

# Business and Information Technology Department

## Annual Unit Plan for Academic Year 2017-2018

October 2016

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### Describe Department/Unit

#### Mission/Connection to College Mission

It is the mission of the Department of Business and Information Technology to provide courses and instruction that will meet the academic, career, and general education needs of our students, college, and communities. We provide instruction leading to Associate degrees and certificates in multiple occupational areas including: Business Administration, Business, Management, Business Office Technology, Computer Information Systems, Computer Technology, Paralegal, and Web Professional. The programs in the Department of Business and Information Technology provide life-long learning and support to students in their academic, technical, and vocational pursuits. The goal of our programs is to foster in students a lifelong desire to learn, a passion to excel, and a commitment to contribute actively to their local community. Students graduating from the department's programs will be prepared to transfer to a four-year institution to continue as students in Business, Business Administration, Business Management, Computer Information Systems, Management Information Systems, or other comparable courses of studies. Students earning Associate degrees, certificates, and awards that are under the Department of Business and Information Technology will be prepared to enter the job market in entry level positions with a variety of focus including but not limited to: programmers, help desk providers, computer operators, desktop publishers, office clerks, administrative support specialists, computer support specialists, legal assistants, and web developers/designers.

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### Report on Improvements Made and Gaps Identified in the Prior Year

#### Student Equity

##### African American Males, American Indian, Asian/Filipino/Pac. Islander/, Hispanic/Latino, Two or More Races and Male completion

###### Population:

Ethnicity: African American

###### Analysis and Plan:

**Business Office Technology:** The biggest gap in the Business Office Technology area is that of the ethnic group, African American, with respect to success at 37% vs. 44% college wide (-8%) which is an increase of 10% from the previous year which was 27% vs. 42% (-15%) college wide.

The next biggest gap in the Business Office Technology area is that of the ethnic group, African American, with respect to retention at 58% vs 71% (-13%) college wide which is an increase of 10% compared to the previous year which was 48% vs 71% college wide. (-23%). In the "Two or More Races" category BSOT is above college average at 70% vs. 66% college wide.

- American Indian retention is at 71% vs. 79% college wide (-8%). Success is at 52% vs. 57% (-5%) college wide.
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- Asian Filipino/Pac. Islander retention is at 84% vs. 88% (-4%) college wide, and success is at 63% vs. 75% (-12%) college wide.
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- Hispanic/Latino retention is at 71% vs. 83% (-12%) college wide and success is at 60% vs. 75% (-15%) college wide.
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- White retention is at 83% vs. 86% (-3%) college wide and success is at 75% vs. 72% (+15%) college wide.

While the area is working on developing cohorts, BSOT classes are often attended by students from a wide range or program areas

and this will impact retention to a point. Students may not come back for new classes when they have not succeeded with the initial classes. Conversely, those that do come back for further classes may raise their success level with future classes. Success may bring more success. The implementation of the BSOT C100 gateway course has been developed with a focus on creating success for students who continue with the program. Future year's data is expected to show the outcome of increased success in further classes. Implementation of courses in Canvas may also increase student success. An assignment has also been added to BSOT C100 where students need to complete an education plan.

Faculty has also continued professional development in Canvas, Assessment, and Accessibility, which ultimately could increase effective teaching strategies and development of course tools that may increase success. The program grew by over 100% two years ago and by 25% last year.

**Business:** The biggest gap in the Business area is that of the ethnic group, African American, with respect to success at 37% vs. 44% college wide (-8%) which is an increase of 10% from the previous year which was 27% vs. 42% (-15%) college wide.

The next biggest gap in the Business area is that of the ethnic group, African American, with respect to retention at 61% vs 71% (-10%) college wide which is an increase of 13% compared to the previous year which was 48% vs 71% college wide. (-23%). In the "Two or More Races" category Business is above college average at 80% vs. 66% college wide.

- American Indian retention is at 79% vs. 79% college wide, and success is at 48% vs. 57% (-9%) college wide.
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- Asian Filipino/Pac. Islander retention is at 87% vs. 88% (-1%) college wide, and success is at 71% vs. 75% (-4%) college wide.
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- Hispanic/Latino retention is at 77% vs. 83% (-6%) college wide and success is at 60% vs. 75% (-15%) college wide.
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- White retention is at 80% vs. 86% (-6%) college wide and success is at 69% vs. 72% (-3%) college wide.

The business area continues to evaluate pre-requisites and develop marketing tools that will impact success and retention for students.

**Computer Information System and Computer Science:** The Computer Information System and Computer Science data provided demonstrated student retention is close to the college average at 85% and has risen over from the last five years from a 79%. The college average has also continually risen from 83% to 86%. Student Success rates are 72%, and are slightly higher the college rate of 70%. In the past five years the success rates were fairly level from 2011-12 to 2013-14 at 62%, 62% and 64% and began increasing in 2014-15 to 2015-16 at 67% and 72%. Gender retention close to the college averages (CIS 81%, College 83%) for women, but the male retention is lower (CIS 78%, College 85%). Gender success is higher for women than the college level (CIS 69%, College 67%), where the Male is lower (CIS 60%, College 69%). This is an interesting trend since males are traditional in CIS so one would expect that they would be more likely to stay and succeed. Age statistics are aligned pretty closely with our college numbers. There continues to be a huge gap in ethnicity for Computer Information System and Computer Science. The African American student retention rose to 61% from 57%. The college average is 10% higher at 71%. The African American student success also rose from 36% to 41%, but again it is below the college average of 44%. It is significantly behind the overall student success of 70%. Class to Career presentations are in the third year of implementation in the Computer Information Systems traditional classes and they have been added into the online sections this year through the Services area of the Canvas interface. Interventions with African American Males and Males overall to provide support and assist in retention by providing information and support through Class to Career will provide this guidance to these populations.

## Women in Computer Information Systems/Computer Science/Cyber Security

### Population:

Gender: Female

### Analysis and Plan:

While women in Information Technology positions are a non-traditional population, the data suggests that the program is meeting the targets at 56% (down from 2014-15 at 58%). Informal observation in on-ground classes this fall is significantly lower than last fall. There are 16 males and 6 females in the IWV section representing just 27%. The 2015-16 data will more accurately portray the actual CSC/CS student populations and it reflects 56% females. It would be interesting to see the breakout by gender for traditional

versus online classes. Success online is higher (traditional 62%, online 73%). Strategies to enroll more females into the CIS and CS programs will include direct marketing to the high school student and the college populations. As the updated CIS program was in transition last year, marketing and active recruitment was delayed last year. Additionally, the new Cyber Security program will also be marketed and recruitment will commence in 2016-17. These activities will include outreach activities, special events, hands-on labs and the formation of a student club.

The Data Analyst I Certificate of Achievement program launched in the Fall 2016. Two of the four classes required for the certificate were offered in the Fall semester. In those two classes, 12 students identified themselves as working toward the certificate as their reason for enrolling in the courses. Of those 12 students, eight (75%) were female.

## Outcomes Assessment: Overall Report

All program area courses assessed during 2015-2016 met the level of goals as identified below:

**Paralegal Studies:** Even though the assessed PARA classes indicate that students achieved the stated goal for success, the plan is to determine and identify a consistent set of student learning outcome assessment tools for PARA classes as they are offered.

All courses that were not previously assessed have been assessed as of Fall 2016. Work to continue to keep the assessments up to date. Two courses were submitted through CIC with revision and evaluation of Student Learning Outcomes. Program outcomes are being assessed during the 2016-2017 year for the program review scheduled for 2017-2018.

**Computer Information Systems:** Program outcomes are being assessed during 2016-2017 in preparation for the of the 2016-2017 Program Review. Computer Information Systems will be conducting program review in 2016-17 and any shortfalls will be evaluated.

### **Business:**

The Business Review was completed and submitted during the 2015-2016 academic year and received by College Council in September of 2016. The program review identified two program learning outcome gaps in the Business Administration AS-T degree. The two gaps were identified and resolved as follows:

The first program learning outcome that was not met was PLO#B -- Apply critical thinking skills (analysis, synthesis, and evaluation) to technical and economic issues in a business environment. The target was for 70% of the students to pass the assessment at 70% or higher. The results showed that 6 sections of Financial Accounting were examined. During that time frame, 130 students finished the course but only 117 attempted the final exam. Of those 117, 71 (61%) successfully passed the exam with a score of 70% or higher. Additionally, two sections of Managerial Accounting were examined. During that time frame, 31 students finished the course but only 30 attempted the final exam. Of those 30, 14 (47%) successfully passed the exam with a score of 70% or higher. The department understands that the courses are difficult for students. The use of, and preparation for the final exam as it relates to the coursework for the accounting courses will be examined in the future. The program will be reassessed during the next program review.

The second program learning outcome that was not met was PLO#C -- Recognize and demonstrate skills necessary to function effectively in the global economy. The target was for 70% of the students to pass the PLO assessment(s) at 70% or higher. The PLO was assessed using final exam results from one section of ECON 103 in the Spring 2013 semester. During that semester 30 students finished the course but only 22 attempted the final exam. Of those 22, 13 (59%) successfully passed the exam with a score of 70% or higher. The department understands that ECON 103 is a course that satisfies general education requirements. Because of this, a wide variety of students take the course including many, non-business majors. The next assessment will be based on the revised course which now includes Math 50 as a prerequisite. It is expected that this will affect the results in a positive way.

### **Business Office Technology program outcomes 2015-2016:**

Programs outcomes were assessed in 2015-2016 for the program review. All outcomes were met except the following:

Overall, changes have been implemented in areas where there were gaps, by adding an appropriate pre-requisite course BSOT C100 Introduction to Business Office Technology to the program. The move to realign the CSCI courses to BSOT courses has led to better alignment of prerequisites and this is leading to higher achievement by students who now have also more often taken the courses in a recommended pathway. For example, BSOT C100 comes before BSOT C154 with the latter now having appropriate pre-requisites in the BSOT discipline. The added grammar refresher in BSOT C100 is better preparing students across the BSOT curriculum for writing skills. Writing assignments have also been more fully developed in all the applications classes and these are

used to record problem solving and measure progress with business writing skills at the same time.

The program also has set a high goal of 90% for each outcome. Changes have been mentioned in the previous section and most have already been implemented. Faculty in this area discuss outcomes assessment with adjuncts but the conversation will increase as the next course and program outcome cycle begins. Courses are shared for the sake of continuity, whenever possible and there is a dialog among those teaching CSCI C070 Computer Literacy to keep a similar rigor and style to the class. Faculty are encouraged to use the same textbook for all versions of the class in the same semester. Overall, achievement is high but strategies to perfect and improve assessment tools and results are continually being researched through discussion and professional development.

Graduates of the program hold a high percent of success in all program review outcomes, but because there were only four BSOT classes prior to the changes in the past five year cycle, the absence of appropriate pre-requisites brought the success level down for some students in BSOT C154 in particular. This has now been solved by the addition of the BSOT C100 Introduction to Business Office Technology class which is now also the gateway class for the program certificates and degree.

### **Web Professional**

All program and course learning outcomes have a target of 80% in this program. Program learning outcomes were assessed in Spring 2016. Five out of five outcomes were met. All course outcomes were also reassessed in the 2015-2016 academic year. Eight course SLOs did not meet target, and the gaps that were identified were instructional. Common themes were the need to add more formative assessments and ensure timely feedback to enable students to master skills and concepts. Students will be encouraged more strongly to avail themselves to instructor video demonstrations. In one case, an identified lapse in time between instruction and assessment was thought to be the problem, and a review lecture will be added when the assessment is given. One outcome (DMA C117) is planned for deletion because that course is not the best place to collaboration skills. That is also already addressed in the capstone class. A new SLO is being proposed for DMA C117 that pertains to theme design for content management systems.

## **Outcomes Assessment: Gaps Identified in Prior Year's Assessments**

### **PLO#B -- Apply critical thinking skills (analysis, synthesis, and evaluation) to technical and economic issues in a business environment.**

**Type:**

SLO

#### **Target Missed/Gap Detected:**

The first program learning outcome that was not met was for 70% of the students to pass the assessment at 70% or higher. The results showed that 6 sections of Financial Accounting were examined. During that time frame, 130 students finished the course but only 117 attempted the final exam. Of those 117, 71 (61%) successfully passed the exam with a score of 70% or higher. Additionally, two sections of Managerial Accounting were examined. During that time frame, 31 students finished the course but only 30 attempted the final exam. Of those 31, 14 (47%) successfully passed the exam with a score of 70% or higher.

**Type of Gap:**

#### **Analysis and Plan:**

The department understands that the courses are difficult for students. The use of, and preparation for the final exam as it relates to the coursework for the accounting courses will be examined in the future. The program will be reassessed during the next program review. The department will also recommend BSOT C072 as a possible advisory for this course.

### **PLO#C -- Recognize and demonstrate skills necessary to function effectively in the global economy. The target was for 70% of the students to pass the PLO assessment(s) at 70% or higher.**

**Type:**

SLO

**Target Missed/Gap Detected:**

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**Type of Gap:**

**Analysis and Plan:**

The department understands that ECON 103 is a course that satisfies general education requirements. Because of this, a wide variety of students take the course including many, non-business majors. The next assessment will be based on the revised course which now includes Math 50 as a prerequisite. It is expected that this will affect the results in a positive way.

## Progress Made on Program Review

### Paralegal Program

**Year of Last Program Review:**

2012

**Progress in the last year on two-year strategies:**

A full time faculty has been hired in this area and has initiated new marketing strategies that will continue to evolve.

Marketing to Students: Brochures are considered a good option and draft brochures have been initiated and used at Preview Day. Brochures have been created and a poster for the program has been created. An initial marketing plan was discussed and needs to be fine-tuned and implemented.

Program Development: The revised program has been approved and has made its way into the college catalog with the California Forms class added to the required courses and the PARA C290 course deleted.

Course Development: Courses have all been maintained as up-to-date. All courses SLO's have now been assessed. Two courses are going through CIC for review on schedule.

Create new LDA certificate: This is still being discussed at the advisory level since feedback from the advisory committee varies depending on which members of the committee are in attendance. The LDA certificate looks to be viable option. Further investigation will be made to see if the certificate will make a good "step-up" for a certificate. Check California Business and Professional Code to see requirements for LDA.

**Progress in the last year on five-year strategies:**

Application for ABA: The American Bar Association approval designation for our completers is at a stall, primarily because this requires a minimum of twelve units of on campus classes. The newly hired full-time faculty is investigating use of ITV, perhaps with Bakersfield and/or Porterville college students linked in. New investigation will also be made into synchronous teaching online which will work more smoothly with our new LMS Canvas' integrated tools. This may also work better with our online format.

Tracking of students and jobs: This goal continues to perplex the department, but there is a new job specialist who may assist in the future.

SLO Assessment: Three further PARA classes were assessed in the past year including one that had not been assessed previously. All classes have now been assessed.

Advisory Committee: The department meets each school year with a dedicated group of professionals for the Paralegal Studies area and minutes are on file.

## **Computer Science**

### **Year of Last Program Review:**

2013

### **Progress in the last year on two-year strategies:**

Computer Science program is currently on hold until the unit issue can be resolved.

### **Progress in the last year on five-year strategies:**

## **Computer Information Systems**

### **Year of Last Program Review:**

2011

### **Progress in the last year on two-year strategies:**

The Program Review template in 2011 did not have two-year strategies included and as a result this cannot be reported on.

### **Progress in the last year on five-year strategies:**

Annual Unit Plan data has provided us with data that we can see the trends in retention, success, gender, and ethnicity and age that provides us with valuable insight to our student populations. The college overall has institutional strategies to assist in success and retention in the forms of traditional tutoring, online tutoring and math/English labs. In the CIS area, faculty are striving to make a personal connection with students via emails sent out before the class, use of private journals, responsiveness to questions through email and interpersonal contact with students.

CIS and Cyber Security have developed and submitted long term schedule and new pathways. Marketing documents were developed by the faculty for both programs and provide the information to incoming and existing students through outreach events and online. Additionally, the college is listed on the ICT state website for IT Technician pathways and they have provided IT Technician brochures that will be given out to potential students. New brochures will be developed this year that provides college specific information.

Faculty are continually updating their technological skills through attending professional conferences, Lydna.com training, reading professional journals/blogs and participating in local technology groups.

Program Review for CIS is scheduled for the 2016-17 academic year and trends and data will be reviewed and new strategies will be developed for three and five years.

CIS and Cyber Security have developed and submitted long term schedule and new pathways. Marketing documents were developed by the faculty for both programs and provide the information to incoming and existing students through outreach events and online. Additionally, the college is listed on the ICT state website for IT Technician pathways and they have provided IT Technician brochures that will be given out to potential students.

# Business Office Technology

## Year of Last Program Review:

2016

## Progress in the last year on two-year strategies:

Business Office Technology: Goals that were included in the previous plan for the Business Office Technology area included development of long term schedule, participation in professional development, alignment of program with industry needs, submission of certificates to the state and articulation with transfer programs. Progress was made in each of these areas in the following ways:

- Long term schedule has been completed
- New pathways have been developed
- The 12-unit Office Clerk, and 18-unit Administrative Assistant were submitted and approved by the state.
- BSOT faculty is primary reviewer for Model Curriculum for Business Office Technology and several courses have been drafted.
- Faculty participates in professional development and is currently president of the California Business Education Association.

## Progress in the last year on five-year strategies:

A new program review was just completed for Business Office Technology, so new two and five year goals have been developed.

# Business

## Year of Last Program Review:

2016

## Progress in the last year on two-year strategies:

Goals that were included in the previous plan for the Business area included development of long term schedule, participation in professional development, alignment of program with industry needs, marketing, and articulation with transfer programs. Progress was made in each of these areas in the following ways:

- Long term schedule has been completed
- New pathways have been developed
- The Business Administration AS-T was developed and approved by the state.
- Marketing tri-fold brochures were created.
- BSAD faculty is currently on the state faculty resource group for Business to review AS-T that was developed five years ago.
- IWV business faculty participates in professional development and is currently treasurer of the California Business Education Association.

## Progress in the last year on five-year strategies:

A new program review was just completed for Business, so new two and five year goals have been developed.

## **Business (Business/Business Administration/Management)**

### **Year of Last Program Review:**

2015-2016

### **Progress in the last year on two-year strategies:**

The Program Review identified the following Three-Year Program Strategies:

1. Improve marketing efforts to increase enrollments in courses
2. Assess prerequisites for courses and implement early aligned assignments to substantiate the prerequisites.
3. Examine effectiveness of two year pathway to completion for Business AS and COA on-campus. Outcome could be to eliminate on-campus offerings of upper-level courses or implementation of an every other or every three offering of upper-level courses on campus.
4. Monitor enrollments in new Data Analyst I Certificate of Achievement.
5. Work with Advisory Committees to update courses, degrees, and certificates to align with industry needs.

### **Progress in the last year on five-year strategies:**

The Program Review identified the following Six-Year Program Strategies:

1. Create current student and graduate workplace tracking system to monitor student employment.

## **Digital Media Arts**

### **Year of Last Program Review:**

2011

### **Progress in the last year on two-year strategies:**

The Program Review template in 2011 did not have two-year strategies included and as a result this cannot be reported on.

### **Progress in the last year on five-year strategies:**

- The 2011 Program Review set goals of improved retention and success by 15 and 25 percentage points, respectively. Retention has only improved 8 percentage points, and success has declined by 2 percentage points. The latter may not be statistically significant. Retention has remained fairly consistent at around 71-74%. In order to address this, a survey will be developed, and instructors will be asked to contact students who have dropped to find out why. Then, appropriate strategies can be developed to improve both measures.
- A goal of increased completion (VTEA Core Indicators) by 26 percentage points has been exceeded at 43 percentage points. The program now exceeds the State and District by 11.3%.
- The program has met the goal of 80% of students attaining program learning outcomes A, B, and C.
- Curriculum has been updated, as described.

## **Progress Made on Prior Year Initiatives**

### **Advisory Committee Expansion**

CIS: The CIS Advisory Committee expanded in the last year as Cyber Security professionals were added to the group. A sub-committee of the CIS Advisory Committee provided expertise in the development of specialized courses. Industry professionals continue to provide presentations to the students both online and on campus. Development of internship programs to direct students into career pathways has assisted in the engagement of industry. The unmet need for employees in CIS and Cyber has also driven



employers to engage.

BSOT: This is a continual process. Outreach is being made through preview day contacts plus faculty presented to the Rotary and attended employer meetings with Jacobs and the base over the summer of 2016.

Business: Outreach is ongoing to institutions such as the hospital and Alta One, for example. The Business and the Business Office Technology advisories are planning to meet as one group as well, because some of the people are the same.

## **Employment Placement Reporting**

Administration was to coordinate this project through by Santa Rosa College District in the Spring of 2017.

CIS: The CIS program is working with the Job Development Specialist in placement of students. We are also working with employers to place student in internships and apprenticeship programs.

## **Paralegal Studies and Business area Program Extension to Correctional Facility**

Paralegal Studies: Progress has been made into whether the students/inmates completing the program would be able to obtain work after release and completion of the program. Currently inmates also not prevented from bonding for LDA, unless specific crime related to UPL. Other placement options would be dependent on hiring firm, but options look positive.

One potential adjunct instructor has been identified who already teaches other courses at the prison. There is a need to search for more options, possibly do advertisement search for adjunct pool. Investigation will continue.

## **Department Marketing**

CIS/Cyber Security: Since the both the CIS/Cyber Security programs were in the development and final approval stages through the last year, brochures were not developed. Faculty developed several preliminary documents to show students the roadmap to CIS and Cyber programs. Now that the programs have state approval, brochures and direct marketing can begin.

Paralegal - brochures and new posters have been produced with help of digital media/print shop.

BSOT: This is currently in progress. Brochures are available from the "Doing What Matters" Business Information Worker site currently. These will be used for the fall fair for example.

## **App Development Program**

### **Revision of Computer Information Systems AS and Cert to align with State Model Curriculum**

The CIS degree and certificate were revised, submitted to the Chancellor's Office and approved in early 2016.

Development of an Information Technology Plus certificate was also completed and state approved.

The Cyber Security Technology degree was developed in the Spring 2016 term with a team of experts, approved through the college processes and sent to the Chancellor's Office. It was approved in August 2016. This program was the direct result of the needs presented by the CIS Advisory Committee in November of 2015. Close relationships with the local employers have also resulted in the development of internships, apprenticeships and placements of students. Partnerships within the college with the Counseling Office, Job Development Specialist, Certification Testing Center and the Contract and Community Education Office have also assisted in the development of aligning our program with industry needs. Attendances at professional organizations (CBEA and ICT) conferences in the past year were critical components of the development and updating of our CIS and Cyber Security programs. Statewide resources and professionals were key components to develop partnerships with Cisco Systems, CompTIA and CyberWatch West organizations, which resulted in the use of resources and discounts for students on industry certification exams. The college is now listed at the statewide ICT site as a approved provider for IT Technician pathway (<http://ict-dm.net/>).

A 12-unit Certificate of Achievement, Data Analyst I, was created and approved by the State. The certificate officially launched in the Fall of 2016.

## Computer Science AS-T Transfer project

The science department is revising their courses so now we will be within one unit of compliance and we are continuing this conversation with the intention of reviving this program soon.

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## Plan Initiatives for Next Year

### Initiatives for Next Academic Year

#### Investigate program launch at Prisons and Implement (if practical)

**Action Plan:**

Investigate the details in having the Paralegal Program run at the California City and/or Tehachapi prison that are currently working with the college on other programs and assessment of viability of the program. Work with appropriate college officials, prison officials, and other instructors teaching currently to see what needs to be completed to have a program at the prison.

**Measure of Success:**

Locate possible adjunct instructors. Meet with other instructors currently teaching at prison. Contact with appropriate personnel for assessment of viability of the program.

**Person Responsible:**

Dawn Ward, paralegal instructor

**It addresses a gap in student equity**

Males and Socioeconomically disadvantaged students. Help inmates prepare for release and integration back into society.

#### Legal Document Assistant (LDA) Certificate of Achievement

**Action Plan:**

Investigate California Business and Professional Code to see if a "step-up" smaller completion certificate would work in the program. This would be a lower unit requirement than the current Paralegal Studies certificate.

**Measure of Success:**

Review Code and state laws. Discuss with Advisory Committee and Dean. Prepare draft of program certificate and pathways. Prepare certificate to submit to CIC for processing and approval, if viable.

**Person Responsible:**

Dawn Ward, paralegal instructor

**It addresses a program review strategy**

This addresses a two year program goal. It also addresses strategic goal #1 to maximize student success and strategic goal #3 ensure student access for more degree options.

## **Increase classroom and storage space**

### **Action Plan:**

As a strategy to increase student retention, success, completion and job placement in the Computer Information Systems (CIS) in the Networking and Cyber Security pathways, the development of a student club has been proposed to engage and connect students, provide supplemental hands-on experiences and employer connections with the program. In order to have these types of interactions and learning experience, the CIS program needs a dedicated space in which to have the meetings, hands-on exercises and employer visitation.

The CIS program has a lot of equipment that has been purchased and is currently housed in the CIS instructors' office. New equipment was ordered last year to modernize the program and provide students with an educational experience that would assist them in the engagement of learning as well as prepare them for job placement. Faculty currently have to transport all the equipment each day to the classroom and set it up for class. Following the end of class, the equipment has to be disassembled and transported back to the office. The daily setup and tear down could compromise the cables and connections after a period of time and result in the failure of components. A dedicated classroom for the CIS program would provide housing for the on campus classes as well as a place for the students to get together for club activities. Local donations of old equipment for students to repair and configure would provide valuable experience that would translate to employment. The problem is that there is not a location for the CIS equipment to be housed. The current classroom (LRC 709) is used by multiple disciplines and so storage in that room is limited.

Additionally, LRC 710 and LRC 631 are used for proctoring and Library Research classes and do not have additional space to house the equipment.

Employers have stated in the Advisory Committees in the past that hands-on exercises are valuable and research also demonstrates in a field where hands-on activities are done, students engage. Employers will provide priority hiring for those students that have this experience. Inquiries to students in the Fall 2015 semester on the development of a club were positive and in a short time, 14 signed up. The student learning experiences in the classes and through club activities will assist students struggling with the content by providing hands-on exercises and a group identity. This social connection and learning community will build the program and the students. Recruitment of new members will begin this fall as many of the previous members graduated.

Our previous CIS addendum in the AUP 2015-16 and AUP for 2016-17 we requested a dedicated space and equipment to fully bring up a Cyber Security program. The newly approved and state model aligned CIS and Cyber Security certificates and degrees will serve to meet the needs of our employers, but further development will be restricted without dedicated space. The building of a degree program in Cyber Security requires becoming a member of the Cisco network of schools, where the cost for textbooks will be reduced or eliminated. The state model lists the Cisco IT Essentials curriculum as a recommended option. The online learning platform provides interactive online textbooks and exercise that are free for students from partner schools. This is a win-win for the college and our students. If we do not bring up a full degree program, we could develop a higher-level certificate, but again, this would require dedicated space, servers, and partnerships with industry and Cisco. Additional costs for Cisco certification for adjunct professors would be required.

The new electronics laboratory has very similar equipment (benches, test equipment) that we could share with an electronics program. All CSCI C101 classes and CSCI C070 classes could be held in that classroom where all the equipment and materials would be stored. This would free up LRC 709 for other classes that require computers. Electronics and other disciplines (Engineering) could also share the space and we could work out a rotation for the room. The new classroom would need college computers for students to use for simulations online, email, assignment uploads, etc. Equipment for hands-on labs could be pulled from old college computers that are being excessed or replaced each year.

### **Measure of Success:**

Dedicated classroom would be established and CIS and Cyber Security classes would be taught in the room. Club activities and Employer Advisory Committee would work together with the faculty to enhance the educational experience for students. This enhancement would improve student retention, success, completion and employment.

**Person Responsible:**

Valerie Karnes

**It directly addresses a college Strategic Goal or Objective**

To build the program and develop connections with industry. It also addressed Strategic Goals #1 and #3 for the college.

**Marketing programs/High School Outreach & Recruitment/Increased community awareness**

**Action Plan:**

Increase marketing of all department area programs through well prepared and relevant brochures, flyers, posters, and banners, as well as other methods that may include social media.

Discuss an employer recognition program with the Office of Public Relations and the Job Developer. Update and or develop materials lists for all programs.

Update and or develop introductory letters to respond to student enquiries in a systematic and consistent way that includes a description of recommended advisories and pre-requisites.

Continue to review dual enrollment opportunities and communicate with each K12 school in our region to to streamline entrance into Business & Information Technology programs.

Participate in community and outreach activities to increase community awareness of programs offered.

**Measure of Success:**

The evidence of success will be the marketing materials and tools that will be created. If the Business marketing reflected increased enrollment, and it appears that it did during 2014-2015, there should be increased enrollments after the 2016-2017 year as these planned marketing tools and strategies are implemented. This may take some time to be reflected in the data.

If successful, this initiative should increase success and retention as well.

Enrollment will increase from the community and K12 community.

**Person Responsible:**

Department Members

**It addresses a gap in student equity**

Effective marketing can help the under-represented groups make the right choices for entry to the college.

A strategy that addresses increased effective communication about our courses and programs will help groups understand the

expectations and entry skills that facilitate success in courses and programs. The better informed students are about college options and what is involved in each program area, why the advisories are what they are, the better prepared they will be for success and completion.

## **Optimize accessibility for all department programs and classes**

### **Action Plan:**

The department plans to roll out systematic review of all course learning objects with a focus on accessibility including the following:

- Examining and revising course syllabus for universal design components for usability and accessibility.
- Ensuring PowerPoint presentations employ accessibility attributes.
- Ensuring audio transcripts are strategically placed.
- Ensuring captioning is provided in videos.
- Reviewing features available in Canvas to ensure optimum accessibility of course presentation.
- Employing other accessibility strategies that may be discovered as the review is completed.

### **Measure of Success:**

This is an ongoing project, but the department will keep a list of items that have been reviewed for accessibility as well as the actions that were taken to remedy any shortfalls.

### **Person Responsible:**

All faculty

### **It addresses a gap in outcomes assessment**

The improvement where possible of accessibility features in courses should impact success overall and also possible achievement gaps in equity groups.

## **Certification Testing for Business Office Technology Students and all Students**

### **Action Plan:**

The Business Office Technology Program area is initiating a Certiport Testing Center institutional site license for industry recognized certification of students in the Microsoft Office field of programs.

Students will be able to take practice classes as part of their courses and be prepared for the final certification by the end of their training.

### **Measure of Success:**

A record of student success with certifications will increase visibility of preparedness/recognition for employment.

### **Person Responsible:**

Faculty Chair -- Karen O'Connor Business Information Technology faculty

### **It addresses a program review strategy**

Help enable employment opportunities for students.

## **Web Professional Online Marketing Campaign**

### **Action Plan:**

Facebook advertisements and Google AdWords will run when fall registration opens directing prospective students to the college and program brochure web sites. Ads will target individuals with interests in technology, business, web design, web development, web programming, and in regions with strong employment opportunities for web designers and developers. The students who are most likely to persist and find employment are those who are already engaged in self-paced training on the internet. The ads will describe the benefits of Cerro Coso's credit courses over self-training opportunities, including meaningful instructor guidance and critique and a collaborative class environment.

### **Measure of Success:**

With annual marketing campaigns as described above, we expect to see 100% increase in enrollment over 5 years.

### **Person Responsible:**

Suzie Ama

### **Other**

The initiative addresses the need to improve VTEA Core Indicator 4 Employment.

## **Professional Development**

### **Action Plan:**

Provide all department faculty opportunities for professional development which may include but not limited to attendance at professional conferences (i.e. CBEA, WBEA, NBA, ICT), professional journals, Lynda.com, Information and Communications Technologies (ICT) conferences, NetPlus training, Cisco, certification preparation courses, @One courses, CAPA (paralegal conference) or other venues for training.

### **Measure of Success:**

Faculty will attend professional conferences and submit professional development reports describing factors that will impact student retention, success and completion.

### **Person Responsible:**

All faculty

### **It addresses a program review strategy**

Faculty maintaining currency in constantly evolving technologies will provide them skills to implement for improved retention, success and completion. Strategies to improve enrollment through K12 transitioning into college may also be a result.

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## **Evaluate Resource Needs**

### **Facilities**

Computer Information Systems is in need of a dedicated (or shared) classroom to provide instruction, store equipment and work with

students and employers.

As a strategy to increase student retention, success, completion and job placement in the Computer Information Systems (CIS) in the Networking and Cyber Security pathways, the development of a student club has been proposed to engage and connect students, provide supplemental hands-on experiences and employer connections with the program. In order to have these types of interactions and learning experience, the CIS program needs a dedicated space in which to have the meetings, hands-on exercises and employer visitation.

The CIS program has a lot of equipment that has been purchased and is currently housed in the CIS instructors' office. New equipment was ordered last year to modernize the program and provide students with an educational experience that would assist them in the engagement of learning as well as prepare them for job placement. Faculty currently have to transport all the equipment each day to the classroom and set it up for class. Following the end of class, the equipment has to be disassembled and transported back to the office. The daily setup and tear down could compromise the cables and connections after a period of time and result in the failure of components. A dedicated classroom for the CIS program would provide housing for the on campus classes as well as a place for the students to get together for club activities. Local donations of old equipment for students to repair and configure would provide valuable experience that would translate to employment. The problem is that there is not a location for the CIS equipment to be housed. The current classroom (LRC 709) is used by multiple disciplines and so storage in that room is limited.

Additionally, LRC 710 and LRC 631 are used for proctoring and Library Research classes and do not have additional space to house the equipment.

Employers have stated in the Advisory Committees in the past that hands-on exercises are valuable and research also demonstrates in a field where hands-on activities are done, students engage. Employers will provide priority hiring for those students that have this experience. Inquiries to students in the Fall 2015 semester on the development of a club have been very positive and in a short time, 14 have signed up. The student learning experiences in the classes and through club activities will assist students struggling with the content by providing hands-on exercises and a group identity. This social connection and learning community will build the program and the students.

Our previous CIS addendum in the AUP 2015-16 requested a dedicated space and equipment to fully bring up a Cyber Security program. The newly approved and state model aligned CIS certificates and degree will serve to meet the needs of our employers, but further development will be restricted without dedicated space. The building of a degree program in Cyber Security requires becoming a member of the Cisco network of schools, where the cost for textbooks will be reduced or eliminated. The state model lists the Cisco IT Essentials curriculum as a recommended option. The online learning platform provides interactive online textbooks and exercise that are free for students from partner schools. This is a win-win for the college and our students. If we do not bring up a full degree program, we could develop a higher level certificate, but again, this would require dedicated space, servers, and partnerships with industry and Cisco. Additional costs for Cisco certification for adjunct professors would be required.

The new electronics laboratory has very similar equipment (benches, test equipment) that we could share with an electronics program. All CSCI C101 classes and CSCI C070 classes could be held in that classroom where all the equipment and materials would be stored. This would free up LRC 709 for other classes that require computers. Electronics and other disciplines (Engineering) could also share the space and we could work out a rotation for the room. The new classroom would need college computers for students to use for simulations online, email, assignment uploads, etc. Equipment for hands-on labs could be pulled from old college computers that are being put into storage or replaced each year.

## Information Technology

Existing computer programs as are taught in the BSOT, CIS, BSAD, and DMA programs are required to maintain the status quo in campus labs. This includes Office 2016 and appropriate operating systems. Plug-ins for SAM, CengageNow, and Keyboarding Pro Deluxe Online, continue to be needed for online students who are completing work on campus. Please add Movie Maker for room 709.

Additionally, Computer Information Systems needs 30-35 computer workstations for the new classroom. An instructor station with a computer, projector, speakers and wireless access is also required. The classroom could be shared with Engineering and Electronics.

The Computer Information Systems certificate and degree program requires that students can take and pass industry certification exams. This is also a key component in the VTEA success, completion, non-traditional participation and employment. Partnership with the CompTIA testing agency, Cisco and the Cerro Coso Community College Testing Center through Pearson Vue are critical for students and staff. Placement of our students into industry partners requires industry certifications. The new server was paid

through VTEA funds as a critical component of the CIS program and will increase our student success, completion and job placement. The partnerships with CompTIA, Cisco and Pearson Vue will provide students that are economically disadvantaged with a 50% discount on exam certifications.

Access to expensive course-specific computer software is required for students and faculty in the Computer Information Systems and Data Analyst I programs. The College/District has supported this in the past by providing faculty and student free access to operating systems, database management systems, and other applications via the DreamSpark program from Microsoft.

Additionally, the College/District has participated in other Microsoft programs which allow all students free access to the Office 365 applications. The Business and Information Systems department relies on the continuation of these programs for student equity and success.

The following is a list of what was requested at the beginning of the 2015 school year. As we are planning a year ahead, it is difficult to keep up with changing technology that we cannot necessarily predict a year in advance, but this is the best for the moment.

For DMA C102 students need: Adobe Photoshop CC 2014 Adobe Reader

Firefox (preferred)

A compression utility to zip files & folders Word 2016

Quicktime or another way to view mp4 video files

Access to microphone is optional but useful when attending office hours using CCC Confer CCC Confer-ready

BSOT C070 Business Math - online – Access to Canvas

BSAD C100 Intro to Business – on ground, Access to Canvas + Ability to use PowerPoint in the classroom

BSAD C101 Financial Accounting – on ground, Access to Canvas & CengageNow + Ability to use PowerPoint in the classroom

BSAD C102 Managerial Accounting – online - Access to Canvas & CengageNow + Ability to use PowerPoint

BSAD C110 Intro to Personal Finance - on ground, Access to Canvas + Ability to use PowerPoint in the classroom BSAD C155 Human Resource Management online - Access to Canvas & Cengage/Aplia

BSAD C152 Managing Diversity - online – Access to Canvas + Ability to use PowerPoint

BSAD C171 Intro to Marketing on ground, Access to Canvas + Ability to use PowerPoint in the classroom Office 2016 including Word, Excel, Access, PowerPoint (should be the same as this semester) plug-ins needed for SAM 2016 (should be the same as this semester) KBPO plug ins (Should be the same as this semester)

Internet Explorer Chrome

BSOT C135 Adobe Acrobat Professional (DC)

BSAD 220 Principles of Project Management – MS Project 2016

BSAD 222 Problem Solving, Decision Making, and Computer Applications in Business – MS Office 2016 (Word, Excel, Access, and PowerPoint)

CSCI 270 Database Design and Management – Access 2016, MySQL Workbench

CSCI 251 Introduction to Programming Concepts and Methodologies – MS Visual Studio

CIS/Cyber Security courses (CSCI 101, 142, 143, 146, 251, 270, 190, 193, 195): The technology needs for CIS/Cyber are expanding as equipment (servers, switches, routers, removable drives, VMware) will be required in order to deliver the Cyber Security program.

Additionally, support for Apple computers and technology is needed as it is required for instruction.



## Marketing

Paralegal Department - To implement marketing plan to connect to more students in the service area and beyond. Distribute brochures, posters, and design other materials. Work with Marketing Director to implement plan and approve.

Computer Information Systems has re-developed the certificates and degree to align with the California state model. Additionally, there are new certificates and A.S. degree for Cyber Security. There is also a new Data Analyst certificate that will serve our business community. All of these new certificates and the degrees need to be marketed to all the CCCC communities. Brochures, online marketing, human interest stories and presentations need to be done to let our service area know that the new program has launched. It was launched in Fall 2016 term but our communities are just finding out that these programs are available. This was held up as we were waiting for state approval.

Each area plans to create or update flyers to market the programs at Preview Day, Fall Fair, and other events.

Marketing strategies that have been used for the Web Professional program include Career Day contacts, printed brochures, online brochure web site, Facebook ads, and Cerro Coso web site banners. Expanded online marketing strategies are needed to grow enrollments and meet workforce training needs statewide. We are requesting funds for a significant Google Ad and Facebook Ad campaign every spring to boost Fall enrollment.

Support for these marketing strategies should be continued.

## Professional Development

The department members would like to attend conferences to support currency in their areas as well as to keep abreast of state-wide initiatives.

Examples of conferences include the California Business Education Association (K-12, College, and university) or the Cengage Technology conference.

The California Business Education Association conference is relevant to K-12/College/University transitions as well as creating industry partnerships, and other current topics relevant to career technical education in the state of California including but not limited to success, retention, equity gaps, career pathways, and networking with individuals from other levels of education in the state of California.

The Cengage conference focus is focused on emerging technology and staying abreast of the cutting edge with technology in education and industry.

CAPA (paralegal conference) is required for our full-time paralegal faculty to maintain currency as well as network with state-wide faculty.

Six full time faculty request \$2,000 each for annual professional development. Professional development activities such as conference include workshops, discussion and/or training in emerging technologies as well as opportunities to network with faculty at other colleges and in the K-12 system to discuss trends, equity gaps, career pathways, and other state related topics that impact each institution.

Certification training and associated costs are needed for the Cisco partnership for both full time and adjunct faculty. Professional conferences and meetings will also be required.

CIS - The CBEA conference offers valuable information and training for CIS and Cyber Security faculty. In addition, the Information & Communication Technologies (ICT) conference is technology oriented and offers current and future trends as well as networking opportunities with companies such as Cisco, Microsoft and Google.

Paralegal - Attend Annual California Alliance of Paralegal Association (CAPA) conference and other relevant training/continuing education to stay up to date of on current laws effecting the profession and other conferences to learn more about teaching tools to help students or gain further knowledge to help the program such as CBEA.

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## **Staffing Requests**

**1000 Category - Certificated Positions**

**2000 Category - Classified Staff**