

Computer Technology

Associate in Computer Technology

Entrance Requirements:

Acceptable ASSET or COMPASS score

Type of Program:

Day, night or online

Type of Degree:

Associate degree

Employment Opportunities:

Insurance companies, hospitals, manufacturing firms, software development companies, other business and industry

- The Programming concentration trains students to plan, design and develop computer systems and programs using varied programming languages and databases with state-of-the-art equipment.
- The Network Systems Administration concentration provides students with the knowledge and skills to prepare for occupations in the field of desktop support and local area network administration. Students learn how to install, configure and maintain networking hardware including servers, workstations, switches, routers and firewalls.
- The Information Management & Systems concentration provides a 2+2 opportunity for students to earn a B.A. in Information Management & Systems at USC Upstate in the Department of Informatics.
- The Computer Information Systems concentration provides a 2+2 opportunity for students to earn a B.A. in Computer Information Systems at USC Upstate in the Department of Mathematics and Computer Science.
- Requires a minimum grade of "C" in all CPT and IST courses.
- Transfer credit for CPT 101 will only be allowed if completed within the last five years. Validation of skills by exemption exam (at a cost assessed by the college) is required for credits earned more than five years past.
- To graduate with an associate degree, candidates must meet the computer competency requirement by taking CPT 101 (EGR 130 may be substituted with departmental approval) or by passing the exemption exam at a cost to be assessed by the college.
- The Programming and Network Systems Administration concentrations are accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

Programming concentration:

Recommended Program Schedule

First Semester

CPT 101	Introduction to Computers*	3.0
CPT 113	Information Systems	3.0
ENG 101	English Composition I*	3.0
or		
ENG 102	English Composition II*	
	College Transfer-Level Math */**	3.0

Second Semester

CPT 257	Operating Systems	3.0
CPT 234	C Programming I	3.0
IST 222	Introduction to Web Page Production	3.0
CPT 209	Computer Systems Management	3.0

Third Semester

IST 227	Internet Operations & Management	3.0
CPT 264	Systems and Procedures	3.0
CPT 186	Visual Basic.Net I	3.0
IST 272	Relational Database	3.0
SPC 205	Public Speaking*	3.0

Fourth Semester

IST 278	Database Programming	3.0
IST 237	Intermediate Website Design	3.0
CPT 286	Visual Basic.Net II	3.0
CPT 238	Internet Scripting	3.0

Fifth Semester

CPT 236	Introduction to Java Programming	3.0
CPT 239	Active Server Pages	3.0
	Social Science Elective*	3.0
	CPT Elective***	3.0

Sixth Semester

CPT 275	Computer Tech Senior Project	3.0
	Humanities/Fine Arts Elective*	3.0
	CPT Elective***	3.0
	CPT Elective***	3.0

Total credit hours **75.0**

* General Education course

** Three credit hours of college transfer-level math from the following:

MAT 109	College Algebra with Modeling	3.0
MAT 110	College Algebra	3.0
MAT 122	Finite College Mathematics	3.0
MAT 130	Elementary Calculus	3.0

MAT 132	Discrete Mathematics	3.0
MAT 140	Analytical Geometry & Calculus I	3.0

**Social Science and Humanities/Fine Arts Electives-
See advisor for approved list of courses, as documented
with curriculum road maps.

*** Approved departmental electives – Option A
(All courses required)

IST 220	Data Communications	3.0
CPT 237	Advanced JAVA Programming	3.0
CPT 240	Internet Scripting with Databases	
	or	
CPT 250	Java Certification Topics	3.0

*** Approved departmental electives – Option B
(All courses required)

IST 239	DHTML and JavaScript	3.0
IST 238	Advanced Tools for Website Design	3.0
IST 240	Multimedia for the Web	3.0

Network Systems Administration concentration:

Recommended Program Schedule

First Semester

CPT 101	Introduction to Computers*	3.0
CPT 209	Computer Systems Management	3.0
CPT 257	Operating Systems	3.0
IST 220	Data Communications	3.0

Second Semester

	College Transfer Level Math */**	3.0
ENG 101	English Composition I*	3.0
	or	
ENG 102	English Composition II*	
CPT 267	Technical Support Concepts	3.0
IST 241	Network Architecture I	3.0

Third Semester

CPT 234	C Programming I	3.0
IST 190	Linux Essentials	3.0
IST 256	LAN Desktop Technologies	3.0
IST 257	LAN Network Server Technologies	3.0

Fourth Semester

IST 201	Cisco Internetworking Concepts	3.0
IST 202	Cisco Router Configuration	3.0
IST 236	Mobile and Wireless Appliances	3.0
IST 191	Linux System Administration	3.0
SPC 205	Public Speaking*	3.0

Fifth Semester

IST	203	Adv. Cisco Router Configuration	3.0
IST	204	Cisco Troubleshooting	3.0
IST	266	Internet and Firewall Security	3.0
IST	293	IT and Data Assurance I	3.0

Sixth Semester

IST	260	Network Design	3.0
IST	272	Relational Database	3.0
		Humanities/Fine Arts Elective*	3.0
		Social Science Elective*	3.0

Total credit hours 75.0

* General Education course

** Three credit hours of college transfer-level math from the following:

MAT	109	College Algebra with Modeling (preferred)	3.0
MAT	110	College Algebra	3.0
MAT	122	Finite College Mathematics	3.0
MAT	130	Elementary Calculus	3.0
MAT	132	Discrete Mathematics	3.0
MAT	140	Analytical Geometry & Calculus I	4.0

Social Science and Humanities/Fine Arts Electives- see advisor for approved list of courses, as documented with curriculum road maps.

USC Upstate Transfer – Information Management and Systems concentration:

A transfer agreement with the University of South Carolina Upstate enables a student to earn a degree from Greenville Tech as part of course work toward a B.A. degree in Information Management and Systems. The degree at USC Upstate is a multidisciplinary degree, integrating an understanding of computer science, information science, telecommunications, discipline-specific data, information administration and an ability to recognize relationships between technical systems and social structures. Completion of the bachelor’s degree program will prepare graduates to design, implement, and manage information systems and use information and information technology to solve problems in business, industry, government agencies, and educational institutions.

Recommended Program Schedule

First Semester

CPT	101	Introduction to Computers*	3.0
-----	-----	----------------------------	-----

		University Transferable Science (1 of 2)#/*	4.0
ENG	101	English Composition I*	3.0
MAT	109	College Algebra with Modeling (preferred)*	3.0
		or	
MAT	110	College Algebra*	

Second Semester

CPT	257	Operating Systems	3.0
CPT	234	C Programming I†	3.0
ENG	102	English Composition II*	3.0
		University Transferable Science (2 of 2)#/*	4.0

Third Semester

IST	220	Data Communications	3.0
SPC	205	Public Speaking*	3.0
MAT	120	Probability & Statistics*	3.0
ACC	101	Accounting Principles I	3.0

Fourth Semester

SPA	101	Elementary Spanish I*	4.0
		or	
FRE	101	Elementary French I*	
		or	
GER	101	Elementary German I*	
ACC	102	Accounting Principles II	3.0
IST	272	Relational Database	3.0
CPT	209	Computer Systems Management	3.0

Fifth Semester

SPA	102	Elementary Spanish II*	4.0
		or	
FRE	102	Elementary French II*	
		or	
GER	102	Elementary German II*	
ECO	210	Macroeconomics*	3.0
		or	
ECO	211	Microeconomics*	
		or	
GEO	101	Introduction to Geography*	
CPT	186	Visual Basic.Net I	3.0
CPT	264	Systems and Procedures†	3.0

Sixth Semester

PSY	201	General Psychology*	3.0
		or	
SOC	101	Introduction to Sociology*	
ART	101	Art History & Appreciation*	3.0
		or	
MUS	105	Music Appreciation*	
		or	
THE	101	Introduction to Theatre*	

CPT	286	Visual Basic.Net II	3.0
HIS	102	Western Civilization Post 1689*	3.0
		or	
HIS	112	Nonwestern Civilizations*	

Total credit hours **76.0**

*General Education course

#Choose one science course from Astronomy, Biology, Chemistry or Physics. Course must be transferable to a four-year college or university.

†Will not transfer to USC Upstate as part of this transfer agreement.

USC Upstate Transfer – Computer Information Systems concentration:

A transfer agreement with the University of South Carolina Upstate enables a student to earn a degree from Greenville Tech as part of course work toward a B.A. degree in Computer Information Systems. The program with USC-Upstate and Greenville Tech, provides rigorous instruction in not only computer programming, but also in many important areas such as systems analysis and design, web technologies, database, networking, and information security. With a strong core of supporting courses in business administration, graduates are well prepared to work in a variety of environments. Students with interest in computer and information technology related areas should consider this degree. The degree also offers an opportunity for adults already working in the computer technology field to update skills, continue their education and expand career opportunities.

Recommended Program Schedule

First Semester

CPT	101	Introduction to Computers*/\$	3.0
		University Transferable	4.0
		Science (1 of 2)#/*	
ENG	101	English Composition I*	3.0
MAT	110	College Algebra*	3.0

Second Semester

CPT	257	Operating Systems	3.0
CPT	234	C Programming I†	3.0
ENG	102	English Composition II*	3.0
		University Transferable	4.0
		Science (2 of 2)#/*	

Third Semester

HIS	102	Western Civilization Post 1689*	3.0
		or	
HIS	112	Nonwestern Civilizations*	
SPC	205	Public Speaking*	3.0
MAT	120	Probability & Statistics*	3.0
CPT	186	Visual Basic.Net I^	3.0

Fourth Semester

SPA	101	Elementary Spanish I*/†	4.0
		or	
FRE	101	Elementary French I*	
		or	
GER	101	Elementary German I*	
ECO	210	Macroeconomics*	3.0
		or	
ECO	211	Microeconomics*	
IST	272	Relational Database	3.0
MAT	220	Advanced Statistics*	3.0

Fifth Semester

SPA	102	Elementary Spanish II*	4.0
		or	
FRE	102	Elementary French II*	
		or	
GER	102	Elementary German II*	
IST	278	Database Programming\$	3.0
CPT	236	Introduction to JAVA	3.0
CPT	286	Visual Basic.Net II	3.0

Sixth Semester

PSY	201	General Psychology*	3.0
		or	
SOC	101	Introduction to Sociology*	
ART	101	Art History & Appreciation*	3.0
		or	
MUS	105	Music Appreciation*	
		or	
THE	101	Introduction to Theatre*	
CPT	237	Advanced Java Programming	3.0
CPT	264	Systems and Procedures	3.0

Total credit hours **76.0**

*General Education course

#Choose science course from Astronomy, Biology, Chemistry or Physics. Course must be transferable to a four-year college or university.

^Transfers as an elective

†Will not transfer to USC Upstate as part of this transfer agreement.