department three years ago, we have had a dedicated room/lab for the last two years. The lab was created with the mindset of future growth in the 3D printing / additive manufacturing / makers space arenas. The program currently has 2 commercial 3D printers. The six 3d printers are smaller units and would allow more hands on participation in the lab, as noted in our student evaluations after the first class we offered.

Q: Since this is a new course, what would be the development timeline?

The advanced course is already developed and will be entered into the ECMS system before the deadline in April. The timeline will only be dependent on how fast the college can push the curriculum thru the system...Being on the curriculum committee for nine years, I understand the need for change to move CTE classes thru faster so we can offer advanced classes at the same time as our local industry needs. Not one to two years later.

Q: Can equipment be purchased through other funding sources (eg Perkins)?

NO...There are no other sufficient funding source to acquire this amount of equipment at this time...Buying one machine a year will not sufficiently help the program (the demand in the community is now) This is my belief in what the state had in mind when these funds were made available.

Q: What is the projected lifetime of the equipment? The 3D printer lifetime is seven to ten years Does there need to be a dedicated fund to maintain the equipment? NO...At this time my CAD operating "B" budget will cover the cost of material and in house maintenance.

Q: How will your request assist in increasing the program's FTES?

From a factual point, I did offer the first 3D Printing/ Rapid Prototyping survey class in fall 2016. Max enrollment was 30 and census enrollment was 42.the course was very successful. Thru student evaluations 95% percent of the students said they would take an advanced class. A certificate and degree is near completion for rapid prototyping /CAD technologies and will be finalized by the May deadline. This would be one of two areas that would increase enrollment substantially in the DMT department.

DMT MCNC: (\$293,820) 177.38 FTES 6 AWARDS

Q: Is lab/work space available for the CNC Equipment?

Yes, The Gene Haas Foundation made a 1 million dollar donation to reconfigure two areas of the machine tool lab. The project has already been designed / approved and at the state level for final approval...This remodel will allow room for five CNC machines. This money can ONLY be used for remodel and interior needs for the program, such as tool holders, cabinets, air compressor etc...NO CNC MACHINES CAN BE OPURCHASED WITH THIS MONEY

Q: Can equipment be purchased through other funding sources (eg Perkins)?

*NO...There are no other ways to purchase this amount of equipment that would have an immediate impact on the program. (increased enrollment, increased salaries for students, students returning to upgrade their skills etc.) When approved HAAS AUTOMATION (corporation behind the Gene Haas Foundation) has tentatively agreed to match the amount in consigned / entrusted equipment for the program...HAAS Automation is fully behind the regional project that has been long overdue (as of today has agreed to **match** \$220,000.00) As you can see all of the elements of this project and program are aligning perfectly.*

Over the last ten years there has only been one year when capital equipment funds were available to replace a 17 year old cnc machine.

Q: Are both pieces of equipment required? YES

Do we have existing equipment to support the course? Very limited at this time. The added equipment would teach students at the level of all manufacturing facilities in the bay area...When approved we will have better equipment than 25% of the small manufacturing facilities in the bay area. Students will have skills that will be at the level or higher than some of the employers who call the program on a regular basis looking to hire new and existing students.

Q: What is the projected lifetime of the equipment? 10-15 years (very small investment for the life of the machines in an educational environment)

Does there need to be an additional dedicated fund to maintain the equipment? No, experience over the last 10 years at DeAnza, and in private industry, has shown that our operating budget has been adequate to maintain the equipment. For educational institutions, warranties are extended to three years for new equipment. Experience also shows that if a new piece of equipment has issues it is usually in the first year (much like an automobile).

Q: How will your request assist in increasing the program's FTES?

These courses are in high demand in industry, shown by our advisory members, such as Apple, Northrup Grumman, Lockheed, NASA, Lawrence Livermore National Lab, Google and many other local companies. The immediate impact will be returning students followed by entry level student who will be taking more classes in order to maximize their employment opportunities. I had the opportunity of working with a college in Maine, that received an NSF grant for one million dollars to develop curriculum in this area ...The program was very successful in this area. I believe I can take this area of training to next level with less than half the funds they used and increase enrollment in a short period of time.

Auto Tech (\$157, 860) 288.22 FTES 57 AWARDS

How will your request assist in increasing the program's FTES?

A portion of these funds will be used for outreach materials as stated in the Auto Tech proposal.

Proposal Summary: Provide a brief description of the proposal.

This proposal is focused on upgrading our alternative fuels training program with the purchase of vehicles and equipment that our students are likely to see at work, as recommended by our advisory committee. Auto tech will also attract new students from fleets, dealerships, and even first responders who have the need to understand alternative fuels vehicles.

Proposal Start and End Date (estimated):

Work has already begun in collaboration with BACCC in Regional Joint Ventures with no end date determined.

Proposal Rationale: What need does this proposal address?

Fleet and independent shops are servicing and repairing alternative fuels vehicles. Many of these technicians do not have a foundation in these emerging technologies. De Anza auto tech has the opportunity to provide education and training for technicians to safely service and repair these vehicles.

How Does This Proposal Address Regional Labor Market Needs?

The Centers of Excellence (<http://www.coecc.net>) has shown that the labor market in advanced transportation is under supplied. Auto tech has the opportunity to expand its alternative fuels program to help students and technicians become better prepared for this demand.

How Does This Proposal Address Regional Priorities?

Auto tech can continue to develop connections with industry representatives and other workforce development entities to more closely align alternative fuels instruction with regional labor needs. To this end, auto tech is participating in the Regional Joint Venture Program for advanced transportation.