1. Assessment Plan - Three Column



PIE - Technology & Health: Architecture, Industrial Design Engineering & **Manufacturing Unit**

Narrative Reporting Year

2019-20

Contact Person: Stephen James **Email/Extension:** sjames@mtsac.edu **Summary of Notable Achievements: .**

Program Planning (Equity, Retention and Success): .

External and Internal Conditions Analysis: .

Critical Decisions Made by Unit: . Contributors to the Report: .

Software: Manitain current,

industry-representative software. -

Unit Goals

Resources Needed

Report directly on Goal

Ensure most current versions of core program software packages are purchased, installed and debugged prior to program start each semester. Digital design, engineering and visualization software is at the core of three of the four department programs and is used for most of the curriculum. Software drives other industry-related digital fabrication technologies such as laser-cutting, 3D printing and CNC machining. Maintaining current and relevant software is extremely important in helping our students meet industry

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

Reporting Year: 2018-19 % Completed: 0

Software issue continue to impede student access and success in IDE and MFG programs. CAD installations are incomplete and require daily modifications to operate correctly which is time consuming and distracting and creates an additional, unnecessary source of error and frustration for students and faculty. (05/14/2019)

Reporting Year: 2017-18 % Completed: 50

Software packages are at the core of our programs and vital to their success. Our software drives all other program activities from conceptual design to documentation and fabrication of projects. Funding for software is critical to student success each year.

It is critical that new software updates are installed and

Unit Goals Resources Needed 1. Where We Make an Impact: Closing the Loop on Goals and Resources needs and compete in the job market as well as successfully transfer to in order to maintain program continuity and credibility with students.

Status: Active

Goal Year(s): 2017-18, 2018-19, 2019-

20, 2020-21

Date Goal Entered (Optional):

06/19/2017

default options. Current and previous installations have been incorrect requiring students to perform a basic software configuration for every class which greatly impacts class-time budget, student frustration and erodes "technology" program credibility. (04/06/2018)

Request - Full Funding Requested - Software (CAD/CAM & Arch)

SolidWorks, MasterCAM and similar miscellaneous software per associated contracts and program needs.

(Cost of some contracts are divided over several years)

SolidWorks (\$7k/ 3 year license--IDE/MFG) This software package is at the core of the IDE and MFG programs. The three-year renewal is due by 11/20.

MasterCAM requires an annual

renewal of \$4500.00

MS Projects (ECT Program) One-time purchase \$4k

*Describe Plans & Activities Supported (Justification of Need):

This software is the foundation of all 4 programs. It is used on a daily basis by students and faculty and is critical to the continued operation of the programs in the department Software renewals and maintenance.

Use current software to design,

Reporting Year: 2017-18 % Completed: 100

Software packages are at the core of our programs and vital to their success. Our software drives all other program activities from conceptual design to documentation and fabrication of projects. Funding for software was critical to student success for the year. This funding is program critical and will recur every year. (06/26/2017)

It is critical that software is installed with the appropriate

Unit Goals Resources Needed

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

evaluate, document and fabricate mechanical and product-oriented projects

*Lead: I. Sardinas, S James, H.Kuroki What would success look like and how would you measure it?:

Successful acquisition and implementation

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: Urgent

One-Time Funding Requested (if applicable): 11000

On-Going Funding Requested (if

applicable): 4500

Total Funding Requested: 15500

Software Currency and Timely

Implementation. - Digital design, engineering and visualization software is at the core of three of the four department programs and is used for most of the curriculum. Software drives other industryrelated digital fabrication technologies such as laser-cutting, 3D printing and CNC machining. Maintaining current and relevant software is extremely important in helping our students meet industry needs and compete in the job market may require a slightly larger time as well as successfully transfer to four-year institutions.

Status: Active

Report directly on Goal

Reporting Year: 2017-18 % Completed: 25

Implementation of MFG 105 Intro to AutoCAD is on hold as we focus on the development of other courses.

(04/06/2018)

Request - No Funding Requested -

Sufficient funding to help IT personnel effectively implement yearly software upgrades

*Describe Plans & Activities **Supported (Justification of Need):**

Need more effective support from IT staff when installing software. This investment. We have not had this support for several years and it has substantially degraded the operation

of all CAD-based courses.

Resources Needed

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

Goal Year(s): 2017-18, 2018-19, 2019-

20, 2020-21

Date Goal Entered (Optional):

09/01/2016

*Lead: S. James, H. Kuroki

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

Software and related technology operates as intended. Reduced student frustration and confusion

Type of Request: IT SUPPORT: Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: Urgent One-Time Funding Requested (if

applicable): 0

On-Going Funding Requested (if

applicable): 0

Total Funding Requested: 0

Facilities: Maintain and invest in industry-representative facilities and infrastructure - Optimize the use of classrooms, labs and infrastructure to support, augment and reinforce the curriculum and improve the learning experience.

Continued need for updated facilities and infrastructure that are representative of industry practices in all programs in order to maintain industry level course content and expectations and to establish credibility with industry partners and potential students. Unpredictable, poorly functioning infrastructure impedes effective instruction and hurts program credibility.

Request - Full Funding Requested -

The current Covid19 situation has required the use of DL technology, namely Zoom. which has led to new insights about how to deliver course content. Only one of our five video projectors works effectively, but rather than replace them we are now planning to discontinue using the projectors and instead Zoom or Faronics in conjunction with Canvas within the classroom. This is an improvement over the conventional video projection systems we have employed until now:

--Student's ability to see what is happening on screen is not limited by where they sit in class (ie: at the back). This has a great impact on

Resources Needed

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

This includes lab facilities that are clean, organized, reliable and professional in operation and appearance.

The Covid 19 situation may add an additional layer to our facility infrastructure needs. We don't anticipate holding in-person lecture classes until Spring 2021. But anticipated facility needs may be replacing fabric-covered chairs with plastic or sealed foam types. We will likely need to buy or fabricate barriers for certain student interface activities such as distributing tools or reviewing student work.

Status: Active

Goal Year(s): 2015-16, 2016-17, 2017- use of Zoom. 18, 2018-19, 2019-20, 2020-21

Date Goal Entered (Optional):

06/20/2017

comprehension and engagement.

- --Screen sharing between student and instructor adds a new dimension to student engagement
- --Captioned class recordings are more easily facilitated. These recordings are very helpful and popular with students. They also allow students to review the class from home at a later time.
- -- Minimal cost, zero installation, maintenance, repair and replacement costs. Software updates instead of hardware purchases.

The only funding we anticipate needing is to support the continued use of Zoom.

If Zoom is not continued we will need additional seats of Faronics (similar to Zoom but for specific classroom installation)--this is \$17.50/ seat, so \$1,312.00 for three additional rooms for a 5 year license.

Legacy need is obsolete with continued use of Zoom:
Video Projectors for 28A-102k, 28B-301A, 28B-310
Current projectors are very old and very dim, even with a brand new bulb and the room lights turned down. Resolution is also very low so it is difficult to make out some text or tail from the middle to rear of the room. Our programs rely heavily on these projectors for lectures and

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

CAD demonstrations. Having to turn down the lights creates ancillary problems with students becoming too relaxed or distracted.

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Our current projectors are over 10 years old.

*Describe Plans & Activities Supported (Justification of Need):

Daily CAD lab operation. Program lecture presentations, CAD/CAM demonstrations. CAD and design-related activities for IDE, MFG. GIS and other programs.

*Lead: S James

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

to see the screen in medium light and see higher levels of detail typical in industrial prints and CAD projects. Reduction of student frustration and better comprehension & perception of concepts.

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): 1312.5

On-Going Funding Requested (if

applicable): 0

Total Funding Requested: 1312.50 **Request - Full Funding Requested -** Covid-19 Related barriers between work tables and tool crib areas.

^{*}Describe Plans & Activities

Resources Needed

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

Supported (Justification of Need):

Barriers to help separate work areas and machine tools into individually protected work cells (like office cubicles)

*Lead: Stephen James

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

Students able to work in the shop to maintain the critical hands-on aspect of our programs that they come for. Higher level of confidence and security for students and faculty means better program continuity and engagement

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

Planning Unit Priority: High One-Time Funding Requested (if

applicable): 5000

On-Going Funding Requested (if

applicable): 0

Total Funding Requested: 5000

Related Documents:
WORK STATION PARTITION

060320.pdf

Program Marketing - Increasing awareness of programs through a range of marketing and outreach activities is currently the single, most needed resource for IDE and MFG Tech. School resources and oncampus advertising are insufficient and too inflexible to reach our target demographic.

Report directly on Goal

Reporting Year: 2018-19 **% Completed:** 25

Department websites have been substantially improved, Instagram presence has been established but needs much more support . need much more substantial help than faculty can realistically provide (05/14/2019)

Reporting Year: 2017-18

% Completed: 25

Basic marketing activities have begun (improved website, photo and video documentation or class activities, student

Unit Goals	Resources Needed	1. Where We Make an Impact: Closing the Loop on Goals and Resources
Status: Active Goal Year(s): 2019-20, 2020-21	Report directly on Goal	success, social media etc) But more resources are needed to effectively support advertising in the local community, industry publications and similar avenues. (05/26/2018)
	Request - Full Funding Requested - Professional industry marketing consultant to raise image and awareness of school and programs with local industry. MtSAC marketing does not target industry demographic *Describe Plans & Activities Supported (Justification of Need): Need for industry specific, professional marketing effort that is capable of targeting and reaching potential students specific to IDE/ MFG. This is a critical need that is beyond the capabilities of the program faculty and the school at large. Initial research and strategy outline produced Specific channels media plan Content for social media written, placed according to plan Creation of a special web landing page PR release written and sent to radius publications Creation of a new printed	

*Lead: S. James
What would success look like and

branding/message Outreach to related trades Outreach to off-campus veterans

groups

how would you measure it?:

Improved industry and community awareness of programs and increased enrollment

Resources Needed

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

Type of Request: MARKETING:

Requests for services in the areas of graphic design, news, and photography, posting information, communication and social media.

Planning Unit Priority: High On-Going Funding Requested (if

applicable): 12000

Total Funding Requested: 12000

Equipment and Technology -

Optimize the use of classrooms, labs, equipment and infrastructure to support, augment and reinforce the curriculum and improve the learning experience.

One-time specialized support request to address the impact of Covid 19 on our students--especially large number of economically disadvantaged students.

during Covid 19 shut-down, then eventually on campus to aid in social distancing, especially in the various shop labs where computers are required, but too close together

Status: Active

Goal Year(s): 2015-16, 2016-17, 2017- faculty were surprised to learn of the 18, 2018-19, 2019-20, 2020-21 number of students that do not have

Date Goal Entered (Optional):

06/26/2017

Request - Full Funding Requested -

Student Laptops that support CAD/CAM; (6 Laptops per program)

*Describe Plans & Activities Supported (Justification of Need):

Laptops for students to borrow

eventually on campus to aid in social shop labs where computers are required, but too close together (especially in 28A-102k) number of students that do not have any laptop at all or have a machine that cannot handle the higher demands of software used in the programs. We estimate that we lost 20-30% of our students directly due to thew lack of this resource. These tend to be economically disadvantaged students, many of whom were also struggling with job loss or complicate d family situations brought on or exacerbated by the pandemic.

The "loaner laptops" provided by the school were unusable by students in our programs during spring 2020 because of the higher technical

Unit Goals Resources Needed

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

demands of CAD/CAM software. Similarly the remote/ VPN approach promoted by the IT department does not work for similar reasons. Students need computers they can use without having to troubleshoot.

*Lead: Stephen James, Hiro Kuroki What would success look like and how would you measure it?:

Disadvantaged students who would otherwise not be able to continue with their program because they do not have any computer or a computer that meets the minimum hardware requirements can continue.

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: Urgent One-Time Funding Requested (if applicable): 50000

On-Going Funding Requested (if

applicable): 0

Total Funding Requested: 50000

Related Documents:

COMPUTER QUOTE PIE 2019-20 060220.pdf

Request - Full Funding Requested -

Annual maintenance of 5 CNC machining centers. These machines must be re-calibrated and tuned-up annually.

*Describe Plans & Activities Supported (Justification of Need):

Maintain critical CNC machining centers to support machining

Unit Goals Resources Needed

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

activities for MFG and IDE programs. These machines are the core of industrial manufacturing and are critical to the successful operation of both programs.

*Lead: Stephen James

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

Fundamental resource for multiple courses in the MFG program and used as support equipment for the IDE program. Getting training on these complex machines is the reason many students come to our programs.

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): 0

On-Going Funding Requested (if

applicable): 7000

Total Funding Requested: 7000

Related Documents:

P0063105--Haas Factory Outlet

LLC.pdf

Request - Full Funding Requested -

Web Cams with microphone (4-5 for each of 4 programs)

*Describe Plans & Activities Supported (Justification of Need):

Provide equitable access to Zoom class sessions for students who do not have webcam capability on their laptops or home desktop computers.

*Lead: Stephen James

Resources Needed

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

What would success look like and how would you measure it?: Student access to Zoom and the ability to participate visibly with the rest of the class is critical to their success. Student equity: Address stigma of not being able to participate; not being able to afford the same equipment others in the class take for granted. Greatly improves instructor-student communication and mentoring relationship.

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: Urgent One-Time Funding Requested (if

applicable): 500

On-Going Funding Requested (if

applicable): 0

Total Funding Requested: 500

Related Documents:

WEBCAM 2019-20 060220.pdf

Experience and Application of

Program Skills - Use Work Experience class to help students practice skills learned in IDE/MFG and develop work-related skills and habits. This is an increasingly popular and valuable means of helping students practice and develop skills while also building the "maker culture" and sense of community that is valuable to students and vital to department programs.

Report directly on Goal

Reporting Year: 2017-18 % Completed: 100

The work experience course has been very successful. An increase in student participation during the winter intercession of over 50% compared to the summer intercession.

With the closing of the EDT program, the course has been split into two courses and renamed: MFG 89: Work Experience in Manufacturing, and IDE 89 Work Experience in Industrial Design Engineering (04/20/2018)

Request - No Funding Requested -

Work Experience (Internal, for

Resources Needed

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

Status: Active

20. 2020-21

Date Goal Entered (Optional):

06/27/2017

programs) Students work as Goal Year(s): 2017-18, 2018-19, 2019- fabrication interns to use and develop their skills to improve the Arch, ECT, IDE and MFG programs by assisting with.

*Describe Plans & Activities Supported (Justification of Need):

Support for the Work Experience Program. This has been a valuable resource that helps students practice and develop the skills learned in

class.

All Work Experience will either take place at employer location when possible, or online in the form of digital CAD/CAM and related work. No additional funding is required until the Covid19 situation is resolved

*Lead: Stephen James

What would success look like and how would you measure it?: Projects competed on time, with minimal supervision and at a professional level. Increased student proficiency and skill level.

Type of Request: STAFFING: Requests for permanent employee positions or temporary/hourly employees. **Planning Unit Priority: Low**

One-Time Funding Requested (if

applicable): 0

On-Going Funding Requested (if

applicable): 0

Total Funding Requested: 0

Request - No Funding Requested -Access to shop and labs; Support

from equipment technician and student aides. Some miscellaneous Reporting Year: 2018-19 % Completed: 100

Students in the work experience classes all perform at much higher level and gain significant benefits in a range of areas

1. Where We Make an Impact: Closing the **Unit Goals** Resources Needed Loop on Goals and Resources materials. (plastic, wood, metal) from participating. (05/15/2019) Note: This request is non critical for this year due to the COVID 19 situation, all Work Experience courses are online. We will have a continued need once in-person courses resume. *Describe Plans & Activities **Supported (Justification of Need):** Work Experience (Individual or External) Students take EDT89 Work Experience to practice and develop and master skills learned in the program by developing projects for industry partners, or themselves. *Lead: Stephen James What would success look like and how would you measure it?: Professional level completed project 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:** Low **One-Time Funding Requested (if** applicable): 0 **On-Going Funding Requested (if** applicable): 500 **Total Funding Requested: 500**

MFG Faculty - Program desperately needs a full time faculty. A failed probationary hire in fall 2018 has put extra stress on the department and program.

Planning to begin the hiring process in fall 2019

Report directly on Goal

Reporting Year: 2016-17 **% Completed:** 100

Request - No Funding Requested Full time faculty needed for
Manufacturing Tech program
*Describe Plans & Activities

Faculty hired (03/08/2018)

Resources Needed

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

This continues to be a critical need.

Status: Active

Goal Year(s): 2016-17, 2018-19, 2019- has put extra stress on the

20

Date Goal Entered (Optional):

09/01/2016

Supported (Justification of Need): A failed probationary hire in fall 2018

department and program. Students are not well-served by adjunct-only program.

*Lead: S. James

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

Improved program operation and performance for both IDE and MFG programs. Higher academic and administrative productivity. Better student support and access.

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

Planning Unit Priority: High
One-Time Funding Requested (if

applicable): 0

Promote a "Hands-on "Maker"

Philosophy - Promote goal-oriented iterative experimentation and the physical application of conceptual and virtual processes.

Status: Active

Goal Year(s): 2017-18, 2018-19, 2019-

20, 2020-21

Date Goal Entered (Optional):

06/14/2017

Report directly on Goal

Reporting Year: 2018-19 **% Completed:** 75

Increased use of large shop in 28A-102 and full size equipment by architecture students has greatly increased the "hands-on" experience for them. In particular, the increased use of the CNC routers in collaboration with the IDE program has provided a way for students to connect the design of digital objects to the fabrication of the physical version.

Availability of the Maker Space has encouraged students to continue working on their own projects after class and on Fridays and Saturdays.

New, full-time equipment technician hired 2/25/19
Two people brought on as community volunteers to mentor

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

Report directly on Goal

students and monitor shop area/ support school policies of students not working alone in shop.

Student assistants unavailable during class time so need to hire outside personnel as prof experts

Still have time gaps with no coverage which require students to stop working in shop. This typically leads to them leaving when they would otherwise continue. In addition, the shop area is closed on Friday and weekends. To meet the goal of building and supporting our "maker culture" it is critical to maintain access to the shop during hours of operation. (04/10/2019)

Request - No Funding Requested -

Professional expert(s) that are not taking program courses and can continue assisting between semesters and regardless of the cohort timing.

*Describe Plans & Activities Supported (Justification of Need):

Coverage for increased open lab time, assistance to professors who teach shop oriented courses when student workers are not available.

*Lead: Steve James, Hiro Kuroki

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

Increased use of shop, better continuity in student work (students who would otherwise stay and work, leave when shop is shut down for a few hours between day and night programs. Increased experience and higher skill levels. Better shop "community"

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

Planning Unit Priority: High On-Going Funding Requested (if

applicable): 0

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

Total Funding Requested: 0

Request - Full Funding Requested -

Materials for project-based learning.

*Describe Plans & Activities

Supported (Justification of Need):

All 4 programs are project-based. We rely on a wide range of materials and components such as aluminum extrusions, plastic filament and sheet, mechanical fasteners, adhesives, MDF and many others. These materials and components support a wide range of project activities throughout the year. Despite the setbacks created by Covid-19, we are developing innovative ways of maintaining the hands-on spirit of our department by kitting parts and materials for use at home.

*Lead: Stephen James

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

Students gain and maintain understanding about the complex relationship between physical and inherently imperfect materials and processes, and the artificial and deceptive virtual/ digital world. This aspect of our departmental activities is what industry partners value more than anything else. This is what sets our programs apart from those of other schools and addresses the schools goal of "excellence"

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

Resources Needed

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

program, less than \$500.

Planning Unit Priority: High

On-Going Funding Requested (if

applicable): 15000

Total Funding Requested: 15000

Support Personnel - Maintain community volunteer and lab assistant personnel to support and assist students with use of high tech equipment without the instability of grant funding.

Status: Active

Goal Year(s): 2018-19, 2019-20, 2020- increased use of high-tech

21

Request - Full Funding Requested -

Reliable support for student assistants or

*Describe Plans & Activities Supported (Justification of Need):

Funding for student assistants for Arch, IDE and MFG to support increased use of high-tech equipment. reliance on grant funding means this support is unpredictable, chaotic and timeconsuming.

*Lead: S. James, H. Kuroki

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

Increased student access to high tech equipment that is part of their curriculum. Reduced damage to equipment and student frustration. Improved efficiency of program operation because staffing and personnel would be predictable and we would not have to train new assistants all over again every semester.

We anticipate partial f2f meetings in spring. Student worker support will be even more critical due to check-in, disinfecting; physical movement and tool access etc will be more curtailed and complex and time consuming.

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

Resources Needed

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

Planning Unit Priority: High On-Going Funding Requested (if

applicable): 5000

Total Funding Requested: 5000

Reform Hiring Policies to Better Serve Student Needs. - IDE, ARCH and MFG programs need qualified adjunct faculty. The standard minimum qualifications exclude many very qualified individuals solely because they did not complete a formal college degree.

This continues to be a self-defeating limitation imposed only by MtSAC and places the school at a distinct disadvantage compared to schools with similar programs.

CTE programs that promote the idea that students do not need a formal degree to get a job, should not exclude former CTE students who have substantial technical and teaching experience from being hired simply because they did not complete a degree.

Status: Inactive

Goal Year(s): 2015-16, 2016-17, 2018-

19, 2019-20, 2020-21, 2021-22 **Date Goal Entered (Optional):**

09/01/2016

Report directly on Goal

Reporting Year: 2017-18 **% Completed:** 0

No effective change. This policy has continued to negatively impact the department programs, in particular MFG.

(04/06/2018)

Inter-Program Collaboration -

Continue current collaboration efforts between programs and foster new ones.

Status: Inactive

Goal Year(s): 2017-18, 2018-19,

Report directly on Goal

Reporting Year: 2017-18 **% Completed:** 25

Increased participation and collaboration between IDE and Arch programs. Increased use of main shop area and use of equipment by Arch faculty and students--especially laser

cutters and CNC routers.

		1. Where We Make an Impact: Closing the	
Unit Goals	Resources Needed	Loop on Goals and Resources	
2019-20, 2020-21 Date Goal Entered (Optional): 06/16/2017	Report directly on Goal	IDE faculty has provided several training sessions for CNC router and 3D printers. 3D printing is planned to be adopted by arch during the upcoming year. (04/20/2018)	
	Request - No Funding Requested - Administrative and development support for hybrid program certificates such as a "Fabrication Certification" (between Welding, ,IDE and MFG); Automation/ Mechatronics Certification (ELEC, IDE/MFG) *Describe Plans & Activities Supported (Justification of Need): Many students from the IDE, MFG , ELEC and WELD programs take courses in these other programs, because they recognize the usefulness to their skill set and marketability in the evolving and technically diverse job market. Our programs are not recognizing or capturing these achievements. These proposed certificates would make more efficient use of existing courses and would introduce students from one area to other related disciplines *Lead: Steve James What would success look like and how would you measure it?: New certificates in these areas Type of Request: STAFFING: Requests for permanent employee positions or temporary/hourly employees. Planning Unit Priority: Medium One-Time Funding Requested (if applicable): 0 Total Funding Requested: 0		

Technical Currency of Support Staff -

Unit Goals	Resources Needed	1. Where We Make an Impact: Closing the Loop on Goals and Resources
Help staff maintain currency with technical and support needs of department through training in related area. Current staff is adequately skilled Status: Inactive	Report directly on Goal	Reporting Year: 2017-18 % Completed: 50 Supplemental Skills: Staff need to maintain computer and office software proficiency to assist programs in an efficient and effective manner. (Active) (04/20/2018)
Goal Year(s): 2015-16, 2016-17, 2017-	Request - No Funding Requested -	(0.,1-0,1-0-0)

Time resources

18, 2018-19, 2019-20, 2020-21

Date Goal Entered (Optional):

Date Goal Archived/Inactivated

(Optional): 04/19/2019

06/27/2017

*Describe Plans & Activities **Supported (Justification of Need):**

Critical staff training for programspecific software and technology. Support staff, especially I.T. staff need to meet with faculty at least once per semester to review and train on various set-up, installation, maintenance and repair details and strategies per evolving program needs and software/ technology updates.

*Lead: Stephen James

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

Successful implementation of software and technology in a manner that is efficient, appropriate and timely according to program operation.

Type of Request: PROFESSIONAL & ORGANIZATION DEVELOPMENT (POD): Requests that provide professional learning opportunities for Mt. SAC employees.

Planning Unit Priority: Medium **One-Time Funding Requested (if**

applicable): 0