Computer Technology

Computer Technology
Associate in Applied Science

Mission Statement

The Associate of Applied Science Computer Technology degree program prepares students for entry-level computer technology positions. Emphasis throughout the program's duration is placed on effective computer and communication skills.

Entrance Requirements:

Acceptable ASSET or COMPASS score(s)

Type of Program:

Day, night, or online

Type of Degree:

Associate degree

Employment Opportunities:

Technology services companies, internet service providers, insurance companies, hospitals, manufacturing firms, software development companies, and other business and industry.

- The Computer Technology Associate in Applied Science degree allows students to select one of the following concentrations:
  - ❏ **Network Administration**
  - ❏ **Programming**
  - ❏ **Systems Administration**
- Students will be awarded one degree in one of the three concentrations.
- The **Network Administration Concentration** trains students in computer technical support, router configuration and security, network systems administration, Voice over IP (VoIP), and network security.
- The **Programming Concentration** trains students to design and develop web and mobile applications using object-oriented languages and databases, including Microsoft C#, SQL, and ASP, Java, HTML5, CSS, JavaScript, and PHP.
- The **Systems Administration Concentration** trains students to install, configure, secure, and maintain computer hardware including data center servers and business workstations using Microsoft and Linux operating systems, as well as cloud technologies used for virtualization and data center management.
- This program requires a minimum grade of "C" in all CPT and IST courses.
- Listed below is the ideal grouping of courses in order by semester. This plan assumes a full-time schedule.   Many variables can affect this plan, and not every course is offered every semester. CPT Department students should see their academic advisor to map out their own personalized progression toward graduation.

Recommended Program Schedule for the Network Administration Concentration

First Semester

CPT	113	Information Systems	3.0
IST	220	Data Communications	3.0
CPT	257	Operating Systems	3.0
MAT	103	Quantitative Reasoning *	3.0
		or	
MAT	109	College Algebra with Modeling *	
		or	
MAT	120	Probability and Statistics *	
		or higher college transferable math *	
ENG	101	English Composition I *	3.0

Second Semester

IST	201	Cisco Networking Concepts	3.0
CPT	170	Microcomputer Applications	3.0
CPT	209	Computer Systems Management	3.0
CPT	230	C# Programming I	3.0
SPC	205	Public Speaking *	3.0
		or	
SPC	209	Interpersonal Communications *	

Third Semester

IST	202	Cisco Router Configuration	3.0
IST	226	Internet Programming	3.0
CPT	267	Technical Support Concepts	3.0
IST	272	Relational Database	3.0

Fourth Semester

IST	203	Advanced Cisco Router Configuration	3.0
IST	295	Fundamentals of Voice Over IP (VoIP)	3.0
IST	266	Internet and Firewall Security	3.0
CPT	264	Systems and Procedures	3.0
		Humanities/Fine Arts Elective *	3.0

Fifth Semester

IST	204	Cisco Troubleshooting	3.0
		Technical Elective **	3.0
CPT	275	Computer Technology Senior Project	3.0
		Social Science Elective *	3.0

Total credit hours   **69.0**

 * General education course
** Student must choose one CPT/IST elective from one of the other two concentrations

Recommended Program Schedule for the Programming Concentration

First Semester

CPT	113	Information Systems	3.0
IST	220	Data Communications	3.0
CPT	257	Operating Systems	3.0
MAT	103	Quantitative Reasoning *	3.0
		or	
MAT	109	College Algebra with Modeling *	
		or	
MAT	120	Probability and Statistics *	
		or higher college transferable math *	
ENG	101	English Composition I *	3.0

Second Semester

IST	226	Internet Programming	3.0
CPT	230	C# Programming I	3.0
CPT	209	Computer Systems Management	3.0
CPT	170	Microcomputer Applications	3.0
SPC	205	Public Speaking *	3.0
		or	
SPC	209	Interpersonal Communications *	

Third Semester

		Programming Elective #1 ***	3.0
		Programming Elective #2 ***	3.0
CPT	267	Technical Support Concepts	3.0
IST	272	Relational Database	3.0

Fourth Semester

		Programming Elective #3 ***	3.0
		Advanced Programming Elective #1 ****	3.0
IST	266	Internet and Firewall Security	3.0
CPT	264	Systems and Procedures	3.0
		Humanities/Fine Arts Elective *	3.0

Fifth Semester

		Advanced Programming Elective #2 ****	3.0
		Technical Elective **	3.0
CPT	275	Computer Technology Senior Project	3.0
		Social Science Elective *	3.0

Total credit hours   **69.0**

* General education course
** Student must choose one CPT/IST elective from one of the other two concentration
*** Programming Electives:

CPT	236	Introduction to JAVA Programming	3.0
CPT	239	Active Server Pages	3.0
CPT	283	PHP Programming I	3.0
IST	239	DTML and JavaScript	3.0

**** Advanced Programming Electives:

CPT	231	C# Programming II	3.0
CPT	237	Advanced JAVA Programming	3.0
IST	235	Handheld Computer Programming (Android)	3.0
IST	278	Database Programming	3.0

Recommended Program Schedule for the Systems Administration Concentration

First Semester

CPT	113	Information Systems	3.0
IST	220	Data Communications	3.0
CPT	257	Operating Systems	3.0
MAT	103	Quantitative Reasoning *	3.0
		or	
MAT	109	College Algebra with Modeling *	
		or	
MAT	120	Probability and Statistics *	
		or higher college transferable math *	
ENG	101	English Composition I *	3.0

Second Semester

IST	190	Linux Essentials	3.0
CPT	170	Microcomputer Applications	3.0
CPT	209	Computer Systems Management	3.0
CPT	230	C# Programming I	3.0
SPC	205	Public Speaking *	3.0
		or	
SPC	209	Interpersonal Communications *	

Third Semester

IST	257	LAN Network Server Technologies	3.0
IST	226	Internet Programming	3.0
CPT	267	Technical Support Concepts	3.0
IST	272	Relational Database	3.0

Fourth Semester

IST	258	LAN Directory Services	3.0
IST	191	Linux Systems Administration	3.0
IST	266	Internet and Firewall Security	3.0
CPT	264	Systems and Procedures	3.0
		Humanities/Fine Arts Elective *	3.0

Fifth Semester

IST	198	Cloud Essentials	3.0
		Technical Elective **	3.0
CPT	275	Computer Technology Senior Project	3.0
		Social Science Elective *	3.0

Total credit hours   **69.0**

 * General education course
** Student must choose one CPT/IST elective from one of the other two concentrations

Visit www.gvltec.edu/gainful-employment for important information about the educational debt, earnings and graduation rates of students who attended programs.