

# Associate of Science with Emphasis in Information Systems Technology

The national and regional job outlook and earnings for careers in information technology continue to be strong. Employees in this sector may possess a diverse or concentrated background in areas such as software and hardware development, mobile computing, data storage and analysis, information security, system administration and integration, computer networking, mathematics and science.

Students completing the Associate of Science (AS) emphasis in Information Systems Technology will be prepared with a diverse set of skills that include the fundamentals of software development. They can then transfer credits seamlessly to the University of Kansas, Edwards campus, to complete a Bachelor of Science in Information Technology in two additional years. Completion of the AS degree may help students obtain internships or entry-level jobs as they complete their bachelor's degree.

**Important:** Students graduating with an associate of science degree must complete an **approved cultural diversity** course. Some of the approved courses are able to meet both the cultural diversity requirement and a general education requirement. A list of **approved cultural diversity courses** can be found in the list of AS general education electives (<http://catalog.jccc.edu/degreerequirements/associate-science/>).

- Programming Program web page (<http://www.jccc.edu/academics/credit/programming/>)

(Major Code 2940; State CIP Code 24.0101)

## Associate of Science

### First Semester

CS 134 or CIS 142	Programming Fundamentals Beginning Programming using Python	4
COMS 121	Public Speaking	3
ENGL 121	Composition I*	3
MATH 171	College Algebra*	3
PSYC 130	Introduction to Psychology	3
Total Hours		16

### Second Semester

CS 200 or CS 205	Concepts of Programming Algorithms Using C++* Concepts of Programming Algorithms using Java*	4
CIS 204	UNIX Scripting and Utilities*	3
BIOL 135 or CHEM 124 & CHEM 125	Principles of Cell and Molecular Biology General Chemistry I Lecture* and General Chemistry I Lab	4-5
NOTE: If a science course of less than five credit hours is taken, a one hour elective is required.		
ENGL 122	Composition II*	3
Total Hours		14-15

^ See all AS general education electives (<http://catalog.jccc.edu/degreerequirements/associate-science/>)

### Third Semester

CS 235 or CIS 240	Object-Oriented Programming Using C++* Advanced Topics in Java*	4
CS 210	Discrete Structures I*	3
CIS 260	Database Management*	4
ECON 132	Survey of Economics	3
Humanities Elective ^		3
Note: Ethics is recommended as one of the two humanities electives. Humanities electives chosen must transfer to KU, and one of the humanities electives must satisfy the JCCC cultural diversity requirement.		
Total Hours		17

^ See all AS general education electives (<http://catalog.jccc.edu/degreerequirements/associate-science/>)

## Fourth Semester

Elective		1
Note: If a science course of less than five credit hours is taken, a one hour elective is required.		
CS 250	Basic Data Structures using C++*	4
or CS 255	Basic Data Structures Using Java*	
CS 211	Discrete Structures II*	3
PHYS 130	College Physics I*	5
Humanities Elective ^		3
Note: Ethics recommended as one of the two humanities electives. Humanities electives chosen must transfer to KU, and one of the humanities electives must satisfy the JCCC cultural diversity requirement.		
Total Hours		16

^ See all AS general education electives (<http://catalog.jccc.edu/degreerequirements/associate-science/>)

**Total Program Hours: 63-64**