

PIE - Technology & Health: Electronics & Computer Technology Unit

Unit Goals	Resources Needed	1. Where We Make an Impact: Closing the Loop on Goals and Resources
Facilities Issues - Funds requested having to do with the upkeep and on- going maintenance of the classroom facilities. Status: Active Goal Year(s): 2017-18, 2018-19, 2019- 20, 2020-21, 2021-22 Date Goal Entered (Optional): 09/01/2016	Report directly on Goal	Reporting Year: 2019-20 % Completed: 0 All issues reported for previous year still need to be addressed. Lights routinely burn out and ballasts take months to repair, even when reported in a timely manner through Schooldude. Facilities and wiring upgrades to rooms 312 and 314 are still needed to bring up to campus standards. (06/10/2020)
	Request - Full Funding Requested - Computer Lab Remodel *Lead: Jim Uranga Type of Request: FACILITIES: This section includes minor building improvement projects and alterations to specific rooms or operational areas. Planning Unit Priority: High	Reporting Year: 2019-20 % Completed: 0 Facilities issues are ongoing: though both rooms 312 and 314 are fully functional, they still require electrical and telecommunications upgrades to bring up to campus standards. Additionally, a 3-phase, 208-V circuit must be installed adjacent to room 314 to allow for installation and use of the department's fume extraction system. A third white board needs to be installed in rooms 403 and 412. Overhead lights in the lab and classrooms routinely burn out and are not replaced. Although reported through Schooldude, one ballast replacement took over five months to complete, and another hallway light was burned out for over a year before being replaced despite being reported multiple times. (05/18/2018)
		Reporting Year: 2019-20 % Completed: 25 2016-17: Facilities needs continue in the following areas: third white board installed in rooms 403 and 405; upgrades to power and data-communications capability; and routine

attention paid to maintenance issues, most significantly

*Lead: Hymer

areas.

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replacement of fluorescent lamps and ballasts. 2017-18: Maintenance issues continue. Light ballasts routinely take weeks if not months to replace. Also, power and data communications capabilities need to be addressed in rooms 312 and 314. (07/05/2017)

Reporting Year: 2019-20 % Completed: 25

Room 410 has a third white board. Rooms 403 and 412 each need a third white board installed on either side of the existing ones to allow for additional white board space to improvement projects and alterations be available when the projection screen is in use. (05/18/2018)

Planning Unit Priority: High

Request - Full Funding Requested -

Request - Full Funding Requested -

White boards--rooms 403, 410, 412

Type of Request: FACILITIES: This

section includes minor building

to specific rooms or operational

Secure self-locks or an electronically actuated key system (with surveillance) is desperately needed. The security of several hundred thousand dollars' worth of equipment depends on this. Lock access is still an issue, as is the inability of faculty or staff to access the building during off hours.

Type of Request: FACILITIES: This section includes minor building improvement projects and alterations to specific rooms or operational areas.

Planning Unit Priority: Medium

Request - Full Funding Requested -New carpet in 28B room 404.

*Describe Plans & Activities

Supported (Justification of Need):

Existing carpet is torn and ragged, and could cause a student or faculty to trip over the frayed carpet. *Lead: Ken Miller What would success look like and

Reporting Year: 2019-20 % Completed: 25

Classroom and equipment room locks have been returned to the self-locking variety; however, the department advocates for the installation of a CCTV system to maintain surveillance in the hallways whenever the equipment room (room 406) is unattended. There was an attempted break-in several years ago (pry marks on the Dutch door were apparent). Also, having a keypad (or card-swipe) based locking system installed would eliminate the need for highsecurity keys, and access codes can be changed more readily than with a key-based system. (05/18/2018)

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how would you measure it?: New carpet

Type of Request: FACILITIES: This section includes minor building improvement projects and alterations to specific rooms or operational areas.

Planning Unit Priority: Medium Total Funding Requested: 1500

Request - Full Funding Requested -

Split the existing lights in room 404 for proper video presentation.

*Describe Plans & Activities

Supported (Justification of Need): The lights in 404 are either all on or all off. We would like to have the front half of the room or two light banks closest to the projector be able to be turned off.

*Lead: Ken Miller

What would success look like and how would you measure it?: Split lights in 404

Type of Request: FACILITIES: This section includes minor building improvement projects and alterations to specific rooms or operational areas.

Planning Unit Priority: Medium Total Funding Requested: 1000

Request - Full Funding Requested -

Need 3-phase (208-V) circuit for our existing fume extraction system. Soldering lab remodel room 314/fume extraction system *Describe Plans & Activities

Supported (Justification of Need):

Soldering lab remodel room 314/fume extraction system **Type of Request:** FACILITIES: This

Reporting Year: 2019-20 % Completed: 0

Need for this resource continues. Installation of the department-owned fume extraction system (which is fully self-contained, requiring no external venting) would eliminate the need for noisy, portable fans at each student workstation, thus improving the learning environment. (05/18/2018)

Reporting Year: 2017-18

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	section includes minor building improvement projects and alterations to specific rooms or operational areas. Planning Unit Priority: Medium	% Completed: 0 Need identified. (08/19/2017)
Personnel support - Need for qualified lab assistants continues. Also critically needed is an individual with subject-matter expertise to provide additional support for ELEC 74 (Microcontroller Systems), based on student feedback regarding bottlenecks created as the result of competition for instructor's attention. Status: Active Goal Year(s): 2016-17, 2017-18, 2018- 19, 2019-20, 2020-21, 2021-22 Date Goal Entered (Optional): 09/01/2016		Reporting Year: 2019-20 % Completed: 0 We have not received funding from our PIE in years. As a result, any funding we have received has come through Perkins, which we also did not receive this past year and which has made it hard to hire student assistants for our introductory courses. Because in-class lab assistants are so vital to student success we have had to make them our top request in the Perkins application the last three years, thus, we have not pursued funding for other instructional equipment. I would request that our division increase our yearly hourly instructional aide account by \$3000. With this funding we would be able to pursue funds for purchasing equipment through Perkins or other sources. (05/11/2019)
	Request - Full Funding Requested - The department requests an increase to its existing hourly instructional aide account. The amount of 8158 below reflects an increase of 3000 over the existing allocation of 5158 to the 11000- 353000-231000-093400-2100 Short Term Non Academic account *Describe Plans & Activities Supported (Justification of Need): This funding is used to pay in-class lab assistants for our fundamentals courses. In the past we have relied on Perkins funding for this function; however, Perkins funding is year-to- year and subject to changing institutional priorities. These positions are critical to the department's mission. We did not	

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receive Perkins funds for this purpose for the current academic year, and the absence of lab assistants for the Introduction to Mechatronics course resulted in significantly reduced success rates on student completion for the final exam activity. Because limited department funds had to be redirected from other needs to fund a reduced presence of lab assistants, some courses normally relying on lab assistants were unable to do so this year, resulting in a reduction of student success rates. Although the department usually hires students to work as in-class lab assistants, having a division-supported instructional aide account is advantageous in the event the department needs to hire a non-Mt. SAC student to fulfill a critical role (such as professional expert for Electronics 74). *Lead: Department chairs for 2019-20: Joe Denny and Ken Miller What would success look like and how would you measure it?: Increased student success as measured by completion rates or pass rates on final activity exams in Electronics 10. Type of Request: STAFFING: Requests for permanent employee positions or temporary/hourly employees. Planning Unit Priority: High **On-Going Funding Requested (if** applicable): 8158

Lab Modernization Requests - Each

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department laboratory will have industry current equipment to respond to employer and transfer institution needs. Status: Active Goal Year(s): 2016-17, 2017-18, 2018- 19, 2019-20, 2020-21, 2021-22 Date Goal Entered (Optional): 07/05/2017 07/05/2017	Report directly on Goal	Reporting Year: 2019-20 % Completed: 100 Equipment purchases, as well as the comprehensive nature of the programs in the department, have resulted in a larger number of students seeking positions with high-impact employers starting and continuing with our programs. We have seen an increase in the number of students from LA Metro, and we know of three Metro employees who intend to begin our program in Fall 2018. This is purely the result of word-of-mouth advertising. In addition, CNET students are routinely finding internships and permanent positions, both with Mt. SAC and with a variety of other area employers, particularly school districts. For the current year, the Electronics & Computer Technology Department was recognized with a bronze medal as a Strong Workforce Star by the state chancellor's office for producing a 59% increase in earnings according to state workforce data in the area of Electronics and Electric
	Request - Full Funding Requested - KVM Switches *Describe Plans & Activities Supported (Justification of Need): Purchase 4 KVM (keyboard-video- mouse) switches for use in CNET 58 (Server Systems) course. *Lead: Ken Miller What would success look like and how would you measure it?: The IP Based KVM's would allow remote access to server systems. Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over \$500. Planning Unit Priority: High	Technology. (05/20/2018) Reporting Year: 2019-20 % Completed: 0 Funding has been requested through institutional (instructional equipment) channels, as Perkins funds were not awarded for this purpose in the 2018-19 cycle. (05/19/2018) (05/19/2018)

1. Where We Make an Impact: Closing the Loop on Goals and Resources

One-Time Funding Requested (if applicable): 4000 **Total Funding Requested: 4000 Request - Full Funding Requested -**Increase in department's software line item to reflect ongoing software licensing and maintenance obligations for the following packages: National Instruments Multisim; Camtasia; Userful; Faronics: Brightside *Describe Plans & Activities Supported (Justification of Need): This request covers year-over-year increases to the department's software licensing fees and maintenance agreements. As one example, the National Instruments circuit design suite renews with an annual 10% price increase. What would success look like and how would you measure it?: Increased funding would allow the department to maintain current levels of software-related support. Type of Request: SUPPLIES AND MATERIALS: Instructional supplies and materials are items to be used by students, faculty and other personnel in connection with an instructional program, less than \$500. Planning Unit Priority: High **On-Going Funding Requested (if** applicable): 300 **Total Funding Requested: 300**

Audio-visual upgrades - Upgrades to **Report directly on Goal**

audio-visual equipment in lab rooms. Specifically, a presentation camera (Elmo or other) is requested for Room

Reporting Year: 2019-20 % Completed: 0

A presentation camera is still needed for room 312. The video projectors in lab rooms 401, 403, 404, 410, and 412

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312, and campus-standard video projectors with HDMI inputs are requested for rooms 312, 401, 403,	Report directly on Goal	are over 10 years old and are approaching end-of-life and cannot support HDMI or other modern video formats as well as open captioning. (05/11/2019)
405, and 410. Status: Active Goal Year(s): 2017-18, 2018-19, 2019- 20, 2020-21, 2021-22	Request - Full Funding Requested - Upgrades to audio-visual equipment in lab rooms. Specifically, a presentation camera (Elmo or other) is requested for Room 312, and campus-standard video projectors with HDMI inputs are requested for rooms 312, 401, 403, 404, 405, and 410. *Describe Plans & Activities Supported (Justification of Need): Elmo camera needed for room 312 (department's existing Elmo cameras reside on carts and are shared among lab rooms on 4th floor). Replacement of aging video projectors in lab rooms on 4th floor with campus standard Epson video projectors. *Lead: Joseph Denny What would success look like and how would you measure it?: Equipment installed Type of Request: INSTRUCTIONAL SUPPORT PROGRAM FUNDING (INSTRUCTIONAL EQUIPMENT): Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over \$500. Planning Unit Priority: High One-Time Funding Requested (if applicable): 20000	