

Assessment: Program Review Updates prior to Fall 2018



Program (CIS) - Computer and Information Systems: Computer Maintenance Cert CL.3429

Program Catalog Summary:

Certificate:

SC Program: CL.3429

PROGRAM DESCRIPTION: The Computer Maintenance Certificate Program provides the exposure and training necessary to maintain and troubleshoot common microcomputer systems to the board level. This program provides hands-on training in basic electronics, DOS installation and operation, PC repair and computer management.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student's transcript.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Identify and troubleshoot common problems with computer parts and how to solve the associated problems.
2. Describe the different types of memory, how each operates and installation procedure.
3. Install a Microsoft operating system and configure the computer as a typical workstation.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cis_gainful_employment/.

CERTIFICATE REQUIREMENTS:

CIS 2 Introduction to Computer Science 4

CIS 13 Windows Desktop OS Configuration 3

CIS 14 Manage & Maintain Windows Desktop OS 3

CIS 90 A+ Certification Prep/Cisco IT Essentials I 4

INDE 38 Introduction to Industrial Mechatronics 3

TOTAL UNITS FOR CERTIFICATE 17

Fall 2017

Prepared By: Lew Schmitt, Tom Martin, Dhabih Hendershot & Jeff Hendrickson

What improvements are needed? Please reference items from any associated program reviews as needed.: To improve student outcomes this program needs two additional full-time faculty, one as a replacement for a probable retirement which is supported by our data. The program needs to update hardware to current industry standards, collaborate with local high schools to communicate our updated curriculum and develop guided pathways, develop a student success plan with our new student success coordinator, send CIS faculty for professional development to keep our skills current and develop a marketing plan with EWD. This program operates both night and day classes and needs large blocks of time in computer labs with updated hardware. It is important that we maintain sufficient computer lab classrooms in order to schedule courses when students need them and provide open lab time for our students to get help on their classwork. Currently our CIS students are not supported by any other supervised tutoring lab. Technology is part of many classes and programs beyond our department and student need a place to go for help.

Who completed this form?: Lew Schmitt, Tom Martin, Dhabih Hendershot & Jeff Hendrickson

Participation in the report: Area Faculty (list in the next box), Advisory Committee (if one exists), Other (such as counselors-outside area faculty-deans)

Summarize Participation comments: Technology in our labs is trailing behind industry standards

New faculty and para-professional needed

New equipment needed

Recommendation for Discontinuance?: No

Analyze Overall PLO achievement: PLO achievement is very high. 100% of students earning the certificate have achieved the PLO's. CIS Faculty are currently developing additional PLO's for this program which will be updated shortly.

What changes could be (or have been) made to improve the program?: CIS faculty along with advisory committee have restructured this certificate to align with current industry standards and to align within a stackable certificate and degree pathway that leads from the high schools and on to four year institutions. Each course has been reviewed and updated as well. Faculty have successfully applied for funding for a partial upgrade to some equipment but additional funding is needed to bring us in line with mandated industry changes and to adequately prepare our student for the workforce.

Resources needed to implement the changes noted above: Two additional faculty with one replacement for a potential retirement

Updated servers, rack mounts, cabling, tools, USB drives, ssd drives, wireless access in the computer labs, dual monitors in the lab, new classroom projectors, NetOp software, Classroom display devices and high end pc's and laptops, classroom color printers with wireless printing, scanners, and other devices that improve our ability to deliver quality education.

Professional Development for CIS faculty to update skills and knowledge

Additional computer lab classrooms as it is difficult to schedule courses when students need them and we are already offering sections in the evening.

Open lab with paraprofessional to support CIS students with course work

Labor Market Demand: LMI data shows technology industry jobs are increasing every year across the nation and particularly in California. Local demand is also very strong with many positions remaining open. Our advisory committee reports that they do not bother to list many of their IT related jobs because of the lack of response of qualified workers and rely instead on their social networks to provide references. CIS faculty have referred more than ten students who have been hired this past year at local business. CIS Faculty has also created a LinkedIn group for current and former students where new jobs are posted. Currently we have over 800 members.

Duplication of training: Similar program at Butte College

Program effectiveness: This program measures its effectiveness by Perkins Core Indicators as reported by the Chancellor's office and college generated data read with Tableau.

Other data indications for program improvement: Our Tableau data shows that our success (77%) and retention (92%) rates are higher than the college goals of 70% and 80%.

Perkins Core Indicators show good success rates as well and also show we need to help students fill out the college paperwork to officially "complete" certificates and degrees which will be addressed in our student success plan.

Replicating community college programs north of Sacramento?: Butte college has a similar program.

CSU and UC Transfer impact analysis:: Few of our students in this program transfer as their goal is employment or promotions. We do keep in contact with CSU Chico and Southern Oregon University where we have developed pathways to four year degrees. Those student who do transfer tend to favor those locations.

Influence on related programs and services: This certificate is one step in a series of stackable certificates and degrees.

Specific additional program reflections: Our advisory committee has long indicated that an improvement on student social job skills is needed. We have added team projects and presentations into our courses which has shown to be somewhat effective and are currently developing modules from the 21st Century Job Skills and Growth Mindset curriculum to incorporate into several classes

Other factors for consideration: This program has sections scheduled during the day and night and requires large block of time in computer lab classrooms. As we plan for new buildings it will be important that we maintain a higher number of labs than we currently have to allow for growth and an open tutoring lab focused on technology related courses. Most courses in this program have an online component.

****TO BE COMPLETED BY THE PROGRAM REVIEW COMMITTEE** PRC Action::** PRC recommends the program continue without qualification

Summary Date: 04/03/2019

Summary of findings: The PRC recommends this program continue without qualification. The program has a five-year average of 4.0 completers (2013/14 to 2017/18). The 5-year average success rate for all certificate classes is 72.73% (2012/1-2016/17), which is above the Institution-set Standard of 70%. Retention rates for the same time period show a five-year average of 90.33% for classes in the certificate.

There appears to have been recent changes to the certificate and therefore information is not consistent between the catalog, and the statistics shown for this program. The PLO's have been mapped to ISLO's, SLO's to PLO's and SLO's to ISLO's for some of the classes in the certificate but the listing in Nuventive Improve doesn't match the catalog.

It appears that faculty in the discipline are making changes to their certificates to keep up with industry standards.

The PRC recommends:

Program faculty should write individual program reviews or at least vary the narrative so that differentiation can be made for outside audiences and when analysis is required.

Summary review date: 04/03/2019

Date summary sent to program faculty and/or counselors: 04/09/2019

Program faculty response: No response from faculty. Counselors, Sue Loring and Carolyn Borg, agreed with PRC findings.

Date summary sent to College Council: 05/14/2019

Date reviewed by College Council: 05/21/2019

College Council response or additional action: CC acknowledged review of PR.

Superintendent/President reponse/additional action: N/A

Fall 2017 Program Review
Course Statistics

Course Name	Academic Year					
	2012-13	2013-14	2014-15	2015-16	2016-17	
CIS-2	# of Sections	8	8	8	11	12
	Enrollment	264	261	237	302	326
	FTES	32.7	31.9	30.0	38.1	41.5
	FTEF	2.14	2.14	2.14	1.87	1.87
	WSCH	990	968	910	1,130	1,224
	Avg Enrl/Section	33	33	30	27	27
	Avg FTES FTEF	15.31	14.94	14.07	15.86	17.00
	Avg WSCH FTEF	464	454	427	482	516
CIS-13	# of Sections					1
	Enrollment					25
	FTES					4.2
	FTEF					0.28
	WSCH					125
	Avg Enrl/Section					25
	Avg FTES FTEF					14.72
	Avg WSCH FTEF					441
CIS-14	# of Sections					1
	Enrollment					19
	FTES					3.0
	FTEF					0.28
	WSCH					90
	Avg Enrl/Section					19
	Avg FTES FTEF					10.59
	Avg WSCH FTEF					318
CIS-90	# of Sections	2	2	3	4	3
	Enrollment	52	53	50	62	56
	FTES	10.4	9.8	9.2	11.4	10.1
	FTEF	0.70	0.70	0.70	0.70	0.70
	WSCH	312	294	264	301	299
	Avg Enrl/Section	26	27	17	16	19
	Avg FTES FTEF	14.86	14.00	11.43	11.43	10.57
	Avg WSCH FTEF	446	420	343	343	317
INDE-38	# of Sections				4	4
	Enrollment				85	90
	FTES				13.8	14.9
	FTEF				0.28	0.28
	WSCH				320	300
	Avg Enrl/Section				21	23
	Avg FTES FTEF				8.82	12.95
	Avg WSCH FTEF				265	388
Grand Total	# of Sections	10	10	11	19	21
	Enrollment	280	288	268	415	451
	FTES	43.1	41.7	39.2	63.3	73.7
	FTEF	2.84	2.84	2.84	2.85	3.42
	WSCH	1,302	1,262	1,174	1,751	2,038

Fall 2017 Program Review

Course Statistics

Avg Enrl/Section	28	29	24	22	21
Avg FTES FTEF	15.22	14.75	13.54	14.27	14.86
Avg WSCH FTEF	460	447	410	432	450

Fall 2017 Program Review
Success and Retention

Course Name	Title		Academic Year				
			2012-13	2013-14	2014-15	2015-16	2016-17
CIS-2	Intro to Computer Science	Success	70.49%	70.29%	64.32%	68.52%	72.29%
		Retention	87.30%	91.21%	85.46%	89.84%	91.87%
CIS-13	Windows Desktop OS Config	Success					73.08%
		Retention					88.46%
CIS-14	Manage & Maintain Wndws Dsk Os	Success					68.42%
		Retention					94.74%
CIS-90	A+ Cert Prep/Cisco IT Essen I	Success	76.47%	78.00%	86.96%	88.52%	71.43%
		Retention	92.16%	96.00%	95.65%	96.72%	89.29%
INDE-38	Intro/Industrial Mechatronics	Success				95.40%	93.00%
		Retention				100.00%	95.00%
Grand Total		Success	71.53%	71.63%	68.13%	76.38%	75.98%
		Retention	88.14%	92.04%	87.18%	92.72%	92.12%

Fall 2017 Program Review
Program Awards

Award Type	Program Type - TOP61	2012-13	2013-14	2014-15	2015-16
Certificate requiring 6 to < 18 semester units	Computer Electronics-093410	4	7	2	6
Grand Total		4	7	2	6