

EQUIPMENT NEEDS ASSESSMENT APPLICATION

Name of Person Submitting Request:	Tarif Halabi
Program or Service Area:	Electricity/Electronics
Division:	Applied Technology, Trans. & Culinary Art
Date of Last Program Efficacy:	Spring 2013
What rating was given?	Continuation
Equipment Requested	Modern Test Equipment, PLC, Comm.Trainers
Amount Requested:	\$30,000
Strategic Initiatives Addressed:	3.2, 6.1

Replacement X

Growth □

1. Provide a rationale for your request.

In order to bring our program to current industry standards, we need to purchase laboratory test equipment that is the current standard in the marketplace. Existing equipment is at least 20 years old and lacks the functionality that is needed for today's classes. In addition, in order to improve and update our communications technology and industrial automation programs, we are in desperate need of a Programmable Logic Controller (PLC) Laboratory to simulate the automation and industrial system control environment of a modern industry setting. The PLC lab. is needed for our program to provide adequate training to students. This field is rapidly becoming a major area of job growth in the Inland Empire as a result of the explosive growth of logistics and distribution centers (Target, Amazon, Stator Bros, etc.) that now dominate the job market in our area. We have been asked by Target, California Steel Industries, Inc. and Amazon to provide students with PLC training and knowledge so that they can be employed in their companies. Furthermore, with respect to our electronic communications technology program, we would like to obtain microwave trainers and systems to update the student training capabilities with the latest digital technologies. This equipment will provide them with up to date standards for the ever-growing communication industry.

2. Indicate how the content of the latest Program Efficacy Report and current EMP data support this request How is the request tied to program planning? (*Reference the page number(s) where the information can be found on Program Efficacy.*)

As the Program Efficacy Report clearly states in its introduction, we offer five associate degrees and six certificates. Among them are the power systems technology, as well as the communications technology. Both are in need of the equipment specified above to update the classes and bring them in line with current industry standards. In addition, the basic laboratory test equipment which are the common standard, have to be updated first and foremost to today's standards of test equipment which will clearly aid in student skill enhancement and preparedness for the work force. This equipment also aligns with the goals, challenges, and action plan of the EMP document. In the past five years enrollment has been more or less steady. It is unfair to our students, if we do not provide current equipment and lab to meet the industry standards so that they are adequately prepared for the current jobs.

3. Indicate if there is additional information you wish the committee to consider (*for example: regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

Student success is directly related to them finding gainful employment in their field. Giving the students updated training and skills, via updated equipment, will also make a big improvement in that respect. As a result, it will increase enrollment and ultimately placement in these high demand fields. In addition, installation and use of this updated equipment has the potential to increase not only student success but also retention, persistence, and overall efficiency. It also better aligns with industry licensure, safety, and compliance standards.

4. Evaluation of initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (for example Department Budget or Perkins)

The Perkins budget has been cut drastically in two ways. The state is sending less money for Perkins and the district has changed the allocation model between Crafton Hills and SBVC. The SBVC funds were cut from 70% to 67.5% and CHC funds were increased from 25% to 27.5%. The funds are based on MIS data for the number of CTE students in the district who are under-represented. SBVC has over 85% of such students. This year, we are using Perkins funds to buy MultiSIM software, but it will need to be updated when a new version comes out in another two years.

The program has so many needs at the moment since the labs have not been updated in years. The general funds budget is miniscule compared to the needs. We will also be working with the grants office to look for suitable grants to update newer programs such as solar equipment installation and design, Programmable Logic Controllers (PLC) and automation, as well as microwave trainer equipment for communication systems.

Ongoing maintenance and update costs for the PLC and communications equipment is estimated to be \$1,000 annually. This will allow our department to remain abreast of the latest trends and standards so that our students are properly prepared for good-paying jobs within the Inland Empire.

5. What are the consequences of not funding this equipment?

The Course Outline of Record for ELECTR 265 clearly states in the course description that the students learn assembly language and 8051 series microcontroller. However, the lab does not have any 8051 series controller. The much older microcontrollers that are available in the lab require the use of machine language and not assembly language. Thus, the course content cannot be taught in the lab as stated in the Course Outline of Record, unless the lab equipment is upgraded.

It will let our program stagnate and remain outdated. In addition, it may result in a decline of enrollment as the students realize that SBVC is not up to date with current industry standards and technical job skill requirements. In a much broader view, it will foreclose opportunities for local and regional employment, and contribute to our chronically under-educated, under-prepared

workforce within the Inland Empire.