

1. Assessment Plan - Three Column



PIE - Technology & Health: Air Conditioning & Refrigeration Unit

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>1. Where We Make an Impact: Closing the Loop on Goals and Resources</i>
<p>Support BAS Program - BAS enrollment will need to be improved and marketing efforts will be undertaken in the Fall of 2017 to evaluate what measures should be taken to meet this criteria. Status: Active Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20 Date Goal Entered (Optional): 03/08/2018</p>	<p>Request - No Funding Requested - Develop more effective courses that will allow students to earn their certificate faster and enter the workforce more rapidly while not diminishing and diluting course content. *Describe Plans & Activities Supported (Justification of Need): Through the recommendation of our advisory committee, we have modified the certificate/degree to fewer units while still maintaining all relevant content. Modifications included embedding document, spreadsheet, and presentation software directly into the AIRC 61 class. This will allow the department to target these subject matters utilizing air conditioning and building automation subject matter more relevant to the students. *Lead: Richardson/ Kobzoff What would success look like and how would you measure it?: Increased enrollment and completers Type of Request: MARKETING: Requests for services in the areas of graphic design, news, and photography, posting information,</p>	<p>Reporting Year: 2019-20 % Completed: 100 The advisory committee has met and has provided direction for the department. The curriculum and certificate/degree have been modified and sent forward to the educational design committee for approval. The courses and certificate have received approval from Ed Design. (05/14/2019)</p>

Unit Goals

Resources Needed

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

communication and social media.

Planning Unit Priority: Medium

Request - Full Funding Requested -

Photo-voltaic grid-tie system with battery storage.

***Describe Plans & Activities**

Supported (Justification of Need):

The photo-voltaic system will be used to provide power to a newly installed VRV system which will be used for instruction on grid-tied systems that are becoming more commonplace in industry.

Additionally, the system will be used for future instruction on micro-grid technology. The application of the system will be incorporated into the electrical courses as well as building automation systems courses.

***Lead:** Richardson/Kobzoff

What would success look like and

how would you measure it?: Success would be to develop a more well informed and employable student that meets the needs of industry and an ever evolving energy efficient society. It would be measured through the more diverse areas of job placement and HVAC Excellence Employment Readiness Exams.

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

One-Time Funding Requested (if applicable): 45000

Reporting Year: 2019-20

% Completed: 0

Alternative energy project was placed on hold due to a moratorium on photo-voltaic installations on campus. This is no longer the case and the department is going to move forward on this. The projects current anticipated completion has been postponed until Summer of 2020 at the earliest. (05/14/2019)

Reporting Year: 2019-20

% Completed: 25

A number of VRV systems have been installed and will become operational in the 2017-2018 school year. There is another system currently in the process of being installed which also will incorporate Photo-voltaic (solar panels) to power the system so students can get exposure to this new technology when working within this environment. The college is no longer under a moratorium on photo-voltaic systems on campus and so the department is resuming the process and installation of this project. The VRV units have been placed on the North-West exterior of Building 69 to foster exposure and marketing opportunities of the Air Conditioning department. A fence has been erected by Mt SAC facilities to ensure safety and security of the units. (05/09/2019)

Unit Goals

Resources Needed

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

Total Funding Requested: 45000

Support BAS Program 2 - Acquire equipment and controls to support the BAS program on an ongoing basis to meet the technological advances occurring in industry

Status: Active

Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20, 2020-21

Date Goal Entered (Optional): 03/08/2018

Request - No Funding Requested -

Industry support and advisory

***Describe Plans & Activities**

Supported (Justification of Need):

To ensure that the department has the relevant technology to meet current industry practices as well as professional development to implement current and new technologies the department will seek grant funding for activities.

***Lead:** Richardson, Lanny

What would success look like and how would you measure it?:

Relevant technology to lead towards a higher placement rate within industry.

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: Medium

One-Time Funding Requested (if applicable): 2500

Total Funding Requested: 2500

Reporting Year: 2019-20

% Completed: 25

The department has secured some additional equipment to support the Building Automation Program. These new items will allow the department to maintain relevancy and currency. It has also strengthened the relationship between a major manufacturer, Automated Logic Corporation, and the BAS program at Mt SAC. The equipment has been received and the installation process is ongoing. Faculty will need additional training to fully realize the systems. (05/14/2019)

Technological relevance - Provide students relevant mechanical equipment that is current with industry standards as well as technological standards.

Status: Active

Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20, 2020-21

Date Goal Entered (Optional): 07/13/2017

Report directly on Goal

Reporting Year: 2019-20

% Completed: 50

The department has received the new efficient furnaces and has installed them. They are ready for student use. The department is still in the process of installing the energy monitoring equipment. (05/14/2019)

Request - Full Funding Requested -

Replacement package units and furnaces

Unit Goals

Resources Needed

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

***Describe Plans & Activities**

Supported (Justification of Need):

Many of the Air Conditioning and Refrigeration systems used as lab trainers in the AIRC mechanical lab date back to the 1970's and 1980's. These trainers have always served the department's instructional needs because the systems are durable and the components are clearly visible. The refrigerants these older systems use, however, have been phased out because their destructive environmental properties. It has become prohibitively expensive to maintain the lab trainers that use HCFC refrigerants. It is more cost effective to replace existing older systems with newer, more efficient, and environmentally compatible equipment that use HFC and HFO refrigerants.

***Lead:** Richardson, Lanny
Kobzoff, Fred

What would success look like and how would you measure it?:

Students gaining experience on current relevant technology to provide greater opportunities in the industry.

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
One-Time Funding Requested (if applicable): 50000

Unit Goals

Resources Needed

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

Total Funding Requested: 50000

Support Electrical Instruction -

Replace electrical components used in the Basic and Advanced Electrical course offerings

Status: Active

Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20, 2020-21

Date Goal Entered (Optional): 07/13/2017

Report directly on Goal

Request - Full Funding Requested -

Replacement components for electrical Lab space

***Describe Plans & Activities**

Supported (Justification of Need):

The electrical lab has used the same components for the last 25+ years. These various electrical components have exceeded their life expectancy and quite cost intensive to maintain. These components also are quite dated and are not aligned with current technology found in the newer equipment installed today. The lab could significantly benefit from much needed new components and carry the department forward into the next decade.

***Lead:** Richardson, Lanny

What would success look like and how would you measure it?:

Students having access to equipment that is aligned with today's technology and maintaining relevance in the industry.

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

Reporting Year: 2019-20

% Completed: 0

The department is still seeking and awaiting funding to replace and update the electrical lab with new and relevant components. (05/14/2019)

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>1. Where We Make an Impact: Closing the Loop on Goals and Resources</i>	
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One-Time Funding Requested (if applicable): 20000
Total Funding Requested: 20000

<p>Empower student success - Create or continue efforts to aid student employment opportunities. Status: Active Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20, 2020-21 Date Goal Entered (Optional): 07/13/2017</p>	<p>Request - Full Funding Requested - Part time employee to investigate best practices for internship and placement opportunities.</p> <p>*Describe Plans & Activities Supported (Justification of Need): The department currently hosts an annual open house/student exhibition that industry partners attend and either offer students an internship opportunity or employment. We would like to take this process to the next level so that we can place every completer in the workforce.</p> <p>*Lead: Lanny Richardson Fred Kobzoff</p> <p>What would success look like and how would you measure it?: Criteria will be based on the number of students securing an internship or employment within industry. Create a tracking metric.</p> <p>Type of Request: STAFFING: Requests for permanent employee positions or temporary/hourly employees.</p> <p>Planning Unit Priority: High One-Time Funding Requested (if applicable): 45000</p>	<p>Reporting Year: 2019-20 % Completed: 25</p> <p>To date, the Air Conditioning program has a 95% placement success rate. An average of 21 industry partners have participated annually over the last two years. The interview process has been ongoing since 2012 with smaller numbers but has grown substantially over the years. The department will be providing interview opportunities, for students, in June of 2019 to further maintain our employment numbers., (05/14/2019)</p>	<p>: This effort will be continued as long as industry supports it and we see no cause for slowing down in the foreseeable future. (08/21/2017)</p>
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<p>Marketing - Participate or implement marketing efforts to promote the Air Conditioning and Building Automation programs. Status: Active</p>	<p>Report directly on Goal</p>	<p>Reporting Year: 2019-20 % Completed: 75</p> <p>The department has created a number of posters for internal marketing purposes and is in the process of furthering our marketing efforts to industry. The</p>	
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<p>Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20</p> <p>Date Goal Entered (Optional): 08/21/2017</p>	<p>Report directly on Goal</p> <hr/> <p>Request - Full Funding Requested - To create marketing videos/posters/literature that can be used internally as well as externally to promote our programs.</p> <p>*Describe Plans & Activities Supported (Justification of Need): To participate in marketing efforts that highlight the need for qualified technicians graduating from Mt SAC.</p> <p>*Lead: Lanny Richardson</p> <p>What would success look like and how would you measure it?: Industry feedback</p> <p>Type of Request: MARKETING: Requests for services in the areas of graphic design, news, and photography, posting information, communication and social media.</p> <p>Planning Unit Priority: Medium</p> <p>One-Time Funding Requested (if applicable): 15000</p> <p>On-Going Funding Requested (if applicable): 2500</p> <p>Related Documents: ZNE means job Opportunities</p>	<p>department has also acquired clothing that reflects a more professional look to industry, employers, as well as potential future students. (05/14/2019)</p> <hr/>
<p>Facilities - The mechanical lab space requires upgrading the lighting in this space to improve the quality and efficiency of lighting to provide students with a safe environment. Lighting issues result in the use of portable lighting necessities to ensure students can work on their project in a safe and comfortable manor.</p> <p>Status: Active</p>	<p>Report directly on Goal</p> <hr/> <p>Request - Full Funding Requested - Lighting retrofit to high bay fluorescent or LED lighting</p> <p>*Describe Plans & Activities</p>	<p>Reporting Year: 2019-20</p> <p>% Completed: 0</p> <p>This issue has been listed on our PIE report since prior to 2017 but was removed. It has since been on our PIE report and is currently still waiting for approval and implementation. (05/14/2019)</p> <hr/>

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<p>Goal Year(s): 2017-18, 2018-19, 2019-20, 2020-21</p> <p>Date Goal Entered (Optional): 05/31/2018</p>	<p>Supported (Justification of Need): Current lighting in shop area is inadequate and creates excessive dark areas and shadows that are not conducive to a proper learning environment. The request is to either replace existing lighting with fluorescent or LED lighting or support existing lighting with additional fluorescent or LED lighting.</p> <p>*Lead: Lanny Richardson</p> <p>What would success look like and how would you measure it?: Improved student performance measured by improved project score results.</p> <p>Type of Request: FACILITIES: This section includes minor building improvement projects and alterations to specific rooms or operational areas.</p> <p>Planning Unit Priority: High</p>	
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<p>IT support - Increase the support from IT staff serving the Technology and Health Division.</p> <p>Status: Active</p> <p>Goal Year(s): 2018-19, 2019-20, 2020-21</p> <p>Date Goal Entered (Optional): 05/14/2019</p>	<p>Report directly on Goal</p> <hr/> <p>Request - Full Funding Requested - Request additional personnel hiring to support full time IT staff serving Technology and Health facilities and classrooms.</p> <p>*Describe Plans & Activities</p> <p>Supported (Justification of Need): The division currently has one full time IT staff member who serves a large population on campus. A part-time employee is currently in a supporting role and should be made</p>	<p>Reporting Year: 2019-20</p> <p>% Completed: 0</p> <p>Night time support for faculty and students has been a low priority and needs to be addressed. (06/17/2020)</p>
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full time as the needs of technology and support continue to grow within the division.

***Lead:** Lanny Richardson

What would success look like and how would you measure it?: Ability to offer far greater support to a growing division.

Type of Request: STAFFING: Requests for permanent employee positions or temporary/hourly employees.

Planning Unit Priority: Medium

<p>Support Program Instruction - Consumables and welding gas supplies for AC classes Status: Active Goal Year(s): 2018-19, 2019-20, 2020-21</p>	<p>Report directly on Goal</p> <p>Request - Full Funding Requested - Ongoing funding for supplies needed to support growth and additional sections in Welding for Air Conditioning and Refrigeration class (AIRC 11). *Describe Plans & Activities Supported (Justification of Need): The industry is hitting a shortfall of qualified entry level employees. The department has increased its offerings with additional sections of the welding for air conditioning and refrigeration class (AIRC 11) to allow more students to complete the program faster. However, the course requires substantial resources in consumable materials and gases that can not be sustained by the department without additional funding added to the department budget.</p>	<p>Reporting Year: 2019-20 % Completed: 0 Material costs continue to increase while the department has not received a budget increase in several years. (06/17/2020)</p>
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Unit Goals

Resources Needed

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

***Lead:** Lanny Richardson

What would success look like and

how would you measure it?: Meet supply and demand of industry needs by allowing more students to achieve their certificate in a more timely manner and enter the workforce sooner.

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): 5000

Total Funding Requested: 5000