GAVILAN COLLEGE
INSTRUCTIONAL PROGRAM SELF STUDY

NAME OF PROGRAM BEING REVIEWED: CTE BUSINESS DEPARTMENT

ACADEMIC YEAR : 2017/2018

IEC Report Foreword and Disclaimer

The Business Department within CTE is comprised of 11 uniquely identified programs some of which are related and some of which are not. As such, an agreement was reached between the IEC team and CTE administration that a single IEC report would be submitted for the Business Department as opposed to 11 separate reports that would constitute an excessive amount of unnecessary work. Further, in an attempt to simplify and organize appropriately related programs, this report will reflect a consolidation of business-related and technical-related programs for reporting purposes. It is particularly important as it relates to jobs growth and the focusing of available resources.

This IEC report has be written primarily by one of two new Department co-chairs, both adjunct faculty (one from Digital Media and one from Computer Science). Lack of familiarity with the normal IEC development process lead to several unfortunate false starts that has delayed the completion of this report until near deadline.

IEC Report Challenges:

- *Wrong form and instructions received initially, causing restarts and wasted effort*
- *Department data mining using GavData was assigned to individual departments resulting in a steep learning curve and unnecessary wasted hours. It also appears that not everyone agrees with the definition of each of the requested areas of data as regards meaning, relevance, etc and what data to collect/display.*
- *Draft report was submitted in early November 2017. For unknown reasons, the report was not received, and only acknowledged in March, 2018, leaving only 3-4 weeks for revisions and final submission.*

When appropriate and necessary, data has been broken out by program, but generally appears in summary format, organized by major department grouping: 1) Adjudication, 2) Business-Related Programs, 3) Technology Programs and 4) Growth/Development Programs.

Department naming conventions

Because the term "Business" can appear in several different contexts, the full descriptor will be used: Business Department, Business-Related Programs, Business Program, etc.

IEC Overview

The **Business Department** is unique within the Career Technical Education Division. There are currently 11 programs within the Business Department:

1) Accounting (ACTG)
2) Administrative Justice (AJ)
3) Business Office Technology (BOT)
4) Business (BUS)
5) Computer Science and Information Systems (CSIS)
6) Digital Media (DM)

7) Economics (ECON)
8) Hospitality and Tour Management (HTM)
9) Management
10) Marketing
11) Real Estate.

The **Business Department Complete Review Data Sheet** is included for reference at the end of this report, and where appropriate, comparative contributions by program are included in the intervening text. The Computer Graphics Program (CMG) is **NOT** included in the analysis as this program was replaced by the DM program as of 2015.

Note that in Summer/Fall, 2017, both Business Department co-chair positions were staffed with two new people, both part-time (one from CSIS and one from DM).

Jobs Data
While Gavilan College is primarily measured on efficient and successful matriculation of students through to 4-year college and university institutions of higher learning, the CTE initiative is based on its name: Career Technical Education. The Business Department provides Certificates and Degrees that prepare the student to enter the workforce early or move on to higher degrees of learning. Over the next decade, job growth is expected to top 11 million new jobs. It's an important part of the planning process, and as such, we believe that Education should provide programs developed based on that job growth, and as such, this report attempts to point out where program growth is warranted, and where other programs can be cut back or eliminated.

A jobs report for 2014-2024 is provided at the end of this report for reference as well as anecdotal and data based evidence to substantiate proposed changes in the direction of the Business Department. As will be seen in the analysis, several job categories (computer programming, most notably) that are on dramatic growth paths, while others (such as medical records) that are predicted to be on a downturn.

Guided Pathways
With the advent of the Guided Pathways program, the content and format of this report will be significantly impacted in the future, yet we're following a format that may or may not be relevant. The IEC report provides a self-assessment of how an individual program is meeting its mission and importantly what needs to be changed to meet that mission. Legislators appear to be driving program changes based on efficiencies in education and it will be important to ensure that the programs are serving the jobs markets, rather than simply meeting throughput requirements.

Educational program development and delivery are tied, in one way or another, to the jobs marketplace. Unfortunately, as with any other program, timing is the most critical element. With rapidly changing technologies facing our students, it's important to be as nimble as possible.

Departmental Challenges
As will be shown within this report, the majority of staff in the Business Department is part-time faculty. This 25:6 ratio has numerous disadvantages, not the least of which is a lack of available people to contribute to major investigative reports such as Program Learning Outcomes, Student Learning Outcomes, IEC reports, etc. Additionally, programs that are NOT staffed with FT faculty will suffer from a lack of attention and will ultimately lose momentum and possibly lose their funding as well.

I. Business Department

- Organization and Headcount

CTE Dean
Department Co-Chairs 2 (counted in headcount below)

Department Headcount

	Total
Full-Time	6
Part-Time	25
Tech Spec	1
Total	32

Faculty Workload by FT/PT

	2015-16	2016-17	2-yr %Inc
Full Time Load	18.2	29.1	60%
Full Time %	36.80%	42.30%	15%
Mixed	1.6	2.6	63%
Mixed %	3.30%	3.80%	17%
Part Time Load	29.5	37	25%
Part Time %	59.90%	53.80%	-10%
Total FTEF	49.3	68.7	39%

Full-Time Equivalency Headcount

		2009 Fall	2010 Fall	2011 Fall	2012 Fall	2013 Fall	2014 Fall	2015 Fall	2016 Fall	2017 Fall
Adjudication	**AJ**	4.93	5.47	5.47	2.67	3.07	6.4	2	2.6	2.6
Subtotal		***4.93***	***5.47***	***5.47***	***2.67***	***3.07***	***6.4***	***2***	***2.6***	***2.6***
	ACCT	1.51	2.85	2.36	3.33	3	1.87	2.59	3.14	3.13
Business-	**BOT**	0.54	1.55	1.48	0.81	1.01	1.68	0.54	0.87	0.81
Related	**BUS**	0.8	1.47	1.47	1	1.67	1.67	1	1.4	1.87
Programs	**ECON**	1	1.2	1.2	1.2	1.4	1.4	1.2	1.6	1.4
	MGMT		1.07	1.07	0.87	1.07	0.87	0.27	0.2	0.2
	MKTG		0.67	0	0.2	0.67	0	0.47	0.2	0.2
Subtotal		***3.85***	***8.81***	***7.58***	***7.41***	***8.82***	***7.49***	***6.07***	***7.41***	***7.61***
Technical	**CSIS**	8.42	12.99	12.74	12.12	15.42	13.48	13.06	13.5	12.49
Programs	**DM**	1.52	0.4	0.74	0.46	2.4	1.74	0.95	2.33	0.4
	CMG*	0.78	1.19	2.49	0.65	1.45	1.45			
Subtotal		***10.72***	***14.58***	***15.97***	***13.23***	***19.27***	***16.67***	***14.01***	***15.83***	***12.89***
Growth	**HTM**									0.2
Programs	**RE**								0.2	0.2
Subtotal									*0.2*	*0.4*
Overall	**BUS DEPT**	***19.5***	***28.86***	***29.02***	***23.31***	***31.16***	***30.56***	***22.08***	***26.04***	***23.5***

Programs Overview

1. Adjudication Program

- Administrative Justice (AJ)

The **Administration of Justice Program** (AJ) provides a course of study to prepare students for employment in private security and public law enforcement agencies, including: state parks, municipal police, game wardens, probation officers, county deputy sheriffs, county and state correctional officers and the federal government. The associate degree program will prepare students for transfer to UC and CSU bachelors programs (if the IGETC or CSU GE pattern is chosen.) The certificate program is an option for students whose employment objectives are with agencies who require less than an A.A. degree.

Those completing the AS-T in Administration of Justice degree will be able to transfer to the California State University system and be prepared to study in the following areas: Administration of Justice, Law Enforcement, Correctional Administration, Social Science, and Pre-Law. Students will be prepared to work in a variety of fields, including: public law enforcement agencies such as municipal police, probation officers, county deputy sheriffs, correctional offices, game wardens, state parks, and private security.

2. Business-Related Programs

- Accounting (ACTG)
- Business (BUS)
- Business Office Technology (BOT)
- Economics (ECON)
- Management (MGMT)
- Marketing (MKTG)

Accounting Option

Students will have job entry skills for these occupations: accounting clerk, accounts receivable/payable, full charge bookkeeping, general ledger accounting, general office accounting. For those who do not already have a degree, the A.A. option is preferred by employers.

Business (BUS)

The Associate in Science in Business Administration for Transfer Degree (A.A.-T) is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Business Administration. The A.A.-T therefore necessarily requires the completion of a general education sequence of courses, as well as specific preparation for upper-division business administration coursework.

Often referred to as Business Administration) is a wide field that incorporates many types of management positions. From major corporations to independent businesses, every operation needs skilled administrators in order to succeed. Motivated, organized personalities will thrive in **business**, where environments are often high-powered. The Associate in Science in Business Administration for Transfer Degree (AA-T) is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Business Administration. The AA-T therefore necessarily requires the completion of a general education sequence of courses, as well as specific preparation for upper-division business administration coursework.

Business Office technology

The technical devices and tools used by various organizations for everyday tasks, such as managing clients, fulfilling orders, maintaining payroll information, analyzing sales records and conducting communications are at the heart of Business Office Technology. Most technically-oriented careers require some level of undergraduate education, such as a bachelor's degree in computer science. Individuals working in entry-level business office technology positions might learn skills through on-the-job training or earn an associate's degree or certificate in administrative assisting or business technology.

Economics

The Associate in Arts in Economics for Transfer Degree (A.A.-T) has been established to assist students in seamlessly transferring from Gavilan College to a California State University (CSU), with the objective of pursuing a baccalaureate degree in economics. The A.A.-T therefore necessarily requires the completion of a general education sequence of courses, as well as specific preparation for upper division economics coursework.

Management

The WAFC-endorsed Retail Management Certificate at Gavilan College is a comprehensive, academic, for-credit college program designed to prepare current and future employees for the fast-paced changes encountered in the retail industry. This broad program is appropriate for retail, wholesale, suppliers, etc. The Retail Management Certificate coursework incorporates both educational knowledge and technical skills, such as management styles, people skills, merchandising philosophies, and technology.

Marketing

After all the hard work is done (idea development, manufacturing, management setup), it’s time to convince the marketplace that they want what you have to offer. Gavilan’s Marketing program is focused on the retail marketing experience. How to build a program to succeed in the marketplace.

3. Technology Programs

- Computer Science and Information Systems (CSIS)
- Digital Media (DM)

Computer Science and Information Systems (CSIS)

Computer Science focuses on technical and theoretical programs. A degree in computer science provides students with knowledge of computer operating systems, coding, computer networking, computer architecture, and database design. Computer science has roots in math, physics, and electrical engineering.

With a Computer Information Systems Degree, students focus on how to apply technology to business. Computer information systems takes technology and places it in a commercial setting. In addition to learning how technology works, students learn how to use the technology to benefit a company.

Digital Media

Digital Media is the use of computer technology in communication: to create, manipulate, and combine different media whether it be text (words, equations), graphics (photography, art and design images, charts and graphs, animation), audio (spoken words, music, sound effects) and video (motion picture/film, animation, visual effects) sometimes with links (connections) that let the user navigate, interact, create, and communicate.

Gavilan College has developed this Digital Media program complete with state of the art technology and studio to provide students with the opportunity to acquire or enhance job skills in this contemporary art, satisfy major requirements for transferring to a college or university, or for personal enrichment in an exciting technology-based field that is changing our lives on a daily basis.

4. Growth/Development programs

- Hospitality Management (HTM)
- Real Estate (RE)

Hospitality and Tour Management

The travel & tourism industry makes up 9.8 % of global GDP, and it's still growing. Responsible for one out of every eleven jobs worldwide, the industry is the world's largest employer according to the World Tourism Organization UNWTO. Every day, a new idea is hatched, big investment firms sign off on the designs of a five-star luxury resort or some mom and pop diner opens its doors. Having doubled in numbers over the past twenty years, the tourist population is set to expand two-fold yet again over the next twenty. The increasing numbers are only a reflection of a budding middle class. Lightly staffed, the current program is in development and evaluation.

Real Estate

On the surface, a career in Real Estate calls out to most people as a great way to make a lot of money quickly, particularly in the Silicon Valley Area. The reality is, however, that there's a LOT of hard work and education goes into a successful career path. Gavilan's program is targeted at the novice as well as the more experienced individual. Business management, organizational methods, financing, marketing, and a wide range of other business-oriented skills are highlighted in the RE program.

II. PROGRAM PROGRESS

A. Goals and Strategies

Adjudication programs

- Hire a full-time instructor with expertise in correctional administration

Strategy #1

Submission of budget for full-time hire as part of full-time hiring plan

Strategy #2

Collaborate with MIS and Research group to track cohorts of students in the program. Identify ways to improve the student success rate as measure by students who finish their degree or certificate within 2 or 6 years

Business-related programs

- Optimize Enrollment, Course offerings and services to reflect community needs and growth
- Improve student services and enhance curriculum and programs in order to help students meet their educational, career and personal goals
- Increase the student success rate and/or who can transfer within two years

Strategy #1

Increase program offerings as student need dictates

Strategy #2

Collaborate with MIS and Research group to track cohorts of students in the program. Identify ways to improve the student success rate as measure by students who finish their degree or certificate within 2 or 6 years

Strategy #3

Continue to advocate for an Occupational Career Program Counselor

Technical programs

- Optimize Enrollment, Course offerings and services to reflect community needs and growth
- Improve student services and enhance curriculum and programs in order to help students meet their educational, career and personal goals
- Increase the student success rate and/or who can transfer within two years
- Stay current with current technical requirements
- Grow the Game Development effort
- Improve

Strategy #1

Increase collaboration with CSUMB, San Jose State, and others to improve the articulation and AA-T degree content

Strategy #2

Increase program offerings as student need dictates

Strategy #3

Advocate for additional funding for lab assistant after Title V monies are gone

B. Results

Administration of Justice

- Full-time instructor hired
- Distance Education course development has been completed, with target student audience identified as shift workers, typically unable to attend classes during normal day classes
- Coyote campus opened with classes scheduled. Initial response limited. Further marketing of courses and campus needed.
- AS-T degree established

Business-Related programs

- Full-time Occupational Career program counselor hired and on-board
- Distance Education has been incorporated into ¾ of all business courses.

Technical Programs

- Additional components of the Introductory classes is completed
- Additional DM/CSIS collaboration underway, with a Game Course program component. This could appeal directly to many High School entry students.
- Hybrid On-line/face-to-face classes completed in all courses.
- Conversion to iLearn programs is complete with a video support model in place for 60% of courses. The vast majority of staff is in favor of the Distance Education program as once a course has been developed (and that's the steep portion of the curve), multiple sections can be offered in a remote environment without a scheduling conflict.
- Additional DM/CSIS collaboration underway, with a Game Course program component. This could appeal directly to many High School entry students.
- Hybrid On-line/face-to-face classes completed in all courses.
- Several game jam programs and cyber programs implemented in 2016/2017 in conjunction with CSUMB
- No additional monies found for lab assistant-position eliminated. Lab time for DM lab now on shared basis with part-time instructors.

C. Integrity Methods

Yearly review of selected courses; evaluation by department staff on scheduled basis.

Advisory council targeted, scheduled for early May, 2018. Includes educators (High School collaboration, secondary schools – CSUMB, San Jose State, and Cogswell), local and remote business leaders.

D. Course evaluation and modification methods

- Departmental review through yearly 4-year cycle programs
- DM technology is in a constant state rapid advancement requiring constant attention to change

- CSIS, BUS, BOT, and AJ technology advancements are slower to react.
- Course content is reviewed by the 3 Part-Time instructors for updating and modification.
- Course curriculums have been written with generic descriptions of learning skills rather than specific software application content. This allows some flexibility in terms of course content without major changes to the outlines.

E. Staff Development

Gavilan Learning Development, Outsourced instruction (World of Work), several conferences.

F. Articulation

Yes. SB 1440 standardization has driven a rewriting of common major course descriptions, making it easier for the articulation process to be successful.

The last four years (under a Title V grant) has resulted in the Gavilan DM program being articulated with CSUMB through their Graphic Arts and Programming Degree program. To date, six courses have been articulated, for a total of 23 transferrable units.

- Introduction to Digital Graphics Design
- Computing for Digital Artists
- Media Tools
- Scripting for Multimedia
- Problem Solving and Programming
- Web Tools

Additional articulation agreements with San Jose State, CSU Chico, and Cogswell College are in place. Additionally, Introduction to Video is now articulated with two high schools.

One serious challenge: Digital Media got its start in the community colleges and then migrated to the CSU system and high schools. During the phenomenal growth of the discipline, everyone wanted to teach every class. The high schools and ROP have developed a curriculum nearly matching the community colleges. The state universities did the same, but added more advanced upper division course work, which they want to protect. The high schools want Gavilan to offer more advanced subjects, but the state universities and UC system think these are upper division and will not articulate. They will, however, give course credit on an individual basis after the student is admitted. In other words, Gavilan is stuck in the middle of this system. Whether or not Gavilan's advanced Digital Media courses articulate, Gavilan needs to offer them for its degrees, certificates, and community/campus needs.

Business has been articulated with the above colleges as well, and transfer is now effected with a BUS AA-T degree.

G. Local, State and Federal Requirements

N/A

H. Community Data Collection

Outreach meetings at Local High schools, providing information to their students and staff. Meetings with High School instructors are being held to determine the follow-on requirements for their programs. As mentioned above in the articulation section, there are challenges with the High Schools, particularly in situations where the HS has developed an advanced DM program. Some of their students are reporting that Gavilan classes are “too easy”. While the frequency is still low, HS instructors are concerned and they are pressing for Gavilan’s development of higher level classes.

I. Equity Report Analysis

a. CTE is primarily focused on Hispanic educational throughput. Please refer to the Business Department overall report attached for specific data detail
b. Remaining Gaps
c. Under the auspices of the most recent Title V grant engaged within the DM program, one of the major goals was to increase the number of Hispanic students graduating from the program which was successful, increasing throughput by 8-12%

III. Program Data

A. Basic Description of Program

1. Enrollment and FTE's

i. Enrollment by top code and course over time (4 years)

CENSUS ENROLLMENT BY PROGRAM

		2012-13	2013-14	2014-15	2015-16	2016-17	% Contr	5-yr %	3-yr %
	BUS DEPT	4,769	4,153	4,087	4,339	5,087		6.7%	24.5%
ADJ	**AJ**	891	856	884	839	895	17.6%	0.4%	16.8%
	Totals	891	856	884	839	895	17.6%	0.4%	16.8%
BUS	**ACTG**	446	413	395	384	496	9.8%	11.2%	25.6%
	BOT	229	200	166	148	139	2.7%	-39.3%	-16.3%
	BUS	277	263	280	332	490	9.6%	76.9%	75.0%
	ECON	449	377	388	495	593	11.7%	32.1%	52.8%
	MGMT	30	0	19	26	77	1.5%	156.7%	305.3%
	MKTG	18	4	0	26	17	0.3%	-5.6%	-34.6%
	Totals	1449	1257	1248	1411	1812	35.6%	25.1%	28.4%
TECH	**CSIS**	2,170	1,818	1,744	1,899	2,092	41.1%	-3.6%	20.0%
	DM	196	173	181	177	237	4.7%	20.9%	30.9%
	Totals	2,366	1,991	1,925	2,076	2,329	45.8%	-1.6%	21.0%
GRO	**RE**				13	51	1.0%	N/A	292.3%
	HTM	0	0	0	0	0	0.0%	0	0
	Totals	0	0	0	13	51	1.0%	N/A	292.3%
	GAVILAN	48,158	46,379	48,289	53,256	54,124		12.4%	12.1%

The %Contr column in Chart 3-1 shows the Census Enrollment contribution for each program. Not surprisingly, the CSIS program contributes more than 40% of the enrollment numbers for the Business Department. The good news is that this program is borne out in terms of job number justification

The 5-year % represents a modest 6.7% overall department growth but the more realistic 3-year % is at 24.5% over double the growth of Gavilan.

ENROLLMENT DISTRIBUTION BY PROGRAM BY GENDER
CHART 3-2

	2012-13		2013-14		2014-15		2015-16		2016-17		2012-17	
DEPT	**Enr**	**%**	**Enr**	**%**	**Enr**	**%**	**Enr**	**%**	**Enr**	**%**	**%Inc**	**% Mix**
Female	**2,485**	**52%**	**2,010**	**48%**	**1,940**	**47%**	**1,943**	**45%**	**2,347**	**46%**	**-6%**	**-6%**
Male	**2,222**	**47%**	**2,122**	**51%**	**2,111**	**52%**	**2,360**	**54%**	**2,697**	**53%**	**21%**	**6%**
	4,707		***4,132***		***4,051***		***4,303***		***5,044***			
AJ												
Female	**384**	**43%**	**318**	**37%**	**362**	**41%**	**330**	**39%**	**436**	**49%**	**14%**	**5%**
Male	**496**	**56%**	**535**	**63%**	**514**	**58%**	**506**	**60%**	**454**	**51%**	**-8%**	**-5%**
	880		***853***		***876***		***836***		***890***			
BOT												
Female	**203**	**89%**	**176**	**88%**	**142**	**86%**	**125**	**84%**	**121**	**87%**	**-40%**	**-2%**
Male	**24**	**10%**	**24**	**12%**	**22**	**13%**	**21**	**14%**	**17**	**12%**	**-29%**	**2%**
	227		***200***		***164***		***146***		***138***			
BUS												
Female	**127**	**46%**	**119**	**45%**	**130**	**46%**	**148**	**45%**	**223**	**46%**	**76%**	**-1%**
Male	**145**	**52%**	**141**	**54%**	**148**	**53%**	**181**	**55%**	**264**	**54%**	**82%**	**1%**
	272		***260***		***278***		***329***		***487***			
CSIS												
Female	**1,193**	**55%**	**902**	**50%**	**818**	**47%**	**805**	**42%**	**908**	**43%**	**-24%**	**-12%**
Male	**952**	**44%**	**908**	**50%**	**908**	**52%**	**1,078**	**57%**	**1,158**	**55%**	**22%**	**12%**
	2,145		***1,810***		***1,726***		***1,883***		***2,066***			
DM												
Female	**78**	**40%**	**77**	**45%**	**72**	**40%**	**53**	**30%**	**72**	**30%**	**-8%**	**-10%**
Male	**115**	**59%**	**96**	**55%**	**108**	**60%**	**123**	**69%**	**163**	**69%**	**42%**	**10%**
	193		***173***		***180***		***176***		***235***			

The more interesting information comes from the enrollment gender distribution analysis show in Chart 3-2. The Business Department shows an overall increase in enrollments from 2012-13 through 2016-17, however there has been a noticeable shift in male/female distribution. The CSIS and DM programs show a significant male shift which is surprising given the focus on STEM for women in education. The AJ program bucks this trend, having shown a significant increase in female enrollment, resulting in a nearly balanced distribution.

ii. FTES by top code over time (4 years)

FTE's BY PROGRAM

		2012-13	2013-14	2014-15	2015-16	2016-17	% Contr	5-yr %	3-yr %
	BUS DEPT	453	452	492	444	597		31.6%	21.1%
ADJ	**AJ**	142.5	168.9	196.1	131.5	221.5	37.1%	55.4%	16.8%
	Totals	142.5	168.9	196.1	131.5	221.5	37.1%	55.4%	16.8%
BUS	**ACTG**	41.6	48	47.9	46.7	59.8	10.0%	43.8%	24.8%
	BOT	6.5	2.9	12.8	10.7	10	1.7%	53.8%	-21.9%
	BUS	28.7	27.6	28.7	33.3	50.9	8.5%	77.4%	77.4%
	ECON	45.6	38.3	38.9	48.1	55.5	9.3%	21.7%	42.7%
	MGMT	3.1	0	2	2.4	6.8	1.1%	119.4%	240.0%
	MKTG	1.9	0.2	0	2.5	1.7	0.3%	-10.5%	-32.0%
	Totals	127.4	117	130.3	143.7	184.7	30.9%	45.0%	28.5%
TECH	**CSIS**	153	141	143	151	164	27.4%	7.1%	14.3%
	DM	22.7	19.2	20	16.8	21.8	3.7%	-4.0%	9.0%
	Totals	176	160	163	168	186	31.1%	5.7%	13.7%
GRO	**RE**				1.4	4.8	0.8%	N/A	242.9%
	HTM	0	0	0	0	0	0.0%	0	0
	Totals	0	0	0	1.4	4.8	0.8%	N/A	242.9%
	GAVILAN	5,358	5,126	5,140	5,161	5,443		1.6%	5.9%

The three groups in the Business Department are nearly evenly split in terms of %Contribution to the overall FTE's.

The downturn in BOT and MKTG FTE's for the 3-yr analysis needs further scrutiny as neither make a great deal of sense in terms of market demand, except that Medical records is a declining industry. The 5-year to 3-year BUS Area growth has dropped as a result. Tech shows a significant turn around from 5year to 3year growth.

iii. Current Enrollment by term last available census

Current Enrollment Chart 3-4

Fall 2017

AJ	BOT	BUS	CSIS	DM	TOTAL
341	42	218	801	108	1,510

2. Student Outcomes

i. Stuccess rate by top code and course and year (4 years)

Course Success Rates by Unit
Chart 3-4

	2012-13		2013-14		2014-15		2015-16		2016-17		
BUS. DPT.	**Gd**	**%**	**Gd**	**%**	**Gd**	**%**	**Gd**	**%**	**Gd**	**%**	**%Inc**
Succ	**3,327**	**70%**	**2,997**	**72%**	**2,872**	**70%**	**2,983**	**69%**	**3,586**	**71%**	**1%**
N-Succ	**720**	**15%**	**560**	**13%**	**591**	**14%**	**725**	**17%**	**753**	**15%**	**0%**
WD	**705**	**15%**	**593**	**14%**	**624**	**15%**	**589**	**14%**	**710**	**14%**	**-1%**
Total	**4,752**	**100%**	**4,150**	**100%**	**4,087**	**100%**	**4,297**	**100%**	**5,049**	**100%**	**0%**
AJ											
Succ	**3,327**	**70%**	**2,997**	**72%**	**2,872**	**70%**	**2,983**	**69%**	**3,586**	**71%**	**1%**
N-Succ	**720**	**15%**	**560**	**13%**	**591**	**14%**	**725**	**17%**	**753**	**15%**	**0%**
WD	**705**	**15%**	**593**	**14%**	**624**	**15%**	**589**	**14%**	**710**	**14%**	**-1%**
BOT											
Succ	**160**	**72%**	**170**	**85%**	**142**	**86%**	**120**	**81%**	**125**	**90%**	**18%**
N-Succ	**16**	**7%**	**7**	**4%**	**8**	**5%**	**13**	**9%**	**5**	**4%**	**-3%**
WD	**45**	**20%**	**23**	**12%**	**16**	**10%**	**15**	**10%**	**9**	**6%**	**-14%**
BUS											
Succ	**181**	**65%**	**153**	**58%**	**167**	**60%**	**212**	**64%**	**345**	**70%**	**5%**
N-Succ	**60**	**22%**	**71**	**27%**	**77**	**28%**	**88**	**27%**	**92**	**19%**	**-3%**
WD	**36**	**13%**	**39**	**15%**	**36**	**13%**	**32**	**10%**	**53**	**11%**	**-2%**
CSIS											
Succ	**1,561**	**72%**	**1,386**	**76%**	**1,253**	**72%**	**1,302**	**70%**	**1,550**	**75%**	**3%**
N-Succ	**211**	**10%**	**164**	**9%**	**181**	**10%**	**259**	**14%**	**203**	**10%**	**0%**
WD	**392**	**18%**	**265**	**15%**	**310**	**18%**	**300**	**16%**	**315**	**15%**	**-3%**
DM											
Succ	**137**	**70%**	**118**	**68%**	**123**	**68%**	**121**	**68%**	**172**	**73%**	**3%**
N-Succ	**24**	**12%**	**29**	**17%**	**24**	**13%**	**34**	**19%**	**36**	**15%**	**3%**
WD	**34**	**17%**	**26**	**15%**	**34**	**19%**	**22**	**12%**	**28**	**12%**	**-5%**

Success, non-Success, and Withdrawal rates are statistically flat at the department and AJ levels. Significantly improved rates are noted for BOT, and notable for BUS, CSIS, and DM. Because of the BOT changes for the better, additional study will be prioritized to understand if there is a best practices approach that can be used across the other programs. Additional drill down will be reviewed for each of the different programs to determine gender, age and ethnicity detail.

ii. Retention rate by top code and course and year (4 years)

Business Department

2012 Fall	2013 Fall	2014 Fall	2015 Fall	2016 Fall
48%	50%	52%	45%	0%

iii. Number of majors by year (4 year)

Business Department

2012 Fall	2013 Fall	2014 Fall	2015 Fall	2016 Fall
845	**843**	**901**	**929**	**946**

iV. Number of degrees and certificates by top code and year (4 years)

Certificates awarded Chart 3-5A

Admin of Justice: Academy CA	Cert					9	
Administration of Justice CA	Cert	14	5	5	15	5	
Administration of Justice	Cert	14	5	5	15	14	
Business, General CA	Cert	2	2		2	4	
Business: Accounting CA	Cert	1	3	4	2	1	
Business: Economics CA	Cert	2	1	2	1	2	
Business: Genl Office Skill CA	Cert		2	2	3	2	
Business: Medical Office CA	Cert	1	3	5	2	2	
Business	Cert	*6*	*11*	*13*	*10*	*11*	
CSIS: Business Computer App CA	Cert	4	3	1	1		
CSIS: Computer Networking CA	Cert	2	2	3		2	
CSIS: Computer Programming CA	Cert	2	2	1	4	3	
CSIS: Program for Internet CA	Cert	1					
CSIS: UNIX CA	Cert		1	1			
CSIS	Cert	*9*	*8*	*6*	*5*	*5*	
DM: Digital Art Imaging CA	Cert	2	1	1			
DM: Digital Audio Video CA	Cert					1	
DM	Cert	*2*	*1*	*1*	*0*	*1*	**TOT**
Department Certificates	**Tot**	**31**	**25**	**25**	**30**	**31**	**142**

Degrees Awarded Chart 3-5B

Admin of Justice: Academy AA	Deg		2		1	1	
Administration of Justice AA	Deg	26	16	11	18	8	
Administration of Justice AS-T	Deg	6	30	31	28	41	
Adminstration of Justice	Deg	32	48	42	47	50	
Business Administration AS-T	Deg					37	
Business, General AA	Deg	27	41	46	31	22	
Business: Accounting AA	Deg	7	8	11	12	5	
Business: Bus Comp Appl AS	Deg		1				
Business: Economics AS	Deg	2	2	1	1	2	
Business: Genl Business AA	Deg			6			
Business: Genl Office Skill AA	Deg	1	2	1	2	1	
Business: Medical Office AA	Deg	5	2	3	3	5	
Business	Deg	*42*	*56*	*68*	*49*	*72*	
CSIS: Business Computer App AS	Deg	1	3	1	1	1	
CSIS: Computer Networking AS	Deg	5	2	3	2	6	
CSIS: Computer Programming AS	Deg	3	6	9	7	5	
CSIS: Program for Internet AS	Deg					1	
CSIS: Scientific Program AS	Deg				1	1	
CSIS: UNIX AS	Deg				1		
CSIS	Deg	*9*	*11*	*13*	*12*	*14*	
DM: Digital Art Imaging AA	Deg	3	1	7	4	2	
DM: Digital Audio Video AA	Deg	3	1		2		
DM: Interactive Media Auth AA	Deg	1				1	
DM	Deg	*7*	*2*	*7*	*6*	*3*	
Economics AA-T	Deg					2	
Economics	Deg					*2*	**TOT**
Department Degrees	***Tot***	***90***	***117***	***130***	***114***	***141***	**592**
Total Degrees/Certificates	**Tot**	**121**	**142**	**155**	**144**	**172**	**734**

Items highlighted in yellow indicate an underachievement (degree/certificate offered, not awarded) – Note that black areas indicate when degrees/certificates were not yet offered.

A comprehensive evaluation of all of the Business Department Degrees and Certificates is currently on-going to establish their level of utilization and value, and to determine if consolidation or elimination is possible. Degrees/Certificates highlighted in RED are under scrutiny.

Class cancellation:
Class cancellation due to under-enrollment has been an issue for Digital Media and Business and this leaves students enrolled in one or more program courses in a bind. Namely they cannot

graduate without petitioning for substitution course materials. It may be possible to combine some certificates which could stimulate enrollment, and more fully meet the needs of the program. In Digital Media, for example, Degrees have been significantly reduced.

3. STAFFING DATA

BUSINESS DEPARMENT PROGRAM STAFFING
(Chart 3-6)

Headcount by Program

	AJ	ACCT	BOT	BUS	ECON	MGMT	MKTG	CSIS	DM	HTM	RE	Total
Full-Time	1	1	1	1				2				6
Part-Time	4	2		3	1	1	1	9	3	0	1	25
Tech Spec								1				1
Total	5	3	1	4	1	1	1	12	3	0	1	32

Total staffing headcount for CTE is 86 (FT, PT, TS); Business Department represents 38% of CTE Faculty Headcount.

ii. Faculty Productivity

Note: this data makes no sense at all, but I was not able to find the info on GavData when I looked for it.

Faculty Productivity (WSCH / FTEF)
Chart 3-7

	2012 Fall	2013 Fall	2014 Fall	2015 Fall	2016 Fall	2017 Fall
BUS DEPT	**285**	**192**	**271**	**270**	**260**	**-8.60%**
AJ	**808**	**411**	**654**	**857**	**697**	**-13.70%**
BOT	**85**	**32**	**150**	**237**	**124**	**45.70%**
BUS	**431**	**234**	**322**	**439**	**331**	**-23.00%**
CSIS	**180**	**133**	**156**	**155**	**146**	**-18.90%**
DM	**324**	**101**	**195**	**197**	**129**	**-60.20%**

iii. Current ethnic and gender distribution of faculty

BUSINESS DEPARTMENT

Adjudication: 5 Males (3 Hispanic, 2 White)

Business-related: 5 Males (4 White, 1 Hispanic); 3 Females (2 White, 1 Hispanic)

Technical: 8 Males (5 White, 3 Hispanic); 7 Females (7 White)

Growth 1 Male (1 White)

iv. Contract overload by year (past 4 years)

This is being reviewed currently, as new rules have been put in place.

v. Program Release Time (past 4 years)

Being reviewed.

vi. Classified Staff who contribute to the instructional program, e.g., Instructional Assistant, lab supervisor (past 4 years)

- The DM department was fortunate to have a lab assistant, funded through a Title V grant. The money from this grant has now run out, the lab assistant has moved on, and the part-time instructors are supporting the lab on an as-needed basis. Instructors are supporting lab hours for non-enrolled students during regular class lecture hours.
- CSIS has one Tech Specialist supporting lab activity.

vii. Student Assistants (tutors, Cal/WORKs, Work Study, etc.) (past 4 years)

B. The mix of PT to FT instructors in the Business Department remains at 6/25. Digital Media has no FT Faculty. Economically, the ratio APPEARS favorable with overall lower costs to support a program. Despite the perceived economic benefit however, there are several disadvantages:

- Difficult to find and hire the right instructor at any given time
- Long-term program goals go unsupported due to the lack of continuing faculty involvement.
- Net value of the program suffers due to lack of upgrade change management.

C. The Business and Digital Media programs each had budgets of $5,000 for the past 4 years, primarily covering office support items, such as printing supplies (ink, etc).

D. Budget allocations have not changed significantly over the past 4 years.

E. While the Title V asynchronous income in 2014/2015 was not technically a “Budget” increase, it has had a significant impact on the total upgrading of the DM lab (Library 128). 24 High-end Macintosh workstations were purchased and put in place, in addition to 2 3D printers (now in operation/usage). Software licensing was purchased and installed on all of the computers, providing the very latest in technology for students in all of the DM classes. These computers are likely to remain “current” for at least 3-5 years.

IV. Trends Affecting your Program (Data-Driven)

A. Briefly describe your program’s strengths and challenges (utilize data to support your contentions).

The Business Department covers a diverse field of both business and technology, in addition. Market demand for Computer Software development has shifted from

convention software programming to game development, cyber security, and other non-traditional areas. With the expansion in web-based programming, Digital Media has expanded into an ever-widening market of graphics, web development, animation, etc. Business related technology has moved from the desktop to the Cloud, with larger web-based application familiarity required.

Because High Schools want to "teach it all" and have gone out of their way to improve their digital media and computer programming programs, Gavilan (as is the case with many CC's) is caught in between the upward pressure of High School, and the downward pressure of 4-year colleges who insist on protecting their programs. This is making it more difficult to remain relevant to the student at the Gavilan College level (from a technology standpoint).

Jobs Marketplace:

Attached is a 2014-2024 Jobs forecast report.

- Employment in business and financial operations occupations is projected to grow 8.4 percent from 2014 to 2024, as fast as the average for all occupations, adding 632,400 new jobs. Accountants and auditors are projected to add the most new jobs (142,400) of all the business and financial operations occupations.

- Computer Programming skills are continuing to remain in high demand. Recent anecdotal commentary by Technology Leaders indicate that there is currently a shortage of nearly 500,000 programmers and that there will be a shortage of 2,000,000 by 2020. For some odd reason, this data is contradicted by the bureau of labor statistics claiming that only 250,000 new jobs will be created in programming over the next 10 years. Somebody is very wrong.

- The good news is that AA and BS degree-related jobs are increasing significantly. That puts the Gavilan student in good stead, at least technically-speaking.

B. Program Plan Summary

Each technical program (CSIS, BOT, DM) is/will be facing equipment obsolescence issues over the next 2-4 years

V. Program/Student Learning Outcomes

A. SLO's for the Business Department Programs are currently under review and updating

B. PLO's are currently under review.

Program/Student Learning Outcomes	Assessment / Measurement	Result	Use of Results

C. What percentage of course-level student outcomes has your program assessed?

Within the Business department, approximately 35 classes were due for review and updating. Student Learning Outcomes for those classes have been rewritten to improve the content, and reduce complexity. This represents approximately 20-25% of course updates.

VI. Program Plan/Budget Requests

A. List goals and objectives for the next three to five years that will address the needs and trends identified above and in your course and program level SLO assessment results.
AJ: Marketing program to ensure full utilization of Coyote facilities
BOT: Upgrade of lab equipment
BUS: Symposium attendance
CSIS: Upgrade of lab equipment; incremental breadth in courses
DM: Additional course development to include game design/other technologies

B. Provide your current Program Plan (required) that should include these goals and objectives.

Program Plans are attached

VII. Self Study Summary

Use data provided in this report as well as previous program plans to complete the Self Study Summary. Please provide a narrative summary, which should include an overall description of the program, a summary of the program's progress, a summary of and trends facing the program, and the program's plans for the future (2 page limit).

PROGRAM OVERVIEW:

General:

As shown in the outline above, the Business Department includes a very broad student need in the business landscape. Five of these programs (Administrative Justice, Business Office Technology, Business, Computer Science and Information Systems and Digital Media) are currently under review and included in this Self Study. The Computer Graphics Program (previously evaluated in the 2012 IEC) is NOT included in the analysis, as it has been merged into the DM program as of 2015. Both Business Department Co-chair positions were replaced with new individuals in the Fall of 2017.

The **Administration of Justice Program** provides a course of study to prepare students for employment in private security and public law enforcement agencies, including: state parks, municipal police, game wardens, probation officers, county deputy sheriffs, county and state correctional officers and the federal government.

Business Office technology refers to the technical devices and tools used by various organizations for everyday tasks, such as managing clients, fulfilling orders, maintaining payroll information, analyzing sales records and conducting communications.

Business administration is a wide field that incorporates many types of management positions. From major corporations to independent businesses, every operation needs skilled administrators in order to succeed. Motivated, organized personalities will thrive in **business**, where environments are often high-powered. The Associate in Science in Business Administration for Transfer Degree (AA-T) is designed to prepare students for a seamless transfer into the CSU system to complete a baccalaureate degree in Business Administration. The AA-T therefore necessarily requires the completion of a general education sequence of courses, as well as specific preparation for upper-division business administration coursework.

Computer Science focuses on technical and theoretical programs. A degree in computer science provides students with knowledge of computer operating systems, coding, computer networking, computer architecture, and database design. Computer science has roots in math, physics, and electrical engineering.

With a **Computer Information Systems Degree**, students focus on how to apply technology to business. Computer information systems takes technology and places it in a commercial setting. In addition to learning how technology works, students learn how to use the technology to benefit a company.

Digital Media is the use of computer technology in communication: to create, manipulate, and combine different media whether it be text (words, equations), graphics (photography, art and design images, charts and graphs, animation), audio (spoken words, music, sound effects) and video (motion picture/film, animation, visual effects) sometimes with links (connections) that let the user navigate, interact, create, and communicate.

Accomplishments
Overall, the Business Department enrollment numbers represent approximately 50% of the Career Technical Education enrollments. Business enrollments are are up by 14% over the past 3-5 years.

- A new AA-T degree has been articulated and is in place for Business
- The Digital Media lab was completely upgraded through a Title V grant
- A full-time instructor was added to the AJ department
- DM program articulation with CSUMB was completed

Program Impact
The notable contribution to the overall student learning outcomes can be seen with the awarding of certificates and degrees

From 2011-12 through 2015-16, 89 certificates were awarded, and 373 Degrees were awarded. While the certificate award trend is measurably flat, there has been a marked increase in the number of degrees award (20% increase in the past two years).

Significantly, as shown below success rates are improved in the BOT department:

	2012-13		2013-14		2014-15		2015-16		2016-17		
BOT											
Succ	**160**	**72%**	**170**	**85%**	**142**	**86%**	**120**	**81%**	**125**	**90%**	**18%**
N-Succ	**16**	**7%**	**7**	**4%**	**8**	**5%**	**13**	**9%**	**5**	**4%**	**-3%**
WD	**45**	**20%**	**23**	**12%**	**16**	**10%**	**15**	**10%**	**9**	**6%**	**-14%**

Resource and Staffing Changes
AJ: Addition of a full-time instructor
CSIS: FT instructor
DM: Loss of FT instructor

Staffing continues upward trend in the hiring of Part-Time faculty.

Trends affecting the Business programs
The Business Department covers a diverse field of both business and technology, in addition. Market demand for Computer Software development has shifted from convention software programming to game development, cyber security, and other non-traditional areas. With the expansion in web-based programming, Digital Media has expanded into an ever-widening market of graphics, web development, animation, etc. Business related technology has moved from the desktop to the Cloud, with larger web-based application familiarity required.

Goals and Objectives

Short term

- Increase visibility of the AJ program at the Coyote campus
- Increase the enrollments for all departments
- Continue to review, revise and approve courses through the Curriculum program

Longer term

- Increase the use of distance education in all appropriate programs
- Work with the local community High Schools and associate colleges to ensure that all Business related programs are meeting the needs of the community and providing a clear path for success.
- Investigate and develop a game development program element combining CSIS and DM program content
- Utilizing the skills of a newly added full-time CTE counselor, develop and distribute an awareness program which will highlight every student in every program, with a clear understanding of where they are on the path to a degree or certificate.