A.A. in Computer Information Systems
Program Review Summary Template
3.7 Academic Program Review

Based on the thorough internal or external program review addressing all criteria in policy, a comprehensive report should be possible within ten or fewer pages. This program review template is provided to assist institutions in compiling the program review information, which is to be presented to the institutional governing board prior to submission to the State Regents. Executive Summaries should be possible within two pages using the provided template (Program Review Executive Summary Template).

Description of the program's connection to the institutional mission and goals:

Our mission at Carl Albert State College is "To provide affordable, accessible and exceptional education that fosters student success."

The Computer Information Systems at CASC provides pathways to provide affordable, accessible, and exceptional education. The CIS program has no authority to set the cost of the programs but our tuition is the lowest in the state and compared to our closest institutions can be considered affordable. We provide accessible education opportunities through scheduling flexibility including mornings, afternoons, evenings, online, hybrid coursework and continuing education. Faculty provide an exceptional education experience based on students surveys, departmental questionnaires, faculty evaluations. Computer Information Systems Faculty are committed to providing opportunities for success to each and every one of our customers and are excellent at finding strategies to work with each student's particular learning styles.

3.7.5 Process (Internal/External Review):
Previous Reviews and Actions from those reviews:

Analysis and Assessment (including quantitative and qualitative measures) noting key findings from internal or external reviews and including developments since the last review:

The Higher Learning Commission evaluation was completed in February of 2013. We had previously self-identified Analysis and Assessment as one area that needed organization and improvement. Recognizing this weakness in 2012, Carl Albert State College acquired a license for use of WEAVE online software, an online tool used by faculty to organize course outcomes and objectives, assessment strategies, and measurements.

WEAVE online training was launched in August of 2012, and faculty members worked together to create outcomes and objectives for all courses. Individual faculty members then worked to input measurement strategies for individual course sections. At the end of the semester, faculty entered measurement data to assess course outcomes. The Office of Academic Affairs generated a real-time audit report for faculty and division chair review.

CASC employees are in the learning stages of implementation of the software, but the benefits of the software are already evident as faculty are able to observe, compare, and improve outcomes and measurements.

With the arrival of our new Vice President of Academic Affairs there has been a renewed

focus on organization of our Assessment Plan. The institution has made a commitment to this goal by adding an institutional effectiveness person along with a person dedicated to the operational workings of the WEAVE Program. This person also works closely with Faculty to provide leadership in this part of our operation.

A. Centrality of the Program to the Institution's Mission:

The Computer Information Systems Program prepares students to meet the challenges of a globally connected society. As an example all Computer Information Systems students are required to be successful in two programming courses. In addition to programming we provide pathways to networking, information security, digital forensics, and gaming/animation. Computer skills are integral for success in today's world. Computer skills also drive daily life across many spectrums. In addition part of our mission is also to provide the pathways to four year institutions. Carl Albert Computer Information Systems Faculty are active in the Regents course equivalency projects working with other institutions to facilitate seamless course transfer. This division also supports the institutions general education mission and prepares students for success in the computer proficiency requirement.

B. Vitality of the Program:

B.1.Program Objectives and Goals:

Program Goals

- Prepare students for employment
- Provide computer information systems training
- Provide individual instruction
- Enable students to develop the networking and human interaction skills necessary for success in the academic and real world sector
- Students will master computer and technology skills required in most technology areas and in all sectors of society
- Students will achieve employable skills and effective communication skills based on current state of practice requirements

With the arrival of our new Vice President of Academic Affairs there has been a renewed focus on organization of our Assessment Plan. The institution has made a commitment to this goal by adding an institutional effectiveness person along with a person dedicated to the operational workings of the WEAVE Program. This person also works closely with Faculty to provide leadership in this part of our operation.

B. Vitality of the Program:

B.1.Program Objectives and Goals:

Program Goals

- Prepare students for employment

- Provide computer technology education
- Provide individual instruction
- Enable students to develop the networking and human interaction skills necessary for success in the academic and business sector
- Students will master computer and technology skills required in most business areas and in all sectors of society
- Students will achieve employable skills and effective communication skills based on current business requirements

B.2 Quality Indicators (including Higher Learning Commission issues):

During the reporting period contained in this report the Carl Albert's State College Business Division was certified by Accreditation Council for Business Schools and Programs (ACBSP).This accreditation is nationally recognized and is in addition to our Higher Learning Commission Accreditation. Although computer information systems in not technically a business program we still fell under some of the reporting requirements due to the fact the CIS program is in the business division.

Program goals for the CIS program are clearly stated and are currently being tied to a refreshed set of student learning outcomes. As stated before, our institution has a renewed interest in assessment and this is evidenced by the addition of a full time assessment coordinator.

The computer information systems program supports an environment of effective teaching and values. Our general divisional operating practice requires a high level of customer service to our students in and out of the classroom Faculty support this philosophy of support to students and colleagues and this creates an environment of high values which leads to effective teaching.

There are many learning resources that are available to our students. These include individual tutoring by instructors during office hours and also a learning resource center is available for tutoring. Instructors have at their disposal a supporting structure that provides in-service training along with many opportunities for professorships. Along with these items support in the form of equipment and technology is also provided by grants and e and g funding.

Curricular evaluation comes from instructor knowledge base along with input from various professionals and employers. The Computer Information Systems program does not currently have a formal advisory board and according to the regents this is only required in an associate of applied science program. Nonetheless input from various professionals along with employers helps keep our curriculum at current state of practice.

Our programs are stakeholder driven and we strive to gather as much information from the area we serve to adjust programs to needs and expectations.

B.3. Minimum Productivity Indicators:

Time Frame (e.g.: 5 year span)	Head Count	Graduates
2009	60	12
2010	64	12
2011	66	8
2012	54	23
2013	43	5

B.4. Other Quantitative Measures:

a. Number of courses taught exclusively for the major program for each of the last five years and the size of classes:

CS 1103 Microcomputer Applications 3.00 Credits

This course is designed to give the student hands-on experience with word processing, electronic spreadsheets, presentation software, and data base management software. Exploration of the Internet and a brief overview of microcomputer concepts will be Windows based. This course can be used to satisfy a Computer proficiency requirement at some four-year institutions.

2009-10 788
2010-11 789
2011-12 876
2012-13 868
2013-14 880

CS 1113 Introduction to Computer Forensics 3.00 Credits

This course is designed as an overview of computer forensics and investigation tools and techniques. Topics will include crime and incident scene processing, data acquisition, computer forensics analysis, file recovery, investigative report writing, and evidence control. In addition students will be introduced to available computer forensics hardware and software tools. The basics of operating systems, file structure, and digital processes

will be covered during the basics phase of this course. Students will be required to submit to a background check.

2009-10 10
2010-11 10
2011-12 10
2012-13 10
2013-14 10

CS 1313 Programming I 3.00 Credits

This course is designed as a study of structured programming techniques utilizing the C language. The course provides an overview of classes, objects, encapsulation, and methods. The course will also include fundamental control structures, files, input and output, and end with the study of arrays and collections. Outside computer practice is required.

2009-10 26
2010-11 21
2011-12 29
2012-13 24
2013-14 20

CS 1333 Programming II 3.00 Credits

A continuation of CS 1313 a course in object oriented programming utilizing "C#" language. This course includes memory allocation, linked lists, stacks, queues, binary trees, polymorphism, inheritance, and encapsulation. This course also provides an overview of design processes used in object oriented programming as well as debugging and exception handling. Prerequisite: CS 1313.

2009-10 22
2010-11 24
2011-12 23
2012-13 22
2013-14 13

CS 1423 Information Security 3.00 Credits

This course provides an overview of the threats and vulnerabilities of information systems. The course also provides guidelines of the responsibilities of personnel and the basic tools for information security. An outline of training and expertise needed in organizations to reach and maintain a stat of acceptable security is covered and this course gives the basis for future information security courses. Prerequisites: CS 1103.

2009-10 16
2010-11 20
2011-12 19

2012-13 19
2013-14 12

CS 1433 Introduction to Photoshop 3.00 Credits
This course introduces student to concepts and features of Adobe Photoshop. Students will learn to edit existing images and create original graphics for print and web publications. Prerequisites: CS 1103.

2009-10 54
2010-11 29
2011-12 38
2012-13 25
2013-14 17

CS 1443 Animation and Interactive Media 3.00 Credits
This course is an applied course in computer-based interactive media and animation. The course will cover basic animation techniques including: image sequencing, tweened animation and dynamic motion. The course also encompasses action scripting, keyboard navigation, and interactive design for developing media user interfaces.

2009-10 22
2010-11 19
2011-12 16
2012-13 15
2013-14 7

CS 1463 Digital Photography 3.00 Credits
This course explores techniques and applications of acquiring, manipulating, and processing digitized photographic images. Technical skills for digital photography are covered including refinement of all image parameters, image capture processing using RAW, and workflow solutions to include output processing.
2009-10 12
2010-11 13
2011-12 11
2012-13 0
2013-14 0

CS 2003 Electronic Spreadsheets 3.00 Credits
This course is designed to provide students with hands-on experience in using electronic spreadsheets. The student is introduced to the spreadsheet access system, help facility, entering cell entries, cell ranges and blocks, entering formulas, using functions, importing/exporting files, MACROS, and other spreadsheet concepts. Outside computer practice is required. Prerequisite: CS 1103

2009-10	33
2010-11	33
2011-12	31
2012-13	30
2013-14	19

CS 2013 Data Base Management 3.00 Credits
This course is designed to provide students with hands-on experience in using data base management systems. The student is introduced to planning and creating a database, data structures, sorting and electing data, report generation, command structures, data management, and other database concepts. Outside computer practice is required. Prerequisites: CS 1103 or equivalent.

2009-10	17
2010-11	17
2011-12	22
2012-13	15
2013-14	11

CS 2203 Networking I 3.00 Credits
This course gives the student the fundamental knowledge needed to design, configure and implement a Local Area Network (LAN). An emphasis is placed on the integration of available software and hardware elements of various network architectures. Prerequisites: CS 1103.

2009-10	21
2010-11	32
2011-12	19
2012-13	18
2013-14	17

CS 2213 Networking II 3.00 Credits
This course is a continuation of CS2203 and will present practical applications of LAN software installation and network administration in a laboratory environment. Problem solving skills will be emphasized along with actual troubleshooting scenarios and students will be required to solve problems introduced on lab networks. Prerequisites: CS 2203.

2009-10	14
2010-11	19
2011-12	13
2012-13	10
2013-14	12

CS 2223 Desktop Publishing 3.00 Credits
This course is designed to introduce students to desktop publishing techniques and

software.
Prerequisite: CS 1103.

2009-10	14
2010-11	36
2011-12	16
2012-13	7
2013-14	7

CS 2243 Internet Programming 3.00 Credits

This 16 Week course is an introduction to the Internet and Web Page Development. Topics will include protocols, Internet applications, and html Web Page development. Client Side programing will also be covered using JavaScript. The course will be concluded with Cascading Style Sheets (CSS) as a method of web site content management. Prerequisite: Computer Science 1103.

2009-10	24
2010-11	20
2011-12	20
2012-13	14
2013-14	18

CS 2323 Web Design

This course is designed to give students knowledge and practical experience in website design tools and techniques. Students will be given hands-on experience with Dreamweaver, Photoshop, and Flash software. This course will give students an understanding of visual and conceptual website design techniques.
Pre requisite: CS 1103

2009-10	14
2010-11	16
2011-12	13
2012-13	13
2013-14	06

b. Student credit hours by level generated in all major courses that make up the degree program for five years:

CS 1103 Microcomputer Applications 3.00 Credits

2009-10 788 Credit Hours 2364
2010-11 789 Credit Hours 2367
2011-12 876 Credit Hours 2628
2012-13 868 Credit Hours 2604
2013-14 880 Credit Hours 2640

CS 1113 Introduction to Computer Forensics 3.00 Credits

2009-10 10 Credit Hours 30
2010-11 10 Credit Hours 30
2011-12 10 Credit Hours 30
2012-13 10 Credit Hours 30
2013-14 10 Credit Hours 30

CS 1313 Programming I 3.00 Credits

2009-10 26 Credit Hours 78
2010-11 21 Credit Hours 63
2011-12 29 Credit Hours 87
2012-13 24 Credit Hours 72
2013-14 20 Credit Hours 60

CS 1333 Programming II 3.00 Credits

2009-10 22 Credit Hours 66
2010-11 24 Credit Hours 72
2011-12 23 Credit Hours 69
2012-13 22 Credit Hours 66
2013-14 13 Credit Hours 39

CS 1423 Information Security 3.00 Credits
2009-10 16 Credit Hours 48
2010-11 20 Credit Hours 60

2011-12	19 Credit Hours 57	
2012-13	19 Credit Hours 57	
2013-14	12 Credit Hours 36	
CS 1433	Introduction to Photoshop	3.00 Credits
2009-10	54 Credit Hours 162	
2010-11	29 Credit Hours 87	
2011-12	38 Credit Hours 114	
2012-13	25 Credit Hours 75	
2013-14	17 Credit Hours 51	
CS 1443	Animation and Interactive Media	3.00 Credits
2009-10	22 Credit Hours 66	
2010-11	19 Credit Hours 57	
2011-12	16 Credit Hours 48	
2012-13	15 Credit Hours 45	
2013-14	7 Credit Hours 21	
CS 1463	Digital Photography	3.00 Credits
2009-10	12 Credit Hours 36	
2010-11	13 Credit Hours 39	
2011-12	11 Credit Hours 33	
2012-13	0 Credit Hours 0	
2013-14	0 Credit Hours 0	
CS 2003	Electronic Spreadsheets	3.00 Credits
2009-10	33 Credit Hours 99	
2010-11	33 Credit Hours 99	
2011-12	31 Credit Hours 93	
2012-13	30 Credit Hours 90	
2013-14	19 Credit Hours 57	
CS 2013	Data Base Management	3.00 Credits
2009-10	17 Credit Hours 51	
2010-11	17 Credit Hours 51	
2011-12	22 Credit Hours 66	
2012-13	15 Credit Hours 45	
2013-14	11 Credit Hours 33	

CS 2203	Networking I	3.00 Credits
2009-10	21 Credit Hours 63	
2010-11	32 Credit Hours 96	
2011-12	19 Credit Hours 57	
2012-13	18 Credit Hours 54	
2013-14	17 Credit Hours 51	
CS 2213	Networking II	3.00 Credits
2009-10	14 Credit Hours 42	
2010-11	19 Credit Hours 57	
2011-12	13 Credit Hours 39	
2012-13	10 Credit Hours 30	
2013-14	12 Credit Hours 36	
CS 2223	Desktop Publishing	3.00 Credits
2009-10	14 Credit Hours 42	
2010-11	36 Credit Hours 108	
2011-12	16 Credit Hours 48	
2012-13	7 Credit Hours 21	
2013-14	7 Credit Hours 21	
CS 2243	Internet Programming	3.00 Credits
2009-10	24 Credit Hours 72	
2010-11	20 Credit Hours 60	
2011-12	20 Credit Hours 60	
2012-13	14 Credit Hours 42	
2013-14	18 Credit Hours 54	
CS 2323	Web Design	3.00 Credits
2009-10	14 Credit Hours 42	
2010-11	16 Credit Hours 48	
2011-12	13 Credit Hours 39	
2012-13	13 Credit Hours 39	
2013-14	06 Credit Hours 18	

c. Direct instructional costs for the program for the review period:

Account # 10108		Transaction Amt.
1-10108-1011-510000	Teaching Salaries	278,844.00
1-10108-1111-511000	Professional Salaries	47,100.00
1-10108-1111-512000	Other Salaries	5,302.01
1-10108-1011-513000	Fringe	128,480.81
Total Salaries/Fringe for 09/10 Year		**459,726.82**
1-10108-1011-510000	Teaching Salaries	278,844.00
1-10108-1111-511000	Professional Salaries	47,100.00
1-10108-1111-512000	Other Salaries	5,302.01
1-10108-1011-513000	Fringe	128,480.81
Total Salaries/Fringe for 10/11 Year		**459,726.82**
1-10108-1011-510000	Teaching Salaries	297,811.36
1-10108-1111-511000	Professional Salaries	48,960.00
1-10108-1111-512000	Other Salaries	8,285.04
1-10108-1011-513000	Fringe	122,844.40
Total Salaries/Fringe for 11/12 Year		**477,900.80**
1-10108-1011-510000	Teaching Salaries	326,009.04
1-10108-1111-511000	Professional Salaries	0.00
1-10108-1111-512000	Other Salaries	3,508.36

1-10108-1011-513000	Fringe	134,785.79
Total Salaries/Fringe for 12/13 Year		**464,303.19**
1-10108-1011-510000	Teaching Salaries	314,310.80
1-10108-1111-511000	Professional Salaries	0.00
1-10108-1111-512000	Other Salaries	4,919.15
1-10108-1011-513000	Fringe	121,927.57
Total Salaries/Fringe for 13/14 Year		**441,157.52**
Total Salaries/Fringe for last 5 years		**2,302,815.15**

d. The number of credits and credit hours generated in the program that support the general education component and other major programs including certificates:

Microcomputer Application is a required general education elective for all degrees and certificates. Hours generated are reflected below:

CS 1103 Microcomputer Applications 3.00 Credits

2009-10	788	Credit Hours	2364
2010-11	789	Credit Hours	2367
2011-12	876	Credit Hours	2628
2012-13	868	Credit Hours	2604
2013-14	880	Credit Hours	2640

e. A roster of faculty members, faculty credentials and faculty credential institution(s). Also include the number of full time equivalent faculty in the specialized courses within the curriculum:

Faculty	Credential	Institution that granted degree
William Gann	Masters	East Central University
Jack Armstrong	MBA	OKC University
Hali Repass	MBA	Texas A&M Commerce
Savannah Knight	BS	Northeastern State University
Tommy Smith	Masters	East Central University
Stephanie Thompson	BS	Northeastern State University

Belinda Westfall	Masters	East Central University
Ruth Hendrix	Masters	John Brown University

f. If available, information about employment or advanced studies of graduates of the program over the past five years:

This information is not currently available.

g. If available, information about the success of students from this program who have transferred to another institution:

This information is not currently available.

B.5. Duplication and Demand:

In cases where program titles imply duplication, programs should be carefully compared to determine the extent of the duplication and the extent to which that duplication is unnecessary. An assessment of the demand for a program takes into account the aspirations and expectations of students, faculty, administration, and the various publics served by the program. Demand reflects the desire of people for what the program has to offer and the needs of individuals and society to be served by the program.

B.5. Duplication and Demand Issues:

Address Duplication:

Computer Information Systems is a program that exists in a large percentage of colleges and universities. These programs are supported at the two and four year levels not only nationwide but also in the Oklahoma state system. We have had success interfacing with most of our regional institutions in part thanks to the course equivalency project which allows institutions the input to transfer courses more seamlessly.

Address Demand:

Carl Albert State College has a robust and successful CIS program. Evidence for this success and consequently the demand is shown in section B1. The course student numbers previously stated along with feedback from CASC recruiters should provide an idea of demand with a minimum of one-fourth of the student body in any given year declaring the program as their major. Our program is in demand and continued support is warranted.

B.5.a. Detail demand from students, taking into account the profiles of applicants, enrollment, completion data, and occupational data:

2009	60
2010	64
2011	66
2012	54
2013	43

Student inquiry and ultimately their enrollment is based on many factors. Typically we will see the non-traditional student enrolling in the Computer Information Systems area to either improve current skills or obtain needed skills for employment. The traditional student is looking to this program for an introductory skill set with the idea being that they will further their education at a four year institution. Most students that are interested in the CIS program seek the traditional programming degree with sub categories in Networking, Computer Forensics, and graphics based computing. We see many inquiries from students and exact data is not gathered. Anecdotally it can be said that this program is in great demand just from the traffic we see by phone, email, and through feedback from our enrollment and retention center. We also have many inquiries from our website.

B.5.b. Detail demand for students produced by the program, taking into account employer demands, demands for skills of graduates, and job placement data:

The Computer Information Systems program is an associate of arts program and is designed to dovetail with CIS programs at four year colleges. Consequently data concerning employer demands, demands for skills, and job placement data is not collected at our level.

B.5.c. Detail demand for services or intellectual property of the program, including demands in the form of grants, contracts, or consulting:

Carl Albert State College currently does not have a structure in place that is designed to provide the above mentioned services. These are typically the types of operations that can be expected of research universities and typically is not practical for the community college level. We do however have knowledgeable and talented staff that able to refer stakeholders to other institutions in the state that would provide these services.

B.5.d. Detail indirect demands in the form of faculty and student contributions to the cultural life and well-being of the community:

Computer Information Systems Faculty participate in a variety of projects that add to the cultural lifestyle we enjoy in our community and translate to real world examples:

Under the leadership of our computer science instructor students write programs to make animated characters operate and these are used to entertain children in churches and in schools.

Faculty members organize and participate in running competitions (example Vike Hike, 5K) throughout the year and students are encouraged to volunteer.

Faculty members dedicate time to local high schools and work directly with students on special projects

Faculty members participate in Rotary and Kiwanis clubs.

Faculty members volunteer in Main Street Matters projects.

B.5.e. The process of program review should address meeting demands for the program through alternative forms of delivery. Detail how the program has met these demands:

The Computer Information Systems Program supports the institution in efforts to provide alternate delivery of course content. Realizing that not all students are traditional, support structures have been put in place to give students a wide variety of participation opportunities. The Computer Information Systems Division offers one week accelerated courses if course content is appropriate for this type of delivery. In addition some portions of the Computer Information Systems Program is available online using Blackboard and proprietary course frameworks (My Lab Series). Future plans include eight week courses both in the traditional classroom and online. There has been success using a hybrid in class/online delivery method and this has been embraced by our students. We also have been giving some consideration to the traditional evening class model. The Computer Information Systems Program continues to meet demands for alternate forms of delivery and has an excellent grasp on future trends and models.

B.6. Effective Use of Resources:

Resources include financial support, (state funds, grants and contracts, private funds, student financial aid); library collections; facilities including laboratory and computer equipment; support services, appropriate use of technology in the instructional design and delivery processes, and the human resources of faculty and staff.

Education budgets are limited. This is why it is important to have faculty and staff that are not only judicious with funds but also have an innovative spirit and the ability to do much with less. Budget shortfall and creative forms of finance are a fact of life in education. I believe it is obvious that we are effective with the use of resources. We still exist and our programs are high quality. With that said the Computer Information Systems Division Faculty have many forms of support at their disposal. Faculty has received professorships from the CASC Development Foundation. This program has allowed faculty to write for and receive funds that will enhance projects related to a particular faculty member's field of instruction. A list below details some of those projects and the benefits to the institution:

- Laptop computers were purchased for each faculty member.
- FlipVideo cameras provided for faculty members.
- Classroom software updates.
- Upgrades of instructional equipment in classrooms.
- Two mobile computer labs were provided for use in business and technology courses.
- Attended ASCUE conference in South Myrtle Beach, SC.
- Oklahoma Association of Community Colleges annual conference.
- Photoshop training in Dallas, TX attended by faculty and fifteen students.
- Customer Service Training provided by the institution.
- Multiple WEAVE training sessions provided on campus.

In addition our computer labs are continually updated along with instructional presentation equipment. Partial funding is provided by E&G funds and also Title III.

The Carl Albert State College Library proves excellent support by providing materials that are Computer Information Systems Division specific along with training in research methods to our students. In addition to the many residential resources, the CASC Library also provides E-Library services including many online databases. Business students and faculty also have at their disposal the Library computer network which includes wireless connectivity and desktop computers with current state of practice software.

One of the most recent additions to student services on the Carl Albert Campus has been the enrollment center which is a centralized location where students and prospective students can go to enroll or receive advisement. This department has received training and interfaces on a continual basis to make sure Computer Information Systems students have the advisement and enrollment resources on an extended basis.

*Low Producing Program Reviews follow a different format and template.

Institutional Program Recommendations: (describe detailed recommendations for the program as a result of this thorough review and how these recommendations will be implemented, as well as the timeline for key elements)

Recommendations	Implementation Plan	Target Date
Study recruiting materials and practices to maximize enrollment in the business program	Review Materials. Work with recruiters. Increase and update online presence. (Website Information)	Ongoing

Summary of Recommendations:

	Department	School/College	Institutional
Possible Recommendations:			
Expand program (# of students)			
Maintain program at current level	Computer Information Systems		
Reduce program in size or scope			
Reorganize program			
Suspend program			
Delete program			

Department/
Program Head _____ Date 2/12/15
(Signature)

Dean _____ Date 2/12/15
(Signature)