

# Associate of Science with Emphasis in Information Systems Technology

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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 (<http://www.jccc.edu/academics/computers/programming>)

(Major Code 2940; State CIP Code 24.0101)

## Associate of Science

### First Semester

|                    |                          |           |
|--------------------|--------------------------|-----------|
| CS 134             | Programming Fundamentals | 4         |
| ACCT 121           | Accounting I             | 3         |
| SPD 121            | Public Speaking          | 3         |
| MATH 171           | College Algebra*         | 3         |
| ENGL 121           | Composition I*           | 3         |
| <b>Total Hours</b> |                          | <b>16</b> |

### Second Semester

|                                       |  |     |
|---------------------------------------|--|-----|
| ENGL 122                              | Composition II*  | 3   |
| CS 200                                | Concepts of Programming Algorithms Using C++*  | 4   |
| CIS 204                               | UNIX Scripting and Utilities*  | 3   |
| BIOL 135<br>or CHEM 124<br>& CHEM 125 | Principles of Cell and Molecular Biology<br>General Chemistry I Lecture*<br>and General Chemistry I Lab* | 4-5 |
| 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** **17-18**

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

### Third Semester

|                    |  |           |
|--------------------|--|-----------|
| CS 235             | Object-Oriented Programming Using C++* | 4         |
| CS 210             | Discrete Structures I*                 | 3         |
| CIS 260            | Database Management*                   | 4         |
| PSYC 130           | Introduction to Psychology             | 3         |
| ECON 132           | Survey of Economics                    | 3         |
| <b>Total Hours</b> |  | <b>17</b> |

**Fourth Semester**

|   |                                  |           |
|---|----------------------------------|-----------|
| CS 250  | Basic Data Structures using C++* | 4         |
| CS 211  | Discrete Structures II*          | 3         |
| PHYS 130  | College Physics I*               | 5         |
| Health and/or Physical Education Elective ^   |                                  | 1         |
| 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. |                                  |           |
| <b>Total Hours</b>  |                                  | <b>16</b> |

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

**Total Program Hours: 66-67**