TECHNOLOGY NEEDS ASSESSMENT APPLICATION

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. Requests for one-time programmatic equipment should be listed in the appropriate category above. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

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**
Amount Requested:	$51,500
Strategic Initiatives Addressed:	3.2, 6.1

Replacement X Growth ☐

1. What technology equipment are you requesting?

We need forty computers to equip two labs with 40 students each ($40,000). We expect two students to work together on one station. We need a printer for each lab ($1500), and we need to update software (MultiSim) every other year ($10,000).

The Electrical department has never had a proper computer lab. It has been standard since the early 1980s to provide simulation software in all electronics courses (DC circuits, AC circuits, Semiconductors, Digital Logic Design, Microprocessors, Analog linear Integrated Circuits, Communication systems, Power electronics, and others). These areas of emphasis are included in the standard *MultiSim* software. This software is updated every two years.

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. They all require the use of circuit software simulations of studied circuits to clearly design, draw, and test circuits before they are prototyped. It is the industry standard as well as the modern educational system standard for the program, yet we currently do not have them. In addition, computer systems are used extensively in the microprocessor/embedded systems to program the I.C. chips needed to run much of the electronic systems of today. Therefore, we are at a great disadvantage without having these computers, software, and peripheral printers.

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.).*

Many employers today in the field of electricity and electronics require students to have the

computer skills to simulate, test, and troubleshoot machinery. The incorporation of computers software, and printers will greatly improve student success in obtaining a job and furthering their careers.

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. While this software could be installed within nearly any computer lab on campus, it makes the most sense to purchase computers so that Electricity/Electronics students can work with the software on site, within the Technical Building.

The program has so many needs at the moment and 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.

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

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.