### **Program Overview**

# Computer & Information Technologies (CIT) Progra

AAS Degree tracks in Internet Technologies, Network Administration, and Programming

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#### **PROGRAM DETAILS**

This program includes tracks in Internet Technologies, Network Administration, 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 Information Security track will provide a solid background in information security. Fundamentals of information security, offensive and defensive techniques, and security topics such as operating system security, network security design, or other security topics are covered. This track will help prepare students for entry-level positions of network security, auditing and penetration testing, firewall configuration, and computer crime investigation.

The Internet Technologies track prepares students to design, program, and maintain Internet-based services. With specializations in web programming and web server administration, this track will help prepare students for positions developing and maintaining interactive web sites.

The **Network Administration track** provides the concepts and skills needed to design, set-up, maintain, and expand network and telecommunications systems. The curriculum provides specific training in Cisco and/or Microsoft network systems. Upon completion of the track, the graduate will be

qualified to take industry designed and recognized certification examinations. Employment opportunities include entry-level positions in installation and administration of local and wide area networks in medium to large businesses

and organization and computer network administration positions in small businesses.

The **Programming track** prepares students to design, develop, and maintain computer programs written in current and emerging programming languages. With tracks in Information Systems and Software Development, students successfully completing this track are prepared for entrylevel positions in computer programming.

## COMPUTER & INFORMATION TECHNOLOGIES (CIT) CREDENTIALS:

#### **CERTIFICATES:**

- A+ (4 credit hours)
- Net+ (4 credit hours)
- Security+ (3 credit hours)
- Computer Tech Basic (11 credit hours)
- Programming (12 credit hours)
- Computer Technician (14 credit hours)
- Cisco Networking Associate (16 credit hours)
- Information Security Specialist (19 credit hours)
- Microsoft Network Administrator (19 credit hours)
- Web Programming (24 credit hours)
- Cisco Networking Enhanced (24-25 credit hrs.)
- CIT Fundamentals (26 credit hours)
- Web Administration (27 credit hours)

#### ASSOCIATE IN APPLIED SCIENCE DEGREE:

- Information Security Track (68 credit hours)
- Internet Technologies Track (68 credit hours)
- Network Administration Track (64 credit hours)
- Programming Track (68 credit hours)





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HIGHER EDUCATION BEGINS HERE

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Pam Bridgman, Program Coordinator

deanna.proctor@kctcs.edu

ID NO. \_\_\_\_\_DATE \_\_\_\_

**FACULTY** 

### **REQUIRED COURSES FOR DEGREE TRACKS**

AAS Degree tracks are Interne	t Technologies, Network A	dministration, and Programming
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				(606) 416-3359
GENERAL EDUCATION REQUIREMENTS (15 HOURS)		Credit Hrs.	Grade	pam.bridgman@kctcs.edu
COURSE #	COURSE NAME			Jacqueline Burton
ENG 101	Writing I	3		(606) 875-5821 jacqueline.burton@kctcs.edu
MAT 150	College Algebra	3		Carol Calcaterra
	Social/Behavioral Sciences Course	3		(606) 305-9396
	Heritage/Humanities Course	3		carol.calcaterra@kctcs.edu
	Natural Science Course	3		Margie Childress
				(606) 878-4764
TECHNICAL C	OURSES REQUIRED (29 HOURS)			margie.childress@kctcs.edu
CIT 105	Introduction to Computers	3		Gary Cunningham (606) 451-6682
CIT 111	Computer Hardware and Software	4		gary.cunningham@kctcs.edu
CIT 120	Computational Thinking	3		Ken Jacques
CIT 150	Internet Technologies	3		(606) 451-6803
CIT 170	Database Design Fundamentals	3		ken.jacques@kctcs.edu
CIT 180 Secu	Security Fundamentals	3		Donna Logan
	Approved Level I Networking Course	4		(606) 878-4758 donna.logan@kctcs.edu
	Approved Level I Programming Language Course	3		Zhiming Xia
CIT 291	CIT Capstone	3		(606) 451-6887
	T. C.			zhiming.xia@kctcs.edu
DEGREE TRACKS COURSES (20-24 HOURS)			ADJUNCT FACULTY	
	Varies Depending on Degree Track			Billy Dobbs
	(See the Course Catalog or Approved Advising Pla	n)		(606) 451-6778
				billy.dobbs@kctcs.edu
				Beverly Gaddis (606) 451-6785
	<del></del>			beverly.gaddis@kctcs.edu
				Bruce Gover
				(606) 451-6787
				bruce.gover@kctcs.edu
				Gabriel Hill
				ghill0018@kctcs.edu
				Jeremy Lyons jlyons0042@kctcs.edu
	TOTAL HOURS FOR PROCESS			Amanda Maggard (606) 878-4817
	TOTAL HOURS FOR PROGRA	IVI — 64 - 68		amanda.maggard@kctcs.edu
				DeAnna Proctor
II Canana	ou O Information Tasks along to a source	awa assaila k	ا ممانی ما	(606) 451-6681
<u> II</u> Compute	er & Information Technologies courses a	deanna proctor@kctcs edu		

**ADVISOR** 

Revised: 2/2012

STUDENT\_

SIGNATURE \_