ASSOCIATE IN APPLIED SCIENCE DEGREE

COMPUTER & INFORMATION TECHNOLOGIES
NETWORKING TECHNOLOGIES TRACK

Program Description

This program includes tracks in Applications, Information Security, Internet Technologies, Network Administration, Network Technologies, and Programming, with a core of courses common to all. The core includes a general education component essential to a collegiate education and a technical component giving students an introduction to information systems, computer applications, program development, system maintenance, networking, security, Internet technologies, database design, and collaborative system development. In addition to core courses, students take specialty courses for their selected track. The Network Technologies track provides the concepts and skills needed to set up, maintain, and expand networked computer systems. This track requires sequences in Microsoft Windows, Cisco, and UNIX/Linux as well as courses providing deeper insight into Internet protocols and network security. Employment opportunities include entry-level positions in installation and administration of local area networks in medium to large organizations and as computer network administrators in small businesses.

List of Colleges

Bluegrass Community and Technical College, **Bowling Green Technical College**, **Gateway Community and Technical College**, **Hazard Community and Technical College**, **Henderson Community College**, **Hopkinsville Community College**, **Madisonville Community College**, **Maysville Community and Technical College**, **Owensboro Community and Technical College** and **West Kentucky Community and Technical College** offer this degree .

One of these colleges must be designated as your Home College. Even though the classes will be delivered by different KCTCS colleges, only the Home College will admit you and take care of all of your student service needs including advising, library services, billing, financial aid, etc.

Getting Started

Students may register for KCTCS online classes offered system wide directly at any KCTCS college. Individuals may also complete a "course inquiry" submit form through www.kyvc.org . KYVC course inquiries are submitted directly to the KCTCS Home College identified by the student. The student's chosen Home College processes the course inquiry either through formal admission procedures or class enrollment. Additional information about KCTCS admission requirements and college contacts may be accessed at http://www.kctcs.edu/en/Students/LearnByTerm.aspx.

CIT – Networking Technologies Track Competencies

Upon completion of this program, the graduate can:

1. Describe the communication protocols for computer networks.
2. Use a platform-specific network operating system to create and manage user accounts.
3. Use a platform-specific network operating system to share and secure resources.
4. Use a platform-specific network operating system to establish and maintain Internet connections.
5. Implement advanced network security measures

Course Requirements

Here is a listing of the classes involved in this degree. There may be additional courses that meet these requirements. Please check the current course catalog and online class schedule for additional information and offerings. The entire Associate in Applied Science degree may be completed online; however, some faculty may require proctored exams. Approved proctored sites are listed at http://www.kctcs.edu/en/Students/LearnByTerm.aspx under student services.

CIT – Networking Technologies Track

Course Prefix	Course Number	Program Title: Computer & Information Technologies (AAS) Course Title	Credit Hours
General Education			
ENG	101	Writing I	3
MAT	150	College Algebra	3
		Social/Behavioral Science Course	3
		Heritage/Humanities Course	3
		Natural Sciences Course	3
		Subtotal	**15**
		General Education for Computer Science Track	
ENG	101	Writing I	3
MAT	174	Calculus	4
		Social/Behavioral Science Course	3
		Heritage/Humanities Course	3
PHY	231	General University Physics	4
PHY	241	General University Physics Laboratory	1
		Subtotal	**18**
Core Requirements			
CIT	105	Introduction to Computers	3
CIT	111	Computer Hardware and Software	4
CIT	120	Computational Thinking	3
CIT	150	Internet Technologies	3
CIT	170	Database Design Fundamentals	3
CIT	180	Security Fundamentals	3

		Level I Networking Course	4
		Approved Level I Programming Language Course	3
CIT	291	CIT Capstone	3
		Subtotal	**29**
Network Technologies Track			
CIT	219	Internet Protocols	3
CIT	288	Network Security	3
		Approved Level I and Level II Network Technology Microsoft Windows Course Sequence OR	12
		Approved Level I and Level II Network Technology Cisco Course Sequence OR	(12)
		Approved Level I and Level II Network Technology UNIX/Linux Course Sequence	(12)
		Approved Level I, Level II, or Level III Network Technologies Specialization Sequence	4-6
		Track Subtotal	**22-24**
		Track Total	**66-68**

Helpful links:

APPLICATION: http://www.kctcs.edu/students/admissions/apply_online.aspx

CALENDAR: http://www.kctcs.edu/Students/LearnByTerm/Calendar.aspx

CONTACTS: http://www.kctcs.edu/Students/LearnByTerm/Learn_By_Term_Advisors/College_Contacts.aspx

COURSES: http://www.kctcs.edu/Students/LearnByTerm/Online_Courses.aspx

FINANCIAL AID: http://www.kctcs.edu/Students/Costs_and_Financial_Aid.aspx

GETTING STARTED: http://www.kctcs.edu/Students/LearnByTerm/Getting_Started.aspx

STUDENT TUTORIAL: http://www.kctcs.edu/Students/LearnByTerm/Tutorials.aspx

KCTCS COURSES AVAILABLE AT KYVC: http://kyvc.org/

Dates of Actions:

Revisions: December 2008, October 2010, August 2011, December 2011, April 2012

KCTCS

Kentucky Community & Technical College System