

**UNIVERSITY OF ARKANSAS AT MONTICELLO  
COLLEGE OF TECHNOLOGY-CROSSETT  
ANNUAL ASSESSMENT REPORT 2011-2012**

Revised 3/29/13

*Computer Maintenance/  
Networking*



## General Information

UAM-CTC offers post-secondary training to help individuals gain the knowledge and skills needed to enter and advance in their selected career. In all programs, you will be trained in the skills which employers say you will need in that particular occupational area. The staff works closely with business and industry to keep our programs responsive to the changing workplace.

Each of our programs covers both the theory (class work) and the practical (lab work) aspects of the field. And, of course, you will be trained to use the needed equipment for the occupation you choose.

An applicant who does not have a high school diploma or equivalency will be given an opportunity to work toward earning the Arkansas High School Diploma (GED) free of charge.

Admissions requirements include:

- (1) a completed application for admission,
- (2) college entrance exam scores, and
- (3) official academic transcripts

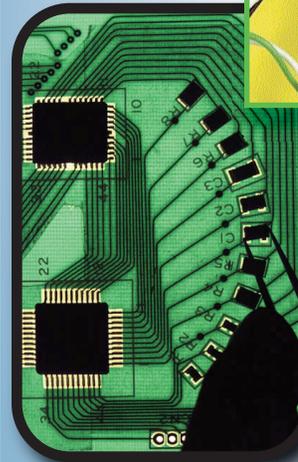
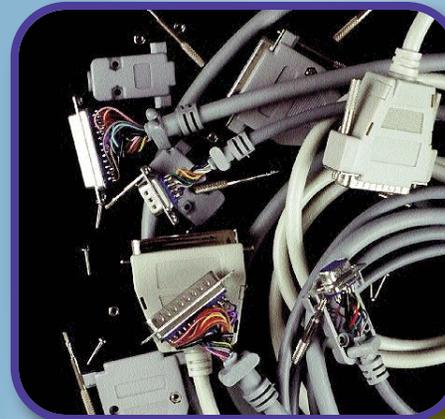
Requirements mandated by law:

- (1) proof of immunization against measles and rubella for applicants born on or after January 1, 1957,
- (2) a selective service statement. Students who are required to register with selective service must sign a statement attesting that they have registered or are exempt from doing so. This statement appears on the application for admission and must be completed by all male applicants, and
- (3) proof of tuberculin skin testing within the last six months for foreign-born students.

Because of the high demands of some career areas, our programs frequently have more applicants than openings. Fair and equitable guidelines for admitting students have been established and are available as a supplemental handout. Reapplication will be required after one year, and free refresher courses are available for all applicants.

You may access specific admissions requirements at [www.uamont.edu](http://www.uamont.edu) or any UAM campus.

# UAM-CTC



***The Computer Maintenance/Networking Program can lead to an Associate of Applied Science Degree by completing additional electives and general education courses. Find out more about this option by visiting, calling, or accessing the UAM web site at [www.uamont.edu](http://www.uamont.edu).***



## Computer Maintenance/Networking

*Program Information 2011-2012*



***“Training for Jobs of Today and Tomorrow”***

UAM College of Technology-Crossett  
1326 Highway 52, W  
Crossett, AR 71635  
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Web Site: [www.uamont.edu](http://www.uamont.edu)

**Appendix A-1**

## Computer Maintenance/Networking

The Computer Maintenance/Networking Program prepares individuals for entering occupations in the information technology (IT) field that involve troubleshooting, repair, and maintenance of personal computers (PCs). Skills are developed by hands-on practice in electronic circuit testing, computer assembly, computer upgrades and configurations, and computer networks. Networking classes provide opportunities for students to design, build, and maintain computer inter-networks.

Successful completion of the Cisco System classes (I and II) will allow students to take the national exam for certifying as a CCENT (Cisco Certified Entry Network Technician). Students also prepare for industry standard certifications, including partial certification of the Cisco Certified Network Associate (CCNA™), and A+.

### Student Learning Outcomes

Successful completers of this program will be able to: install, maintain, and troubleshoot computer hardware

- set up, maintain, and troubleshoot networks
- set up, install, maintain and troubleshoot Microsoft-based desktop and server operating systems
- create and maintain physical cabling infrastructure of a network
- install and maintain physical cabling infrastructure of a network
- apply knowledge, skills, and abilities to obtain the CompTIA A+ certification
- apply knowledge, skills, and abilities to obtain the CompTIA Servers+ certification
- apply knowledge, skills, and abilities to obtain the Cisco Certified Entry-level Network Technician (CCENT) certification.

The program length for a full-time student in Computer Maintenance/Networking is two (2) semesters and one (1) summer term.

### Program Costs:

Full Computer Maintenance Program	
Total Tuition & Fees	\$3,170
Books & Supplies (Approximately)	\$1,105



*The “Digital Divide” is a term used with increasing frequency by educators, policymakers, and government officials to acknowledge that the Internet and its associated technologies are contributing factors in defining the “haves” and the “have nots” of this millennium.*

*Cisco Systems, the worldwide leader in networking for the Internet, has a vision to transform every aspect of our lives -- from the way we do business to how we view entertainment, education, and government. This vision, which is helping to build bridges across the Digital Divide, is realized in part through the Cisco Networking Academy Program.*

### Cisco Networking Academy Program



#### Building Bridges Across the Digital Divide

The Cisco Networking Academy is an e-learning model that delivers Web-based educational content, online testing, student performance tracking, hands-on labs, and instructor training and support. With a curriculum developed by education and networking experts, the Networking Academy program is offered at educational programs around the world. It demonstrates a highly successful alliance among Cisco Systems, educators, governments, leading technology companies, and nonprofit organizations as it prepares graduates for the demands and opportunities of the “New Economy.”

*Computer maintenance technicians are among the top ten most-needed workers in the world.*

### Graduation Requirements (Suggested Schedule)

Fall Semester		Credit Hours
MAT 2214	Advanced Industrial Mathematics	4
CMP 1012	Tech Network Servers	2
CMP 1024	Tech Computer Maint/Core Hardware	4
CFA 1103	Tech Computer Fundamentals (or higher level computer course)	3
CMP 2074	Tech Cisco CENT I or CMP 1034 Tech Networking I	4
<b>Exit: Computer Repair and Networking Certificate of Proficiency</b>		<b>17</b>
Spring Semester		
CMP 1053	Tech Network Security	3
CMP 1604	Tech Operating Systems	4
CMP 1504	Tech Fundamentals of Voice & Data Cabling	4
CMP 1704	Tech Fundamentals of Web Design	4
COM 1203	Technical Communications (or higher level composition course)	3
Summer I		
CMP 1802	Tech Computer Peripheral Maintenance	2
CMP 1092	Tech Project Management	2
COM 1102	Employability Skills/Ethics	2
<b>Exit: Computer Maintenance/Networking Technical Certificate</b>		<b>41</b>

*The University of Arkansas at Monticello is committed to providing educational opportunities to all qualified students and employment opportunities to all persons, regardless of their economic or social status, and will not discriminate on the basis of race, color, religion, creed, gender, ethnic or national origin, disability, age or any legally protected class. The Office of Special Student Services has been designated to coordinate efforts to comply with all laws and regulations applicable to qualified individuals with disabilities, as required by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Inquiries concerning the application of all federal laws and regulations regarding discrimination should be directed to the Human Relations Officer, Officer of Finance and Administration, Babin Business Center, (870) 460-1021.*

## COMPUTER MAINTENANCE/NETWORKING

### Program Description

The Computer Maintenance/Networking program prepares individuals for entering occupations in the information technology (IT) field that involve troubleshooting, repair, and maintenance of personal computers (PCs). Skills are developed by hands-on practice in electronic circuit testing, computer assembly, computer upgrades and configurations and computer networks. Networking classes provide opportunities for students to design, build, and maintain computer inter-networks.

Successful completion of the Cisco system classes (I and II) will allow students to take the national exam for certifying as a CCENT (Cisco Certified Entry Network Technician). Students also prepare for industry standard certifications, including partial certification for the Cisco Certified Network Associate (CCNA™) and A+.

### Student Learning Outcomes

Successful completers of this program will be able to:

- install, maintain, and troubleshoot computer hardware.
- setup, maintain, and troubleshoot networks.
- setup, install, maintain and troubleshoot Microsoft-based desktop and server operating systems.
- create and maintain a secure network.
- Install and maintain physical cabling infrastructure of a network.
- apply knowledge, skills, and abilities to obtain the CompTIA A+ certification.
- apply knowledge, skills, and abilities to obtain the CompTIA Servers+ certification.
- apply knowledge, skills, and abilities to obtain the Cisco Certified Entry-level Network Technician certification.

The program length for a full-time student in Computer Maintenance/Networking is two (2) semesters and one (1) summer term. The program costs are approximately \$3,170 for tuition and fees and approximately \$1,105 for books and supplies.

### GRADUATION REQUIREMENTS

(Suggested Schedule)

<u>Fall Semester</u>			Credit Hours
MAT	2214	Advanced Industrial Mathematics	4
CMP	1012	Tech Network Servers	2
CMP	1024	Tech Computer Maintenance/Core Hardware	4
CFA	1103	Tech Computer Fundamentals (or higher-level computer course)	3
CMP	2074	Tech Cisco CENT I <b>OR</b> CMP 1034 Tech Networking I	4
<b>Exit: Computer Repair and Networking Certificate of Proficiency</b>			<b>17</b>
<u>Spring Semester</u>			
CMP	1053	Tech Network Security	3
CMP	1064	Tech Operating Systems	4
CMP	1504	Tech Fundamentals of Voice and Data Cabling	4
CMP	2084	Tech Cisco CENT II <b>OR</b> CMP 1044 Tech Networking II	4
COM	1203	Technical Communications (or higher-level composition course)	3
<u>Summer I Term</u>			
CMP	1802	Tech Computer Peripheral Maintenance	2
COM	1102	Employability Skills/Ethics	2
CMP	1092	Tech Project Management	2
<b>Exit: Computer Maintenance/Networking Technical Certificate</b>			<b>41</b>

**University of Arkansas at Monticello**  
**College of Technology Crossett**  
**Computer Maintenance and Networking Program**  
**2011-2012 Plan of Improvement for the Council on Occupational Education**

The Computer Maintenance and Networking (CMN) Program is a post-secondary technical certificate program available to high school graduates or persons with a General Educational Development (GED) credential. Students may enroll on a full- or part-time basis. Students who are enrolled full-time can expect to complete the program within two semesters and one summer term.

The Computer Maintenance and Networking program provides training required in today's Information Technology career field, including computer repair and maintenance, networking fundamentals and installation and maintenance of networking devices, distribution cabling methods, network security, and operating systems. In addition, this program offers individualized advising, online learning through the Cisco Net Academy, course challenge opportunities, certified faculty (who has obtained the CMN Certificate of Proficiency, Technical Certificate, AAS, and the Cisco Instructor Certification) and software certification preparation.

Computer Maintenance and Networking students receive computer training using Windows and Linux operating systems. Students learn to operate various computers and networking devices found in contemporary Information Technology environments. English and communication courses developed specifically for business are integral parts of the program through the Advanced Industrial Math and Tech Communications courses.

After an in-depth review, the Computer Maintenance/Networking program is meeting its stated objectives.

**Overall Program Objectives and Content**

**I. Objectives**

- 1. *Are the objectives of the program clearly stated?***
  - Yes, they are stated in the Computer Maintenance and Networking Program Description that can be found at <http://www.uamont.edu/uamctc/pdf/cmn.pdf> and other publications.
  
- 2. *Are the stated objectives relevant in relation to current expectations of the occupation for which students are being educated?***
  - Yes. Comp TIA certifications are world-renowned and certify that the recipient is proficient in a particular area of training. Cisco continues to be one of the world leaders in

networking innovation and helped form the networking standards that are still used today.

3. ***Are program completers asked for their evaluation of the program after placement in the occupation is acquired?***
  - Yes. Completers are contacted six months to a year after they have graduated for a follow-up evaluation.
4. ***What do completer evaluations reveal about the program's success/deficiencies in the preparation of students for employment in the occupation?***
  - A study revealed that most students voted that labs and hands-on activities were helpful or satisfactory.
5. ***Does a summary of completer evaluations indicate success in the program's ability to meet its objectives as written, or does it reveal areas of concern?***
  - For the students who complete the program, yes. For students who don't complete the program, but end up working in the field anyway, yes.

## **II. Content**

6. ***Does program content provide students with adequate preparation for success in the occupation with respect to: theories and concepts, specific knowledge and skills, hands-on practice, laboratory exercises, and work-based activities?***
  - Students receive a well-rounded education based in theories and concepts and coupled with hands-on exercise and real-life scenarios. These are provided through the use of the latest materials available from the industry's leading certification providers. This, coupled with the job experience of the instructor, provides students with more-than-adequate preparation for success.
7. ***Are the elements mentioned above current in terms of practices and expectations of the occupation?***
  - Yes, based on discussions with our advisory committee, we believe our program stays abreast of industry trends and innovations.
8. ***After reviewing current student and program completer evaluations, are there areas of concerns identified that relate to program content?***
  - My only concern is that the student population is not available to offer more advanced courses that could further

benefit the students in the Information Technology field. As for job placement in an entry-level position, the program is sufficient.

### **III. Instructional Materials/Equipment**

- 9. Are materials and equipment used in the instructional processes of the program relevant to each course within the program?*
  - Yes.
- 10. Are materials and equipment current in their content, nature, and use in the industry?*
  - Yes.
- 11. Are there adequate quantities of materials and equipment to support the number of students in the program?*
  - Yes.
- 12. Is equipment maintained/repaired properly to support learning activities of students?*
  - Yes.
- 13. After reviewing current student and program completer evaluations, are there areas of concerns identified that relate to instructional materials and/or equipment used by the program?*
  - Technology is constantly changing, and new software and equipment are being developed and implemented every day in the Information Technology career field. Obtaining funds to stay current with the latest technology can prove challenging.

### **IV. Completion Rate Issues**

- 1. Are the admission requirements stringent enough for the demands of the program?*
  - No. I believe this program requires a certain degree of prerequisites; however, the university currently has an open enrollment policy in place.
- 2. Do prospective employers of the program's completers require a high school diploma or equivalency certificate as a condition for employment? If so, does the program require a high school diploma or equivalency certificate for enrollment in or completion of the program?*

- From my research into current job descriptions, employers require their applicants to have at least a technical certificate in the related field to be considered for the job. UAM-CTC requires students entering this program to have acquired their high school diploma or equivalency certificate. There is a high school diploma equivalency program currently located on campus.

***3. Are the qualifications of the program's instructional staff adequate? If not, what are the specific areas of concern?***

The instructor completed this program in May 2008 and obtained the CMN Certificate of Proficiency, CMN Technical Certificate, and an AAS. The instructor also has obtained the Cisco Instructor Certification. The instructor has a cumulative of three years' experience in the field and will pursue additional certifications in 2012.

***4. Is the performance of the program's instruction staff adequate? If not, what specific areas need improvement?***

- Yes. The instructor is highly motivated and cares deeply for the success of the students.

***5. Does the review of student evaluations of instructional personnel reveal areas of concern?***

- The instructor strives to improve upon any methods that will help the students to succeed and achieve their goals. All student evaluations are read and taken into careful consideration. Although the instructor has limited experience in the education field, he is pursuing further professional development.

**V. Placement Rate Issues**

***1. Are there adequate employment opportunities for completers of the program in your community?***

- No. However, there is a surrounding area of about a 50-75 mile radius that offers a moderate amount of opportunities in this field.

***2. Are job placement staff and faculty effectively involved with businesses in the community that could assist with job placement opportunities for completers?***

- Yes. The program's advisory committee and the school's partnership with the local workforce center provide connections with the business communities in our area.

**3. Does the institution provide itself adequate time for placement of completers and the collection of follow up data for placement statistics?**

- Yes. We gather information within an 18-month window.

**4. Does a review of program evaluations collected from the follow-up of completers, non-completers, and employers of completers identify any weaknesses in the program as they relate to employment opportunities or preparedness?**

- The college is located in a small rural area where IT jobs are few and far between. We encourage students to keep their options open and look outside the area as well for employment opportunities.

### **Issues of Concern**

The admission requirements are not stringent enough for the demands of the program. UAM undergraduate admission requirements include Entrance Exam Scores (ACT, SAT, ASSET, or COMPASS); however, the University has an open enrollment policy.

In the spring of 2010, the Computer Maintenance and Networking instructor abruptly terminated his employment with the university without finishing the semester. This caused some students to lose confidence in the program and withdraw.

### **Recommendations**

Placement and follow-up information is used to evaluate and improve the quality of program outcomes as evidenced in minutes of advisory committee meetings, discussions between administrators, and recommendations made to curriculum and standards committees regarding course/program revisions. Four recommendations are:

- **Academic Advising**
  - With an open enrollment policy, academic advising must play an important part in placing students. The UAM-CTC counselor, Student Services Coordinator, and Computer Maintenance/Networking adviser work closely with students to provide career counseling. Additionally, the Special Student Services (ADA) Coordinator manages efforts to comply with all laws and regulations applicable to qualified individuals with disabilities.
- **Retention Specialist and Arkansas Career Pathways Initiative**
  - Use of the Retention Specialist throughout each semester will help students stay in class and succeed in these courses. The Arkansas Career Pathways Initiative is designed to provide support services and direct financial assistance to parents who want to increase their education and employability. Career Pathways participants have access

to advising to assist with career and educational decisions, assistance finding jobs while in school and careers upon graduation, extra instruction for building successful academic and employment skills, tutoring, and easy access to a computer lab for doing homework and improving computer skills. Eligible students are encouraged to participate in the Arkansas Career Pathways Initiative by completing the certification available to them. The students may earn an Arkansas Career Readiness Certificate.

- **Evaluation of Computer Maintenance and Networking Curriculum**
  - One recommendation is to work with the other campuses and revamp the Computer Maintenance/Networking program. All CMN courses are offered on the Crossett campus. The CMN program is administered and supervised by the Vice Chancellor the Assistant Vice Chancellor/ Supervisor of Instruction. The CMN program has been approved through the UAM Academic Council, UAM Curriculum and Standards Committee, UAM Technical Programs' Curriculum and Standards Committee, UAM Assembly, Arkansas Department of Higher Education, and the UAM Board of Trustees.
  
- **Reevaluation of Completion Rates**
  - Our recommendation is to use a three-year average of completion rates. Enrollment, completion rates, and placement rates vary from year to year. An overall three-year view gives a better idea of the effectiveness of the program instead of one year's effectiveness.