**Eastern West Virginia
Community & Technical College**

Program Review

Computer Applications Specialist, Certificate in Applied Science

Fall 2017

Name and degree level of program:

Computer Applications Specialist, Certificate in Applied Science

Program Overview

The Computer Applications Specialist, Certificate in Applied Science was developed in 2009 to serve the needs of employers in Eastern's College district. The Computer Applications Specialist, Certificate in Applied Science provides training with focus on the practical aspect of computer applications and practices. The program courses include several in Computer Information Systems, Communication, Information Technology, Mathematics, and Business Management. Successful completion of the certificate will allow graduates to enter the workforce in entry-level positions in fields such as administrative and technical support, document processing, customer service and data entry.

Computer Applications Specialists are employed nationally in numerous diverse industries. Locally, this program addresses the labor needs of many organizations including federal and state organizations, educational institutions, manufacturers, health related establishments, and other service organizations. Examples of the types of jobs graduates will be qualified for include entry-level positions such as administrative and technical support, document processing, customer service, and data entry.

Please see Appendix I for program description.

Synopses of significant findings, including findings of external reviewer(s):

Eastern has offered the Certificate in Computer Applications Specialist for nine years. From fall 2010 to spring 2013, the program had three graduates. During this evaluation cycle, the number of graduates has increased from three to six. The review of the data indicates the number of graduates of the Certificate program will remain at a constant rate of two students per year for the next five years.

All required courses in the Computer Applications Specialist certificate are being offered through AAS programs in Business Management, Administrative Support Technology, Information Technology, and Accounting. As a result, the cost of running this certificate program is minimal and it is fully absorbed by the AAS programs in Business Technologies. This Certificate does not have full-time faculty. The revenues generated by the tuition exceed the expenses, thus leaving the college with a positive net income. The program utilizes three adjunct faculty for all core and

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elective courses. In fall 2013, the college hired a full-time faculty in Information Technology. This IT faculty worked for the college for two years and developed several of the IT courses.

In fall 2015, the college received approval as a testing site for Microsoft Technology Associate (MTA) certification. Six students took the exams and all six received the certification. The cost of the MTA exam is $50 and is included in the tuition for the IT courses. It is expected more students will be certified in the future.

Course level assessment:
Ten program courses were assessed during this review period.

Year	Semester	Sbj.	Crs. #	# 0f Students	Crs. Avg.	Target for Assessed Outcomes	Performance +/-	% of Assessed Outcomes	Action Plan / Notes
2016	Fall	CIS	121	7	83%	75%	8%	100%	No Action is needed - focus on unmet outcomes
2017	Spring	CIS	117	12	52%	75%	-23%	100%	Review the course to see if it has to be revised to require prerequisite.
2015	Fall	CIS	119	12	61%	75%	-14%	85%	Performance improved in 2016 and 2017 / No actions required
2016	Fall	CIS	119	15	84%	75%	9%	100%	Performance improved since previous year - focus on unmet outcomes
2017	Spring	CIS	119	21	85%	75%	10%	100%	Performance improved since previous year
2015	Spring	IT	134	5	89%	75%	14%	100%	No Action is needed - focus on unmet outcomes
2016	Summer	MKT	260	14	86%	75%	11%	100%	No Action is needed - focus on unmet outcomes
2014	Summer	BUS	101	11	89%	75%	14%	79%	Outcomes of this course were reduced to simplify assessment
2012	Fall	BUS	101	11	88%	75%	13%	12%	Outcomes of this course were reduced to simplify assessment
2014	Spring	BUS	206	11	90%	75%	15%	10%	Outcomes of this course we reduced to simplify assessment

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Sample / Summary of Assessment of General Education Courses:

Semester	Course Assessed	# of Students	Target for assessed outcomes	Result
Spring 2013	MTH 121	9	75%	25% outcomes met at 75% or above.
Fall 2013	CIS 108	25	75%	91.5% of outcomes met at 75% or above.
Spring 2013	CIS 108	17	75%	75% outcomes met at 75% or higher
Spring 2014	CIS 108	25	75%	97% outcomes met at 75% or above.
Spring 2013	CIS 108	17	75%	100% outcomes met at 75% or higher
Fall 2013	CIS 108	25	75%	100% outcomes met at 75% or higher
Spring 2014	CIS 108	25	75%	100% outcomes met at 75% or higher
Fall 2014	MTH 115	10	75%	50% outcomes met at 75% or higher
Fall 2015	CIS 114	9	75%	44% outcomes met at 75% or higher
Spring 2012 – Spring 2015	ENL 101	235	75%	71% outcomes met at 75% or higher

All courses of this program are offered and assessed through other CAS and AAS programs. No revision is needed for this certificate at this time.

Plans for program improvement, including timeline:

The number of graduates of the CAS program is expected to remain at two students per year for the next five years.

Focusing on the industry certification including MOS and MTA certification, can improve the quality of the program. Many students avoid taking MOS certifications due to the cost of the exam. Students who opt not to pursue industry certification note the cost of the examination ($95) as the prohibiting factor. It is expected more students will try for MOS and MTA certification in the future. The college plans to discuss the cost of the exam with the students

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before the financial aid checks are dispersed. This would allow the college to deduct the cost of the MOS exam ($95) from the financial aid of the students.

Identification of weaknesses or deficiencies from the previous review and the status of improvements implemented or accomplished:

In fall 2014, the College administered the NOCTI exam for the first time. The exam results gave the college an opportunity to better assess the Certificate outcomes.

In the past five years, the quality of instruction has improved due to availability of well qualified part-time instructors. The college is currently expanding its partnership with Potomac State College, Franklin University, Frostburg State University, and West Virginia University.

In the past four years, several Business Technologies instructors have received certification in Quality Matters. More Business, IT and General Education instructors will become certified in the near future. The college plans to apply Quality Matters standards to online and hybrid courses.

The faculty and instructors of this certificate have adopted Cengage textbooks for more than 80% of the program courses. This fall, students can pay a flat rate of $120 a semester to rent up to six eBooks.

Five-year trend data on graduates and majors enrolled:

Enrollment and Graduates from fall 2012 to spring 2017

	Headcount	FTE	Full-Time	Graduates
Fall 2012	1	.8	1	1
Spring 2013	3	2.3	2	3
Fall 2013	2	1.7	2	0
Spring 2014	2	1.2	1	1
Fall 2014	1	.8	1	0
Spring 2015	1	.8	1	1
Fall 2015	0	0	0	0
Spring 2016	2	1	1	0
Fall 2016	0	0	0	0
Spring 2017	0	0	0	0

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Total	12	8.6	9	6

Summary of Assessment Model and Utilization for Program Improvement

Eastern's assessment plan consists of three levels: entry level assessment (ACCUPLACER, SAT, ACT), active enrollment assessment (course and program assessment, student satisfaction surveys, etc.), and post-graduation assessment (employment satisfaction survey, alumni survey, employment and salary data, etc.). Since December 2014, the NOCTI exam has been available to CAS students. However, due to low enrolment in this program not students has tried the NOCTI exam for this assessment cycle. IDEA Short Form Reports (i.e. course evaluation surveys) are administered each semester in all course sections with enrollment of six or more students. Course completion rates and student tracking studies are used as a measure of overall program success.

The assessment of the program indicated that the students could benefit if the "Computer Fundamentals" course, which is a required General Education course, was replaced with a more rigorous course. As the result of this assessment the college removed "Computer Fundamentals" from the curriculum and replaced it with "Introduction to Computer Applications and Concepts."

The college utilizes the "Goals" feature found within Blackboard to generate computerized assessment of the courses. This allows generation of reports and linking course outcomes to assignments, exams, projects, and the discussion board. Using Blackboard has simplified the assessment process for all Business Technologies courses.

Based on the recommendation of the visiting HLC team in 2013, the number of Learning Outcomes for IT courses were reduced from an average of 35 outcomes per course to an average of 10 outcomes. This revision has streamlined the assessment process.

In fall 2015, the College received approval as a testing site for Microsoft Office Specialist Certification, MOS, and Microsoft Technology Associate exam, MTA. So far, three students attempted the MOS exam and two received the certification. Six students took the MTA exam and all six passed the exam.

NOCTI test will be utilized to access the outcomes of this certificate. From fall 2015 to spring 2017, the program has had any graduates. However, this school year three students are expected to graduate with a certificate in Computer Applications Specialist. NOCTI tests will be administered for these graduates and the results will be reported in the next review cycle.

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Graduates Profile:

Based on a review of six students who graduated between fall 2012 to spring 2017:

- **Graduate One:** This graduate completed an AAS degree in Board of Governors in addition to Computer Applications Specialist, C.A.S. She completed three additional CAS in IT, Business and Accounting

- **Graduate two:** This graduate completed an AAS degree in IT and Business in addition to Computer Applications Specialist. Received two MTA certifications and works in the IT field at an educational institution.

- **Graduate three:** This graduate moved out of state. No further information is available.

- **Graduate four:** This graduate is not looking for a computer related job due to personal reasons.

- **Graduate five:** This graduate completed an AAS degree in IT in addition to Computer Applications Specialist, C.A.S. This graduate is not working in a computer related field.

- **Graduate six:** This graduate completed two AAS degrees including an IT degree in addition to Computer Applications Specialist, C.A.S. This graduate is working in a field related to his second associate degree that is not computer related.

Final recommendations approved by governing board.

There is sufficient enrollment in related AAS programs to sustain this Certificate program. Courses like Spreadsheet Software and Data Base Management Software require the newest version of the software. The spreadsheet software (Excel) and Database Management Software (Access) are upgraded once every three years and their cost is being absorbed by the IT department. The IT department purchases Office Suite licenses for the entire institution. Courses like PC Repair and Troubleshooting and Networking require software, computers and equipment. In the past, the IT department of the college cooperated with the Academics department by providing hardware and software and IT resources to instructors and students.

To better serve the needs of Eastern's six-county district, continuation of the program in its current format with full-time day course implementation is recommended. This will serve to increase the number of articulation agreements and explore the feasibility of offering the certificate as a web-based program.

Additionally:

- Promote industry certification
- Apply Quality Matters standards to online and hybrid courses

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- Utilize technology to better assess courses and program
- Facilitate the transfer of graduates to associate and bachelor's degree programs

Computer Applications Specialist   Code: 15-1151.00
ONETonline.org SOC
Certificate in Applied Science
30 Semester Hours

The Computer Applications Specialist Certificate in Applied Science provides students with proficiency in computer applications and practices that are used in today's business environment. This certificate provides students with the opportunity to become proficient in business applications of computers. Hands-on experience with popular business programs is emphasized.

Upon successful completion of the Computer Applications Specialist Certificate in Applied Science, the graduate will be able to:

- Demonstrate a basic knowledge of business organization and procedures by applying business applications of computers
- Demonstrate knowledge regarding computer information systems
- Design and manage a database
- Design an interactive website
- Analyze and present data in a visual format
- Apply computer skills to create, analyze and assess a business document to solve an organizational problem
- Demonstrate effective communication and computation skills

Special Certifications
Students successfully completing the Business Applications of Computers Certificate in Applied Science are prepared to take the certification examination for Microsoft Office Specialist, MOS.

Program Implementation: Full-time Day

Recommended Course Sequence –Computer Applications, Certificate in Applied Science

First Year—Fall Semester			Sem. Hrs.	First Year—Spring Semester			Sem. Hrs.
Dept.		Course Title		Dept.		Course Title	
BUS	101	Introduction to Business	3	CIS	117	Word Processing Software	3
CIS	114	Introduction to Computer Applications and Concepts	3	CIS	121	Database Management Software	3
CIS	119	Spreadsheet Software	3	CIS	133	Introduction to Web Design	3
ENL	101	English Composition I	3	Elective		Computer Applications Specialist Elective	3
Elective		Computer Applications Specialist Elective	3	Elective		Mathematics Elective (MTH 115 or higher)	3

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Total Semester Hours	15	Total Semester Hours	15

Computer Applications Specialist Electives (Select 6 credits)		
Dept.	**Title**	**Sem. Hrs.**
BUS 204	Fundamentals of Ecommerce	3
CIS 111	Introduction to Electronic Presentations	1
CIS 122	Introduction to Information Systems	3
IT 134	Networking Fundamentals	3
IT 180	PC Repair and Troubleshooting	3
MGT 250	Principles of Management	3
MKT 260	Principles of Marketing	3

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