



unit **PIE**

2014-15
2015-16
2016-17
2017-18

Planning for Institutional Effectiveness

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NOTE: This PIE Form is optimized to be used in Acrobat or [Adobe Reader 10 or later](#).



Planning for Institutional Effectiveness

Introduction

UNIT	Air Conditioning and Refrigeration	Current Year	YEAR 1	YEAR 2	YEAR 3
Contact Person	Darrow Soares	2014-15	2015-16	2016-17	2017-18
E-mail / Extension	dsoares@mtsac.edu/Ext. 6438	<input checked="" type="checkbox"/> Summary	<input checked="" type="checkbox"/> Planning	<input checked="" type="checkbox"/> Planning	<input checked="" type="checkbox"/> Planning

Your Unit Program Review will be recorded on this form summarizing the current year and documenting planning for the next three-year cycle. **Please remember** that all outcomes assessment work should be recorded in TracDat (<http://tracdat.mtsac.edu/tracdat>) in order for your assessment work to best contribute to institutional reports. Outcomes assessment work may include courses, programs, direct and indirect services, organizational structure, structural elements, and institutional outcomes. Respond to only the outcomes categories or types that apply to your unit.

Institutional Planning Framework

The college is unified through its demonstrated connection to the mission. Driven by the California Master Plan for Higher Education, revised by the President's Advisory Council, and approved by the Board of Trustees, it informs all planning and assessment.

Institutional Mission

The mission of Mt. San Antonio College is to support students in achieving their full educational potential in an environment of academic excellence.

Unit Mission

The AIRC Department will provide the necessary education and training to students and incumbent workers to achieve successful employment and remain competent and informed technicians in the sustainable industries of Air Conditioning, Refrigeration, and Building Automation.

College Themes and Goals

College themes and goals allow the campus to focus on critical issues. Articulated by the President's Advisory Council and approved by the Board of Trustees, they guide institutional planning and assessment processes.

Theme A: To Advance Academic Excellence and Student Achievement

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|-----------------|---|
| College Goal #1 | The college will prepare students for success through the development and support of exemplary programs and services. |
| College Goal #2 | The college will improve career/vocational training opportunities to help students maintain professional currency and achieve individual goals. |
| College Goal #3 | The college will utilize student learning outcome and placement assessment data to guide planning, curriculum design, pedagogy, and/or decision-making at the department/unit and institutional levels. |

Theme B: To Support Student Access and Success

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|-----------------|---|
| College Goal #4 | The college will increase access for students by strengthening recruitment opportunities for full participation in college programs and services. |
| College Goal #5 | Students entering credit programs of study will be ready for college level academic achievement. |
| College Goal #6 | The college will ensure that curricular, articulation, and counseling efforts are aligned to maximize students' successful university transfer. |

Theme C: To Secure Human, Technological, and Financial Resources to Enhance Learning and Student Achievement

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|------------------|---|
| College Goal #7 | The college will secure funding that supports exemplary programs and services. |
| College Goal #8 | The college will utilize technology to improve operational efficiency and effectiveness and maintain state-of-the-art technology in instructional and support programs. |
| College Goal #9 | The college will provide opportunities for increased diversity and equity for all across campus. |
| College Goal #10 | The college will encourage and support participation in professional development to strengthen programs and services. |
| College Goal #11 | The college will provide facilities and infrastructure that support exemplary programs and the health and safety of the campus community. |
| College Goal #12 | The college will utilize existing resources and improve operational processes to maximize efficiency of existing resources and to maintain necessary services and programs. |

Theme D: To Foster an Atmosphere of Cooperation and Collaboration

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|------------------|---|
| College Goal #13 | The college will improve the quality of its partnerships with business and industry, the community, and other educational institutions. |
| College Goal #14 | The college will improve effectiveness and consistency of dialogue between and among departments, committees, teams, and employee groups across the campus. |

SectionOne

Where We Are: A Summary and Analysis of the Current Year 2014-15

I. Summary Context - Unit Goals for: Air Conditioning and Refrigeration

Identify the goals that guided your Unit's work for the 2014-15 year (from your 2013-14 PIE form) in the following table and connect those goals to the College Themes. *Add rows (+) as needed. Delete rows (X).*

Unit Goal Name	Unit Goal	<u>College Theme</u>
Full time faculty hire	Replace Retired Faculty Full time retirement	A: Academic Excellence
Support BAS Program	Maintain BAS enrollment	A: Academic Excellence
Support BAS Program	Acquire equipment and controls to support the BAS program	C: Secure Resources
Professional Development	Improve technical competency of AIRC and BAS faculty	A: Academic Excellence

II. Notable Achievements for: Air Conditioning and Refrigeration

Enter your Unit's successes for the 2014-15 year in the table below. This provides opportunity for closing the loop on your Unit's activities completed this year. *Text boxes will expand as needed. Add rows (+), delete rows (X).*

Priority for Manager Summary	Unit Achievements for the 2014-15 Year	Connected Unit Goal/ College Theme
High	The program hired a full time faculty member to replace Richard Anderson's retirement in 2012	Unit: Full time faculty hire
		A. Academic Excellence
High	The AIRC/BAS programs received significant and welcomed CTE Enhancement Funding to provide resources for marketing, new equipment & controls, and professional development. Funding will be available in the 2015-2016 fiscal year.	Unit: Support BAS Program
		C. Secure Resources

Priority for Manager Summary	Unit Achievements for the 2014-15 Year	Connected Unit Goal/ College Theme
Med	Faculty participated in professional development and attended training in Building Automation controls, Variable Refrigerant Flow, and OSHA Safety. All will be incorporated into the curriculum in the 2015-2016 academic year.	Unit: Professional Development
		C. Secure Resources

III. External/Internal Conditions, Trends, Impacts, Retention & Success, Critical Decisions and Outcomes Assessment

The following table is intended to track conditions that influence planning over a multi-year period beginning with the 2014-15 year. Please include data. The "Link to Data Sources and Support Options" button will open a Mt. SAC webpage that offers suggestions and links for possible data sources for your Unit. Text boxes will expand. *Add (+) rows, delete (X) rows as needed.*

			Link to Data Sources and Support Options
Year	Add item	External Conditions, Trends, or Impacts	Data Sources
2014-15		1. The HVAC & R industry has stratified skill requirements. New control technologies in the building automation and energy management sector of the HVAC industry require approximately 20% of program completers enter the industry with a foundation in digital controls, network architecture, and programming. The other 80% require the skills necessary to work in the physically demanding roles of construction, installation, service and repair as mechanical, installation ,and electrical technicians . This results in a stratification of technical skill level that the AIRC and BAS programs must adjust to.	BEST Center Participation June 2014, January 2015, & June 2015.
2014-15		2.College affiliates participating with the BEST (Building Efficiency for a Sustainable Tomorrow) Center through Laney College report low enrollments in their building automation programs. Low enrollment in community college building automation programs is being reported by all BEST Center members and participants. The BEST Center is the only organization representing building automation educators. Recruitment methods are a significant part of the BEST workshops and meetings.	BEST Center Participation June 2014, January 2015, & June 2015.
2014-15		3. Workplace safety based on OSHA standards is changing the operation of many HVAC and BAS businesses. This program needs to infuse OSHA standard safety into the AIRC and BAS curriculum.	Advisory, Work Experience reviews, personal experience.
2014-15		4. Air conditioning systems utilizing inverter controlled compressors for Variable Refrigerant Volume (key term) are being specified more in new construction and new installations. The equipment saves energy by eliminating the use of ductwork . for this technology to be included in the program's curriculum, faculty members will have to participate in significant training and professional development. In addition, the mechanical and electrical labs with need to be modified over a period of + or- 3 years.	Cite Data Sources
Year	Add item	Internal Conditions, Trends, or Impacts	Data Sources
2014-15		Low enrollment in the BAS Program has continued since the DOL grant ended. From Fall 2013 to Summer 2015, eight (8) BAS courses were offered. during that time period, three out of eight course offerings were dropped because of low enrollment. Of the courses that ran, enrollment averaged 83% fill at census and 67% fill at the end of the session. Without marketing intervention and consistent subject matter expert representation, enrollment in the BAS program may continue to fall.	Argos report SSR0039 Argos reports SFR0049- from Fall 2013 to Spring 2015.
2014-15		One full time faculty member will be on 90% release to work with other colleges to develop common outcomes and the transferability of certificates and degrees.	Cite Data Sources
Year	Add item	Retention and Success Data	Data Sources
2014-15		BAS enrollment is low. From Fall 2013 to Summer 2015, BAS courses not closed because of low enrollment averaged 83% fill at census and 67% fill at the end of the session.	Argos report SSR0039 Argos reports SFR0049- from Fall 2013 to Spring 2015.

Year	<i>Add item</i>	Critical Decisions	Data Sources
2014-15		One full time faculty member will be on 90% release during the 2015-2016 academic year to work with other colleges to develop common outcomes in order to support the transfer of certificates and degrees between colleges.	See email sent on 6/30/2015 with subject: SLO to PLO to ILO mapping for AIRC and BAS
Year	<i>Add item</i>	Progress on Outcomes Assessment	Data Sources
2014-15		BAS and AIRC course level outcomes, program level outcomes and Institutional level outcomes were mapped during the Summer 2015 and submitted to the SLO committee.	<i>Cite Data Sources</i>
2014-15		Data continues to be collected on the assessment of student learning in AIRC 12 and AIRC 25. Since Mapping SLOs, PLOs, and ILOs, it appears the process for submitting the summary of data has changed. As a result, data has not been submitted to TracDat until assistance can be given.	<i>Cite Data Sources</i>

IV. Alignment and Progress on Unit and College Goals: Closing the Loop

This section serves as a "reporting" function. It shows how your Unit closes the loop and connects planning to budget allocation: How did the prioritized college resources connect to your Unit's outcomes? What progress has your Unit made with the resources provided? Include progress on plans that did not require new resources if applicable. You are also prioritizing your Unit's progress or outcome for inclusion in your manager's summary. The **Plan Status** drop-down offers a time-frame update on the progress of your plan.

Some information has been pre-loaded into this form by your manager. Add rows (+) as needed. Delete rows (X).

Priority for Manager Summary	Plan from Previous PIE (2013-14) and Resources Obtained (if any)		Resources Secured (if any)	Progress/Outcomes/Result/Impact (Resource requests should be based on outcomes assessment)	Connected Unit Goal/ College Theme
High	AC Trainers w/ TEC Trainer Kit, WiFi Link Adapter and Air Handler Flow Meter. This equipment has been purchased.		\$ 0.00	This equipment was purchased and is currently installed in the mechanical lab. Students will be working with Economizers in the advanced mechanical class, AIRC 34, during the Fall of 2015.	Unit: Support BAS Program
			Instr. Equipment		C. Secure Resources
			Grant		
	Plan Status	2015-16 Complete			
Med	Economizers with BACnet T-stat and BACnet Controls. The remaining equipment will be purchased with CTE Enhancement Funds in July 2015.		\$ 3,782.00	This equipment will be purchased through the CTE Enhancement Grant and made available to students mid Fall 2015.	Unit: Support BAS Program
			Instr. Equipment		C. Secure Resources
			Grant		
	Plan Status	2015-16 Complete			

SectionTwo

Where We Are Going: Planning for the Next Three Years: 2015-16, 2016-17, 2017-18

I. Planning Context - Unit Goals Assessed and Revised for: Air Conditioning and Refrigeration


This table contains your goals as noted in Section One for 2014-15. Review your Unit's goals and revise, add new goals or remove goals that are no longer relevant as appropriate for planning for 2015-16, 2016-17, and 2017-18. *Add rows (+) as needed. Delete rows (X).*

Unit Goal Name	Unit Goal	College Theme
Full time faculty hire	Replace Retired Faculty Full time retirement	A: Academic Excellence
Support BAS Program	Maintain BAS enrollment	A: Academic Excellence
Support BAS Program	Acquire equipment and controls to support the BAS program	C: Secure Resources

II. Annual Implementation Plan for: Air Conditioning and Refrigeration

This section serves as a "planning" function. This is where you ask for resources and record new action plans, activities, or interventions necessary to achieve success. Use the Expected Outcomes section to describe how the plan and resources requested is supported by your Unit's to outcomes assessment plan. This section will also be used to record revisions to plans as needed across the three years of planning.

Add rows (+) as needed. Delete rows (X).

Priority for Manager Summary	Plans, Activities, or Interventions		Resources Needed (if any)	Expected Outcomes / Criteria for Success (Resource requests should be based on outcomes assessment)		Connected Unit Goal/ College Theme
High	Redefine the Building Automation Program. CTE Enhancement funds will pay for this inquiry.		\$ 0.00	The BAS program outcomes will be better defined. BAS program's niche for placement and industry support will be identified.		Unit: Support BAS Program
			Grant			
Status	Projected Completion	2015-16	Source 2	Person Responsible	Richardson/ Soares/ Kobzoff	A. Academic Excellence
Med	infuse Variable Refrigerant Volume technology into the AIRC and BAS curriculum.		\$ 35,000.00	Variable Refrigerant Volume (key term) is specified more in new construction and new installations. The AIRC and BAS programs will meet the need for trained technicians by becoming 		Unit: Support BAS Program
			Grant			
Status	Projected Completion	2017-18	Donations	Person Responsible	Soares/ Kobzoff/ Richardson	C. Secure Resources

III. Resources Identified in Relation to Planning

This section will serve the budget prioritization function in the Manager's PIE. Your manager will inform you when actual quotes are due.

SectionThree

Recommendations for Improving the Planning Process

What additional information should the College provide to assist your Unit's planning?

Identify a faculty member in the Division to act as a consultant on editing this form. Mapping ILOs with J. Hymer worked well

What suggestions do you have for improving the planning process for your Unit?

There should be an in-service or instruction on how to submit data to ePIE since mapping SLOs, PLOs, and ILO's.

Enter your name as contributing to and approving of this Unit PIE Plan below. *Add rows (+) as needed.*

Contributer		Contributer	
Darrow Soares	<input checked="" type="checkbox"/> Approve	Lanny Richardson	<input checked="" type="checkbox"/> Approve
David Hering	<input checked="" type="checkbox"/> Approve	<i>Add your name as contributing to this Unit PIE and check that you approve</i>	<input type="checkbox"/> Approve

Thank you for completing the Unit PIE form summarizing 2014-15, and initiating your Unit's planning for the 2015-16, 2016-17, and 2017-18 three-year cycle.

Please save this form and forward to your Unit's manager by 06/30/ 2015.

Questions regarding this form? Send an email to Don Sciore, Interim Associate Dean of Arts, member IEC, at dsciore@mtsac.edu