

PROGRAM REVIEW
Southern West Virginia Community and Technical College
Programs Without Specialized Accreditation

Summary of Findings
2011-2012

Program Name: Information Technology, Certificate Program

Hours Required for Graduation: 30

I. Synopses of significant findings, including findings of external reviewer(s)

A. Adequacy

- The curriculum has adequate requirements that meet the needs of business and industry.
- The program has established goals and objectives.
- Provides a variety of skilled job pathways.
- Entrance abilities for the students are within community college standards.
- The program has appropriately trained faculty.
- The program maintains appropriate assessment tools.

Conclusion: Program meets or exceeds adequacy requirements standards.

B. Viability

- The program is has sufficient enrollment.
- Graduates are within expectations for the program.
- Previous history of the program indicates future students seeking the degree will remain steady.

Conclusion: Program is at near capacity for labs and faculty. Graduates rates are within expected and acceptable measurements. The program meets or exceeds viability requirement standards.

C. Necessity:

- The program meets a validated industry demand.
- The graduates find successful gainful employment.
- The program has input from an advisory committee.

Conclusion: The program meets minimum requirements for necessity.

D. Consistency with Mission:

- The program supports the mission and vision of the institution
- The program and core courses support the compact
- There is limited impact on other programs

Conclusion: The program is consistent with the mission of the college.

II. Plans for program improvement, including timeline.

Meetings are being scheduled to work with the local vocational/career centers to increase dual credit offerings and enrollments. The program is also being explored as an option for the McDowell Federal Prison as a curriculum choice. Both activities are planned for the initial meetings in the spring 2012 semester with implementation beginning in the fall 2012 semester.

Additional efforts are being made on tracking and advising students to assist with completion of courses in sequence. Interventions are being made with regards to math courses to assist earlier. The math department is working with the program for “just in time” learning to enhance math background on the math courses. Additional efforts are being made to track students beyond graduation. Activities are ongoing.

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

There were no identified weaknesses of the previous review. This is the first full program review for the program.

IV. Five year trend data on graduates and majors enrolled

The program does not typically have students seeking only the certificate degree. Most students are enrolled in the full associate in applied science program and get the certificate as the first year of the program. This is expected to continue. The certificate does provide a fall back for students who for some reason or another cannot finish the program.

V. Summary of assessment model and how results are used for program improvement

The assessment model contains a variety of measurements for classroom performance. Student advising and progress toward graduation is monitored by the department chair along with regular consultation with the program faculty. Outcomes are discussed at each department meeting and changes in delivery and content are made accordingly. Formal curriculum changes are presented in accordance with the established institutional policy and procedures for curriculum and instruction.

VI. Data on student placement

Graduates who actively seek computer industry jobs have obtained high quality jobs that pay good wages and have reasonable benefits. They are range from computer repair to network assistants. Average starting salary is approximately \$22, 000.

VII. Final Recommendation Approved by the Governing Board

See the attached resolution for Board of Governors Final Recommendation and signatures.

PROGRAM REVIEW
Southern West Virginia Community and Technical College
Programs Without Specialized Accreditation
Review Component Details
2011-2012

Program: Information Technology, Certificate Program

Date of Last Review: 2008 Post Audit

I. PROGRAM DESCRIPTION

The Information Technology certificate program is primarily designed as non-transfer for career-oriented students who desire to enter the job market quickly with a certification skill set. It is designed to develop knowledge and skills that will enable the student to seek vendor certifications, entry level employment, and perform efficiently in the IT industry workforce. The program also offers opportunities for individuals already in the job market to expand their skills and knowledge to include computers.

This program is currently limited to full program offerings at the Logan Campus. The Wyoming Campus offers courses on a limited basis as demands are warranted. An initial post audit was conducted in 2008.

II. SPECIALIZED ACCREDITATION INFORMATION

This program does not have any specialized accreditation information.

III. PROGRAM STATEMENT on Adequacy, Viability, Necessity and Consistency with College Mission.

A. Adequacy

1. Curriculum

The curriculum for the Information Technology, Certificate program consist of 30 semester hours. These include 10 credit hours in a general education core, and 20 credit hours in a technical core including the CompTIA A+ Service Technician certification. It is aligned with the first year of the Information Technology Associate in Applied Science degree. A complete listing of courses in each category is included in Appendix I.

2. Faculty

The Information Technology program utilizes full-time and part-time faculty to teach the general education course requirements. The program utilizes one full-time faculty (Matthew Payne) assigned to the Information Technology program and two additional full-time faculty (Timothy Weaver and Rick Thompson) split between the Information Technology program and computer support courses for other programs. All faculty

members hold appropriate degrees and certifications in the Information Technology area. See Appendix II for faculty/staff data sheets.

3. Students

A. Entrance Abilities

Southern maintains an open door policy for admissions. Any prospective student with a high school diploma or GED may take classes at Southern. All entering students must satisfy a general math and English requirement or take Transitional Studies courses to bring their skills to prerequisite levels of performance. The ACT test can be used to evaluate student placement or performance or the ACCUPLACER test can be taken on campus. Students are expected to start college level math during their first semester. Students requiring transitional studies math will require additional semesters to graduate. The program assumes general computer skills. Those not having basic computer skills may take the CS 102 Computer Literacy course to gain the skills which may also delay graduation.

B. Exit Abilities

Upon completion of the degree requirements, students will have acquired the necessary skills to qualify for most entry level positions in the information technology industry that require a 2-year degree. Students leave the program with an understanding of the need to continually upgrade their skills and further their knowledge and abilities through on-the-job training, continuing education, seminars, and advanced studies. The breadth of the program of instruction allows individuals to be able to move from jobs in one area of computers to another without the need of comprehensive retraining. Job specific needs and knowledge can quickly be associated from previous knowledge, and further learning can be self-taught because of their educational background. Students are also required to sit for a certification examination of their choice. Possible certifications include choices from CompTIA - A+, Microsoft (Word, Excel, Access, PowerPoint), and Certiport (IC3).

Specific Exit Abilities of Graduates include:

- Exhibit ethical, responsible, and dependable behavior
- Appreciate the need for lifelong learning
- Use problem solving strategies to think critically
- Provide outstanding customer service
- Understand a variety of system architectures
- Install and use a variety of operating systems
- Use basic programming constructs

- Install, configure, and diagnose hardware and application software

4. Resources

A. Financial

This program receives a yearly budget dedicated to the IT associate degree program. No specific funds are allocated to the certificate program. It also receives funds for computer labs through the All Computer Labs budget for printing. While funds were not specifically for the IT program, it did benefit from a Technical Programs grant for the surveying program. New computers were purchased for the lab and are used by the program. Between the grant and budget the financial support has been adequate to cover any necessary needs for the program.

B. Facilities

This program has one lab on the Logan campus in the Allied Health and Technology Building that is shared by the IT and surveying programs. The lab has state-of-the art computers and a variety of software packages available to students. The lab is equipped with a variety of instructional equipment including a projector, a large screen TV connected to computer, and an electronic whiteboard. It is set up for a capacity of 20 students.

5. Assessment Information

The IT program utilizes a variety of assessment measures. Students must pass a capstone course which includes a program assessment exam. The majority of technical core courses also utilize a pre/post course exam. Student achievement in the general education and support courses is assessed in accordance with the institution's plan for assessment for such courses/programs. All students are required a minimum of one licensure exam. Success rates have varied with each exam. Overall the program has a passage rate of 85% on reported exams. This rate also includes some students taking multiple exams.

The program has limited returns on graduate follow-up surveys. Attempts are made each year to contact students by phone, email and letters. There are only three known graduates that are not employed at this time. Some of the graduates are not employed in the field but are also not actively seeking information technology related jobs.

There is also limited feedback on employer satisfaction. A majority of the students who respond prefer not to include employer or salary information. Most information is informal from contact with students and the local industry.

6. Previous Program Reviews

The last program review was the initial post audit conducted in 2008. The program was continued with no corrective action.

7. Advisory Committee

The faculty maintain a good working relationship with local business and industry. The faculty also utilize national data and trends for curriculum adjustment and offerings.

8. Strengths and Weaknesses

STRENGTHS

- Student interest as evidenced by enrollment
- Solid, hands-on curriculum
- Current lab equipment and software
- Flexible curriculum

WEAKNESSES

- Student skills in math result in a longer than expected completion time.
- Student readiness and drive

B. Viability

1. Number of Majors per year for previous 5 years

<u>Year</u>	<u>Enrollment</u>
2005-2006	0
2006-2007	6
2007-2008	7
2008-2009	18
2009-2010	18

Enrollment Trends for previous 5 years

The official enrollment indicates an increase in students seeking a degree. The numbers do not represent students who are seeking the certificate as their final program. A review of student enrollment information indicates that a majority of these students enrolled in a single course and had computers as an interest as opposed to seeking a degree.

Number of Graduates for previous 5 years

<u>Year</u>	<u>Graduates</u>
2005-2006	0
2006-2007	4
2007-2008	4
2008-2009	16
2009-2010	9

All of the graduates also completed the associate degree in information

technology as well. The program tends to draw students that have a low completion rate. Many students enjoy the computer aspect of the program but do not complete the general education requirements necessary for graduation.

Graduates who actively seek computer industry jobs have obtained high quality jobs that pay good wages and have reasonable benefits. They are range from computer repair to network assistants. Average starting salary is approximately \$22, 000.

Enrollment Projections

Although we cannot predict large increases in enrollment in the future, there is a community employment need delivered by this program which we believe drives enrollment. The global job market indicates a continued need for computer technicians.

2. Program Course Enrollments

This program offers a variety of specialized courses designed specifically for the program. Courses are open to all students however the majority are taken by majors only. A complete listing of courses for the past 5 years can be found in Appendix III.

3. Service Courses

This program has one course (IT 102- Cyber Law and Ethics) that was developed specific for the program that is now required by the criminal justice programs.

4. Off-Campus/Distance Delivery Classes

This program has several courses that are currently offered by distance delivery. All courses have an online component. A listing of online courses is available in Appendix IV.

5. Articulation Agreements (2+2 etc.)

There are no articulation agreements for the program.

C. Necessity

There is an identified need for IT professionals within the state and especially the surrounding regions. Information Technology continues to remain one of the fastest growing professions. This program provides an essential opportunity for students within the college's service district. Jobs remain unfilled in the local area due to the lack of qualified candidates.

D. Consistency with Our Mission

This program directly supports the institution's previous compact and mission in a variety of areas. Major areas of support for the previous compact include the

following:

- Courses are offered as dual credit at a number of locations. This supports compact Goal I.B.3.
- Articulation agreements exist with each of the vocational/career centers that offer comparable courses. This supports a number of compact goals including I.C.3, III.A.1, and III.D.1.
- This program provides scholarship opportunities to qualified students through the WV Science Engineering and Technology Scholarship. This supports compact goal I.D.2.
- The program was developed to address identified local/regional needs and provides academic as well as non-academic training in technical areas. This supports compact goals II.A.2. and IV.A.1.
- The program emphasizes citizenship and lifelong learning as instructed in OR 105 and supports compact goal III.E.

This program directly supports the institution's new compact and mission in a variety of areas. Major areas of support for the new compact include the following:

- Produce more graduates
 - Program advising encourages completion of degree and graduation.
- Promote Strong Employer Partnerships
 - The program is a high demand occupation needed by employers.
 - Courses provide opportunities for employers to send employees for training
- Serve More Adults
 - Includes program recruitment for older students for skills enhancement.
- Build and Maintain Facilities
 - Courses use technology

IV. Recommendation

Based on the program review, the continuation of the program at the current level of activity without corrective action is recommended. Enrollment is at near capacity, graduates are within expected and acceptable ranges, and the program meets a need in the community.

APPENDIX I – Curriculum

Information Technology

Certificate
30 Credit Hours

Purpose

The Information Technology Certificate Program was developed for career-oriented individuals who seek entry-level positions in IT tech support industries. It is designed to provide a thorough background in computer technology, basic troubleshooting and repair, and an introduction to networking concepts.

The full Information Technology Certificate Program is available on the Logan Campus. The Boone/Lincoln, Williamson, and Wyoming/McDowell campuses offer the program support courses only.

Dept/No.	Title	Credit Hours
Support Courses		
EN 101	English Composition I	3
MT 124	Technical Math	3
OR 105	Orientation to Technical Programs	1
SP 103	Speech Fundamentals	3
Major Courses		
IT 102	Cyber Law, Ethics, Culture	3
IT 104	Using Internet Technology for Research and Productivity	3
IT 112	Systems Architecture	3
IT 180	PC Maintenance	3
IT 181	Advanced PC Maintenance	3
IT 182	A+ Lab	2
IT	Restricted IT Elective	3

APPENDIX II – Faculty Data Form

Name Matthew Payne Rank Assistant Professor

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned Bachelors

Date Degree Received Dec 2001

Conferred by Marshall University

Area of Specialization Management Information Systems

Professional registration/licensure FAA Weather Observer, CompTIA A+, Multiple Sony Hardware Repair Certs.

Years of employment at present institution 9

Years of employment in higher education 9

Years of related experience outside higher education 15

Non-teaching experience FAA Weather Observer, Technical Support Lexmark International, Owner WV Registered Business – Scorched Silicon

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

<u>Year/Semester</u>	<u>Course Number & Title</u>	<u>Enrollment</u>
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See attached course loads list

- (b). If degree is not in area of current assignment, explain.
Degree is in area of current assignment

- (c). Identify your professional development activities during the past five years.

- Comptia A+ Certification with IT Expert Emphasis
- 20+ Sony Hardware Repair Certifications
- US Department of Transportation Network Security and Privacy Awareness Training Cert.
- NCSA Computer Hardware Technician
- Participated/Taught Globaloria – Social learning through game design
- Several CEU's for various training sessions offered from Southern
- President's Future Leaders Academy Course
- Site Operator/Blogger for a class related blog from Feb. 2007 to Present
- Continuous updating of all materials taught for every course offered.

Faculty Course Loads

Faculty	Term	Course	Title	Enrolled
Payne, Matthew J.				
	201002	IT 145	Adobe Photoshop	21
	201002	IT 180	PC Maintenance	8
	201002	IT 182	A+ Lab	10
	201002	IT 192	Intro. to Prog in Visual Basic	6
	201002	IT 215	Network Administration II	11
	201002	IT 274	Capstone	11
	201002	IT 275	Intro to Gaming - Globaloria	2
	201001	IT 180	PC Maintenance	12
	201001	IT 182	A+ Lab	13
	201001	IT 183	Network +	7
	201001	IT 210	Network Administration I	13
	201001	IT 275	Intro to Gaming I - Globaloria	10
	200902	IT 102	Cyber Law, Ethics, Culture	21
	200902	IT 145	Adobe Photoshop	20
	200902	IT 147	Digital Editing	21
	200902	IT 180	PC Maintenance	14
	200902	IT 182	A+ Lab	15
	200902	IT 192	Intro. to Prog in Visual Basic	15
	200901	IT 102	Cyber Law, Ethics, Culture	21
	200901	IT 145	Adobe Photoshop	16
	200901	IT 180	PC Maintenance	16
	200901	IT 182	A+ Lab	15
	200901	IT 183	Network +	13
	200901	IT 210	Network Administration I	14
	200802	IT 180	PC Maintenance	12
	200802	IT 180	PC Maintenance	13
	200802	IT 181	Advanced PC Maintenance	12
	200802	IT 181	Advanced PC Maintenance	11
	200802	IT 182	A+ Lab	11
	200802	IT 182	A+ Lab	13
	200802	IT 192	Intro. to Prog in Visual Basic	17
	200801	CS 104	Using Internet Tech Research	14
	200801	IT 157	Web Graphics Design	14
	200801	IT 183	Network +	13
	200801	IT 275	Animation	11

APPENDIX II – Faculty Data Form

Name Rick Thompson Rank Assistant Professor

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned Masters
Date Degree Received May 2004
Conferred by Marshall University
Area of Specialization Information Systems

Professional registration/licensure _____
Years of employment at present institution 12
Years of employment in higher education 12
Years of related experience outside higher education 0
Non-teaching experience 0

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

<u>Year/Semester</u>	<u>Course Number & Title</u>	<u>Enrollment</u>
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See attached course loads list

- (b). If degree is not in area of current assignment, explain.

Degree is in area of current assignment

- (c). Identify your professional development activities during the past five years.

Certifications:

IPv6 Certification from Hurricane Electric

HTML 4.0 from National Computer Science Academy

Computer Hardware Technician from National Computer Science Academy

Classes Taken:

IS 624 Data Warehousing from Marshall Graduate College

Faculty Course Loads

Faculty	Term	Course	Title	Enrolled
Thompson, Rick				
	201002	CS 102	Computer Literacy	13
	201002	CS 102	Computer Literacy	14
	201002	CS 116	Word Processing Concepts	11
	201002	IT 156	Web Page Design II	14
	201002	IT 181	Advanced PC Maintenance	8
	201001	CS 102	Computer Literacy	9
	201001	CS 102	Computer Literacy	20
	201001	CS 104	Using Internet Tech Research	15
	201001	IT 112	System Architecture	12
	201001	IT 155	Web Design I	18
	200902	CS 102	Computer Literacy	20
	200902	CS 104	Using Internet Tech Research	10
	200902	IT 181	Advanced PC Maintenance	10
	200902	IT 183	Network +	10
	200902	IT 186	Linux+	19
	200901	CS 102	Computer Literacy	20
	200901	CS 102	Computer Literacy	8
	200901	CS 104	Using Internet Tech Research	9
	200901	CS 116	Word Processing Concepts	11
	200901	IT 156	Web Page Design II	10
	200802	CS 102	Computer Literacy	18
	200802	CS 102	Computer Literacy	15
	200802	CS 102	Computer Literacy	10
	200802	CS 116	Word Processing Concepts	15
	200802	IT 112	System Architecture	9
	200802	IT 155	Web Design I	18
	200801	CS 102	Computer Literacy	18
	200801	CS 104	Using Internet Tech Research	13
	200801	CS 116	Word Processing Concepts	17
	200801	IT 112	System Architecture	18
	200801	IT 155	Web Design I	20

APPENDIX II – Faculty Data Form

Name Tim Weaver Rank Associate Professor

Check one: Full-time X Part-time _____ Adjunct _____

Highest Degree Earned BS
Date Degree Received 1990
Conferred by Concord College (now University)
Area of Specialization Computer Information Systems

Professional registration/licensure A+, Net +, CCNA
Years of employment at present institution 13 Years
Years of employment in higher education 13 Years
Years of related experience outside higher education 2 Years
Non-teaching experience Computer Technician

To determine compatibility of credentials with assignment:

- (a) List courses you taught this year and those you taught last year: (If you participated in team-taught course, indicate each of them and what percent of courses you taught). For each course include year and semester taught, course number, course title and enrollment.

<u>Year/Semester</u>	<u>Course Number & Title</u>	<u>Enrollment</u>
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See attached course loads list

- (b). If degree is not in area of current assignment, explain.

Degree is in area of current assignment

- (c). Identify your professional development activities during the past five years.

I have taken graduate courses each semester toward a master's degree at Marshall University. I am expected to receive master's degree in May 2012.

Faculty Course Loads

Faculty	Term	Course	Title	Enrolled
Weaver, Timothy B.				
	201002	CS 102	Computer Literacy	14
	201002	CS 104	Using Internet Research	9
	201002	CS 116	MS Office Open lab	11
	201002	IT 102	Cyber Law, Ethics, Culture	19
	201002	IT 192	Intro. to Prog in Visual Basic	7
	201001	CS 102	Computer Literacy	13
	201001	CS 102	Computer Literacy	17
	201001	IT 102	Cyber Law, Ethics, Culture	25
	201001	IT 186	Linux+	10
	201001	IT 223	Computer Forensics	11
	200902	CS 102	Computer Literacy	15
	200902	CS 116	MS Office Open Lab	13
	200902	IT 101	Principles of Information Sys	15
	200902	IT 145	Adobe Photoshop	13
	200902	IT 183	Network +	9
	200901	CS 102	Computer Literacy	18
	200901	CS 102	Computer Literacy	3
	200901	CS 116	MS Office Open Lab	12
	200901	IT 112	System Architecture	21
	200901	IT 180	PC Maintenance	9
	200901	IT 181	Advanced PC Maintenance	9
	200901	IT 182	A+ Lab	9
	200802	CS 102	Computer Literacy	12
	200802	CS 102	Computer Literacy	7
	200802	CS 104	Using Internet Tech Research	8
	200802	CS 116	MS Office Open Lab	20
	200802	IT 155	Web Design I	10
	200801	CS 102	Computer Literacy	15
	200801	CS 102	Computer Literacy	16
	200801	CS 102	Computer Literacy	19
	200801	CS 116	MS Office Open Lab	20
	200801	IT 102	Cyber Law, Ethics, Culture	15

APPENDIX III - Course Enrollments

Term	Subject	Course	Title	Enrolled
201002	IT	102	Cyber Law, Ethics, Culture	19
201002	IT	112	System Architecture	12
201002	IT	180	PC Maintenance	8
201002	IT	181	Advanced PC Maintenance	8
201002	IT	182	A+ Lab	10
201001	IT	102	Cyber Law, Ethics, Culture	25
201001	IT	112	System Architecture	12
201001	IT	180	PC Maintenance	12
201001	IT	182	A+ Lab	13
200902	IT	102	Cyber Law, Ethics, Culture	21
200902	IT	180	PC Maintenance	14
200902	IT	181	Advanced PC Maintenance	10
200902	IT	182	A+ Lab	15
200901	IT	102	Cyber Law, Ethics, Culture	21
200901	IT	112	System Architecture	21
200901	IT	180	PC Maintenance	16
200901	IT	180	PC Maintenance	9
200901	IT	181	Advanced PC Maintenance	9
200901	IT	182	A+ Lab	9
200901	IT	182	A+ Lab	15
200802	IT	112	System Architecture	9
200802	IT	180	PC Maintenance	12
200802	IT	180	PC Maintenance	13
200802	IT	181	Advanced PC Maintenance	11
200802	IT	181	Advanced PC Maintenance	12
200802	IT	182	A+ Lab	13
200802	IT	182	A+ Lab	11
200801	IT	102	Cyber Law, Ethics, Culture	15
200801	IT	112	System Architecture	18
200702	IT	102	Cyber Law, Ethics, Culture	17
200702	IT	112	System Architecture	21
200702	IT	180	PC Maintenance	16
200702	IT	181	Advanced PC Maintenance	16
200702	IT	182	A+ Lab	16
200701	IT	102	Cyber Law, Ethics, Culture	21
200701	IT	112	System Architecture	14
200602	IT	102	Cyber Law, Ethics, Culture	19

APPENDIX IV - Distance Delivered Courses

Term	Subject	Course	Title	Enrolled	Section
201002	IT	102	Cyber Law, Ethics, Culture	19	WEB
201002	IT	112	System Architecture	12	WEB
201001	IT	102	Cyber Law, Ethics, Culture	25	WEB
200902	IT	102	Cyber Law, Ethics, Culture	21	WEB
200901	IT	102	Cyber Law, Ethics, Culture	21	WEB
200901	IT	112	System Architecture	21	ICR
200801	IT	112	System Architecture	18	ICR
200702	IT	102	Cyber Law, Ethics, Culture	17	ICR
200702	IT	112	System Architecture	21	ICR
200701	IT	102	Cyber Law, Ethics, Culture	21	ICR
200701	IT	112	System Architecture	14	ICR
200602	IT	102	Cyber Law, Ethics, Culture	19	ICR
200602	IT	112	System Architecture	20	ICR
200601	IT	102	Cyber Law, Ethics, Culture	36	ICR
200601	IT	112	System Architecture	28	ICR