Program Review Executive Summary
Associate of Applied Science in Computer Technology (040)

Based on the thorough program review addressing all criteria in policy, a comprehensive report should be possible within ten or fewer pages. This template is provided to assist institutions in providing a brief summary, 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 this template format.

<table>
<tr><td colspan="2">Institution Name: Carl Albert State College
Program Name and State Regents Code: Associate of Applied Science in Computer Technology (040)
List Any Options:
Office Technology
Programming
Date of Review:12/31/2020 Recommended Date of Next Review: 2025</td></tr>
<tr><td colspan="2">Centrality to Institutional Mission:
The mission of the Computer Technology AAS Program (040) at Carl Albert State College is to provide a terminal alternative for students wanting to go directly in to the field of computer science. Support of the program mission takes place through the introduction of programming methods, practical application of networking fundamentals, and an understanding of graphics and security procedures. In addition, familiarization of procedures used in a work environment are integral to this program.</td></tr>
<tr><td colspan="2">Program Objectives and Goals:
CT AAS Goals: Provide an introduction of Programming methods. Provide practical application of networking fundamentals. Provide an understanding of graphics and security procedures. Provide a familiarization of business concepts and practices in a work environment. CT AAS Program Outcomes: Upon completion of the program, the student will recognize appropriate workplace conduct. Upon completion of the program, the student will build a program in an industry standard programming language. Upon completion of the program, the student will demonstrate the design of fundamental networks. Upon completion of the program, the student will identify security practices that apply to computing and demonstrate graphic processing.</td></tr>
<tr><td>Quality Indicators Such As:
– Student Learning Outcomes
– Effective Teaching
– Effective Learning Environments
– External Curricular Evaluation</td><td>Program goals for the CT program are clearly stated and are tied to student learning outcomes.
• The Computer Technology program supports an environment of effective teaching and values. The division operating practice require a high level of customer service to our students in and out of the classroom Faculty</td></tr>
</table>

– **Capacity to Meet Needs and Expectations of Constituencies**	support this philosophy of support to students and colleagues and this creates an environment of high values which add to an effective teaching environment. • Results of SmartEvals course evaluations each semester are available to instructors and as part of the semester check out process. The instructor is required to specifically interact with indicators of that system in a report to the VPAA. The instructor is required to report grade distributions along with reporting early alerts sent to students. This is also part of the VPAA report. • Outcomes are being assessed using the Nuventive Improve framework. In addition much substructure has been developed over the last five years including alignment of student learning outcomes with state requirements, program mission development, program outcomes development, and student learning outcomes and evaluation criteria for all. • There have been no higher learning commission issues that are specifically addressed to this particular program. Any higher learning commission issues have mainly been in the area of assessment and to that point we have solved those issues.
Productivity for Most Recent 5 Years	**Number of Degrees:** 15 **Number of Majors:** 151

Other Quantitative Measures Such As: – **Number of Courses for Major** – **Student Credit Hour in Major** – **Direct Instructional Costs** – **Supporting Credit Hour Production** – **Roster of faculty members including the number of FTE faculty in the specialized courses within the curriculum** – **If available, information about employment or advanced studies of graduates of the program over the past five years** – **If available, information about the success of students from this program who have transferred to another institution**	• The number of credits and credit hours generated in the program that support the general education component and other major programs including certificates: Microcomputer Applications is a required general education elective for all degrees and certificates and taught by Computer Science faculty. Hours generated listed below: CS 1103 Microcomputer Applications 2015-16 666 Credit Hours 1998 2016-17 641 Credit Hours 1923 2017-18 632 Credit Hours 1896 2018-19 634 Credit Hours 1902 2019-20 479 Credit Hours 1437 • 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: William Gann Masters East Central University Tommy Smith Masters East Central University Savanah Knight Masters (May 2021) East Central University Dan Smith MBA Oklahoma Baptist University Hali Repass MBA Texas A&M Jack Armstrong MBA OKC University
Duplication and Demand	• Address Duplication: The Associate of Applied Science in Computer Technology uses the same courses that are contained in our Computer Information Systems Program Associate of Arts and the Business Administration Associate of Arts. The Computer Technology degree allows us to offer students a terminal version of both of the above mentioned programs. Address Demand: Demand for this program is low. However, this program uses components from two other programs and the decision to end or keep the Computer Technology Degree is essentially a clerical issue. This option is attractive to some students and with the rebuilding of our post Covid economy I believe the demand to get back to work fast will increase numbers.
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. We rely on state resources and tuition and fees for funding. Budget shortfalls yearly are the rule instead of the exception. Carl Albert State College is

	a model of innovation when it comes to doing much with little. The faculty and staff that support our programs make this one of the finest two-year colleges in the state.
Strengths and Weaknesses	***Strengths:*** • Knowledgeable faculty • Proven Coursework ***Weaknesses:*** • Low demand
Recommendations	• Incorporate PLA technical block credit into degree plan

Program Review Summary
3.7 Academic Program Review
Associate of Applied Science in Computer Technology (040)

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:

The mission of the Computer Technology AAS Program (040) at Carl Albert State College is to provide a terminal alternative for students wanting to go directly in to the field of computer science. Support of the program mission takes place through the introduction of programming methods, practical application of networking fundamentals, and an understanding of graphics and security procedures. In addition, familiarization of procedures used in a work environment are integral to this program.

Carl Albert State College's Mission:

"To provide affordable, accessible and exceptional education that fosters student success."

Affordability:

CASC offers students a world-class education at an affordable price. We offer the most affordable tuition and fees in the region and in the state of Oklahoma. The Computer Technology AAS Program (040) comes under institutions current tuition and fee structure.

Accessibility:

Evidence of accessibility include the many modalities offered for each course. In addition to real time in-person classroom delivery, we are a leader in the usage of traditional synchronous and asynchronous online delivery methods. The online college is an area where we are seeing continuous growth. Many of the real time in-person classes are available by "Zoom" technology also.

Exceptional Education:

Exceptional experiences and education are certainly goals delivered by our faculty daily. CASC has been voted the Best Community College in Oklahoma and currently stands as No. 11 in the Nation for graduation rates among community colleges. We care about our students and faculty provide an exceptional education experience as evidenced by students surveys, departmental questionnaires, and faculty evaluations.

Computer Technology Faculty are committed to providing opportunities for success to each our student customers and consider it a privilege to work with each one.

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:

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

Academic Program Outcome Assessment Results 2019-2020 Academic Year

Program	Measure	Program Outcomes	SLOs Measured	Students Assessed	Students Meeting Threshold	% Success
Computer Technology AAS	Course-Embedded	1				%
		2	5	61	57	93%
		3				%
		4				%
		Total	5	61	57	93%

Academic Program Outcome Assessment Results 2018-2019 Academic Year

Program	Measure	Program Outcomes	SLOs Measured	Students Assessed	Students Meeting Threshold	% Success
Computer Technology AAS	Course-Embedded	1	5	59	47	80%
		2	5	44	44	100%
		3	1	9	6	67%
		4	3	29	23	79%
		Total	14	141	120	85%

2017-2018 Course-Embedded Assessment of Program Outcomes Sampling Method Associating Program Outcomes with Required Program Courses & SLOs			
Program Outcomes & Courses/SLOs	Met	Not Met	Total Measured
Computer Information Systems	**19 (100%)**	**0**	**19**
Program Outcome One			
CS 2203, CS 2243, CS 1423, CS 2213, CS 1113	5 (100%)	0	5
Program Outcome Two			
CS 1313, CS 2243, CS 2013	5 (100%)	0	5
Program Outcome Three			
CS 1333 & CS 1433	2 (100%)	0	2

Program Outcome Four			
CS 1313, CS 2243, CS 1433, CS 1443, CS 1513	7 (100%)	0	7

A. Centrality of the Program to the Institution's Mission: *(Institution's response/rationale should follow each criteria of this policy; (Size of box provided is NOT an indicator of the length of response expected; please include as much information as needed to thoroughly address each standard.)*

The description of the program's connection to the institutional mission and goals is detailed above.

B. Vitality of the Program:

B.1. Program Objectives and Goals:

CT AAS Goals:

Provide an introduction of Programming methods.
Provide practical application of networking fundamentals.
Provide an understanding of graphics and security procedures.
Provide a familiarization of business concepts and practices in a work environment.

CT AAS Program Outcomes

Upon completion of the program, the student will recognize appropriate workplace conduct.
Upon completion of the program, the student will build a program in an industry standard programming language.
Upon completion of the program, the student will demonstrate the design of fundamental networks.
Upon completion of the program, the student will identify security practices that apply to computing and demonstrate graphic processing.

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

Program goals for the CT program are clearly stated and are tied to student learning outcomes.

The Computer Technology program supports an environment of effective teaching and values. The division operating practice require 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 add to an effective teaching environment.

Results of SmartEvals course evaluations each semester are available to instructors and as part of the semester check out process. The instructor is required to specifically interact with indicators of that system in a report to the VPAA. The instructor is required to report grade distributions along with reporting early alerts sent to students. This is also part of the VPAA report.

Outcomes are being assessed using the Nuventive Improve framework. In addition much substructure has been developed over the last five years including alignment of student learning outcomes with state requirements, program mission development, program outcomes development, and student learning outcomes and evaluation criteria for all.

There have been no higher learning commission issues that are specifically addressed to this particular program. Any higher learning commission issues have mainly been in the area of assessment and to that point we have solved those issues.

B.3. Minimum Productivity Indicators:

Time Frame (e.g.: 5 year span)	Head Count	Graduates
2016	37	5
2017	32	1
2018	37	5
2019	27	2
2020	18	2

B.4. Other Quantitative Measures:

b.4.a. Number of courses taught exclusively for the major program for each of the last five years and the size of classes:

PROGRAMMING OPTION:

CS 1313 Programming I 3.00 Credits

2015-16	26
2016-17	27
2017-18	23
2018-19	17
2019-20	23

CS 1333 Programming II 3.00 Credits

2015-16	18
2016-17	20
2017-18	14

2018-19 13
2019-20 16

CS 2243 Internet Programming 3.00 Credits

2015-16 26
2016-17 22
2017-18 16
2018-19 13
2019-20 16

CS **2203 Networking I** 3.00 Credits

2015-16 20
2016-17 24
2017-18 17
2018-19 18
2019-20 24

CS **2213 Networking II** 3.00 Credits

2015-16 12
2016-17 18
2017-18 10
2018-19 13
2019-20 14

CS **2013 Database Management** 3.00 Credits

2015-16 18
2016-17 15
2017-18 13
2018-19 18
2019-20 11

CS **1433 Photoshop** 3.00 Credits

2015-16 17
2016-17 15
2017-18 9
2018-19 6
2019-20 12

OFFICE TECHNOLOGY OPTION:

ACCT 1103 Fundamental of Accounting 3.00 Credits

2015-16 42
2016-17 47
2017-18 49
2018-19 42

2019-20 54

ACCT 2103 Financial Accounting 3.00 Credits

2015-16 96
2016-17 102
2017-18 112
2018-19 100
2019-20 77

BUS 2113 Business Law 3.00 Credits

2015-16 11
2016-17 5
2017-18 9
2018-19 6
2019-20 0

BUS 2133 Business Communications 3.00 Credits

2015-16 58
2016-17 20
2017-18 40
2018-19 21
2019-20 30

CS **2003 Spreadsheets** 3.00 Credits

2015-16 12
2016-17 18
2017-18 9
2018-19 0
2019-20 0

CS 2003 Database Management 3.00 Credits

2015-16 18
2016-17 15
2017-18 13
2018-19 18
2019-20 11

BA 1133 Customer Service 3.00 Credits

2015-16 4
2016-17 5
2017-18 11
2018-19 0
2019-20 0

b.4.b. Student credit hours by level generated in all major courses that make up the degree program for five years:

PROGRAMMING OPTION:

CS 1313 Programming I — 3.0 Credit Hours

2015-16	78
2016-17	81
2017-18	69
2018-19	51
2019-20	69

CS 1333 Programming II — 3.0 Credit Hours

2015-16	54
2016-17	60
2017-18	42
2018-19	39
2019-20	48

CS 2243 Internet Programming — 3.0 Credit Hours

2015-16	78
2016-17	66
2017-18	48
2018-19	39
2019-20	48

CS 2203 Networking I — 3.0 Credit Hours

2015-16	60
2016-17	72
2017-18	51
2018-19	54
2019-20	72

CS 2213 Networking II — 3.0 Credit Hours

2014-16	36
2015-17	54
2016-18	30
2017-19	39
2018-20	42

CS 2013 Database Management — 3.0 Credit Hours

2015-16	54
2016-17	45
2017-18	42
2018-19	54

2019-20 33

CS 1433 Photoshop 3.0 Credit Hours

2015-16 51
2016-17 45
2017-18 27
2018-19 18
2019-20 36

OFFICE TECHNOLOGY OPTION:

ACCT 1103 Fundamental of Accounting 3.00 Credits

2015-16 126
2016-17 141
2017-18 147
2018-19 126
2019-20 162

ACCT 2103 Financial Accounting 3.00 Credits

2015-16 288
2016-17 306
2017-18 336
2018-19 300
2019-20 231

BUS 2113 Business Law 3.00 Credits

2015-16 33
2016-17 15
2017-18 27
2018-19 18
2019-20 0

BUS 2133 Business Communications 3.00 Credits

2015-16 174
2016-17 60
2017-18 120
2018-19 63
2019-20 90

CS **2003 Spreadsheets** 3.00 Credits

2015-16 36
2016-17 54
2017-18 27
2018-19 0
2019-20 0

CS 2003 Database Management 3.00 Credits

2015-16	54
2016-17	45
2017-18	39
2018-19	54
2019-20	33

BA 1133 Customer Service 3.00 Credits

2015-16	12
2016-17	15
2017-18	33
2018-19	0
2019-20	0

b.4.c. Direct instructional costs for the program for the review period:

Account #		
1-10108-1511-510000	Teaching Salaries	294,090.80
1-10108-1511-513000	Fringe	113,678.67
Total Salaries/Fringe for 14/15 Year		**407,769.47**
Account #		
1-10108-1611-510000	Teaching Salaries	284,530.80
1-10108-1611-513000	Fringe	107,582.47
Total Salaries/Fringe for 15/16 Year		**392,113.27**
Account #		
1-10108-1711-510000	Teaching Salaries	269,722.15
1-10108-1711-513000	Fringe	93,701.47
Total Salaries/Fringe for 16/17 Year		**363,423.62**
Account #		
1-10108-1811-510000	Teaching Salaries	306,337.32
1-10108-1811-513000	Fringe	115,178.66
Total Salaries/Fringe for 17/18 Year		**421,515.98**
Account #		
1-10108-1711-510000	Teaching Salaries	345,525.02
1-10108-1711-513000	Fringe	135,064.56
Total Salaries/Fringe for 18/19 Year		**480,589.58**
Account #		
1-10108-1811-510000	Teaching Salaries	321,738.52
1-10108-1811-513000	Fringe	125,391.54
Total Salaries/Fringe for 19/20 Year		**447,130.06**

b.4.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 Applications is a required general education elective for all degrees and certificates and taught by Computer Science faculty. Hours generated listed below:

CS 1103 Microcomputer Applications 3.00 Credits

2015-16	666	Credit Hours 1998
2016-17	641	Credit Hours 1923
2017-18	632	Credit Hours 1896
2018-19	634	Credit Hours 1902
2019-20	479	Credit Hours 1437

b.4.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
Tommy Smith	Masters	East Central University
Savanah Knight	Masters (May 2021)	East Central University
Dan Smith	MBA	Oklahoma Baptist University
Hali Repass	MBA	Texas A&M
Jack Armstrong	MBA	OKC University

Add more rows if needed

b.4.f. If available, information about employment or advanced studies of graduates of the program over the past five years:

Not Available

b.4.g. If available, information about the success of students from this program who have transferred to another institution:

Not 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.

Address Duplication:

The Associate of Applied Science in Computer Technology uses the same courses that are contained in our Computer Information Systems Program Associate of Arts and the Business Administration Associate of Arts. The Computer Technology degree allows us to offer students a terminal version of both of the above mentioned programs.

Address Demand:

Demand for this program is low. However, this program uses components from two other programs and the decision to end or keep the Computer Technology Degree is essentially a clerical issue. This option is attractive to some students and with the rebuilding of our post covid economy I believe the demand to get back to work fast will increase numbers.

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

Demand for this program considering number of graduates is low. If using that as the only indicator then this program should be closed.

The case is made for keeping a program like this just from the standpoint of offering students all possible options. There are students that don't want a gateway to a four year institution but a foot in the door of employment. How do we serve those students without the AAS? This program uses components from the Associate of Arts in Computer Information Systems and the Associate in Arts in Business Administration. We are funding both of those programs at a healthy level so that essentially makes the Associate of Applied Science in Computer Technology a no cost viable option to serve those specialty students.

Student inquiry and ultimately their enrollment is based on many factors. We historically see non-traditional student enrolling in Computer Technology to either improve current skills or obtain needed skills for employment. The two pathways provide state of practice skills in computer technology or in office technology. We get many inquiries from prospective students but exact data is not gathered.

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 Technology program is an associate of applied science program and designed for those wanting to upgrade skills/opportunities in a computer related field. Data concerning employer demand, demands for specific skills, and job placement data is not collected at our level. Anecdotally there is not an industry that doesn't have the need for trained computer professionals.

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 Computer Technology Program does not generate any revenue from intellectual property, grants, contracts, or consulting.

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 Technology faculty currently run a community makers group where students and members of the community can work on technology related projects. This has morphed (due to social distancing) in to electronics training online for all that want to participate. No charge to the public and all are welcome.

Additional the faculty interact with low income students through the Upward Bound program and provide technical activities to enrich their lives. We also work with high school students from many of the area schools.

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 Technology Program supports the institution in efforts to provide alternate delivery of course content through the following methods:

In person courses at various times.
Online delivery of courses asynchronously.
Online delivery of courses with a synchronous component.
FLEX delivery.
Hybrid delivery.
Zoom delivery.
In special cases delivery by arrangement.
First Eight Week/Second Eight Week

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.

We rely on state resources and tuition and fees for funding. Budget shortfalls yearly are the rule instead of the exception. Carl Albert State College is a model of innovation when it comes to doing much with little. The faculty and staff that support our programs make this one of the finest two-year colleges in the state.

Campus Resources ;

Online Tutoring
Full Library Facilities
Student Support Services
Enrollment and Retention Center
Learning Resource Center Tutoring
Testing Center
Semester by semester in-service training
Zoom Tutoring
Blackboard Training

Most classrooms have access to the following technologies:

Smart Board/Projection System
Document Camera
Dedicated Classroom Computer
Laptop Carts
Zoom Interface
Blackboard Partnership with NSU

The CASC Development Foundation:

Funding for student scholarships.
Funding for faculty scholarships.
Professorship programs.
Funding for Scholars Program and Dormitories.

A good teacher can teach a class with all the required equipment and resources. The great teachers are the ones that teach daily using minimal resources. We do have our share of equipment for classrooms and the flexibility to maximize usage of what we have to work with. One indicator of effective use of resources is how we have been

able to maintain our faculty and staff, provide the highest quality educational experience, and not reduce the workforce.

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
Keep at current level. The courses and resources used for this program are the same as those for the Computer Information Systems Program and the Business Administration Program. The benefits of being able to offer the option of an Associate of Applied Science Program to students needing that pathway far outweigh the smaller graduation numbers. Add a "technical block" of PLA credit for career tech students in line with the AAS in Applied Technology modifications currently pursued by CASC and 14 other colleges.	Modify Program for PLA with OSRHE	Fall 2021

Summary of Recommendations:

	Department	School/College	Institutional
Possible Recommendations:	Computer Technology	CASC	Click here to enter text.
Expand program (# of students)			
Maintain program at current level	X	X	X
Reduce program in size or scope	Click here to enter text.	Click here to enter text.	Click here to enter text.
Reorganize program	Choose an item.	Choose an item.	Choose an item.
Suspend program	Choose an item.	Choose an item.	Choose an item.
Delete program	Choose an item.	Choose an item.	Choose an item.

Division Chair WJ [signature] (Signature) Date 4/7/2021

VPAA [signature] (Signature) Date 4-7-2021