

# Information Systems

## Information Systems

Associate of Arts Degree (Transfer)  
Sioux City Campus

### Program Overview and Opportunities:

This two-year Associate of Arts program is very hands-on and prepares students for entry-level programming jobs. The graduates of this program are well versed in Java, C++, and databases. The program provides the knowledge-base needed for entry-level job opportunities in the field and at the same time is flexible enough to meet the demands of the labor market.

Programmers are employed in almost every industry, but the largest concentration is in computer systems design and related services. Large numbers of programmers also work for telecommunications companies, software publishers, financial institutions, insurance carriers, educational institutions, and government agencies. Many in this field also work as independent contractors or consultants.

According to the Bureau of Labor Statistics, "Overall, employment of computer software engineers and computer programmers is projected to increase by 21 percent from 2008 to 2018, much faster than the average for all occupations."

### Information Systems Curriculum

Course #	Title	Credits
<b>CSC 142</b>	Computer Science .....	4
<b>MAT 110</b> or higher	.....	3
<b>ENG 105</b>	Composition I .....	3
	Sociology/Behavior General Education Elective .....	3
<b>CSC 110</b>	Introduction to Computers .....	3
<b>CSC 153</b>	Data Structures .....	4
<b>CIS 171</b>	Java .....	3
<b>CIS 345</b>	Database Design .....	2
	Science General Education Elective .....	4
<b>ENG 106</b>	Composition II .....	3
<b>CIS 215</b>	Server Side Scripting .....	3
<b>CIS 175</b>	Java II .....	3
<b>CIS 333</b>	Database and SQL .....	4
<b>SPC 112</b>	Public Speaking .....	3
	Sociology/Behavior General Education Elective .....	3
	Sociology/Behavior General Education Elective .....	3
	Humanities General Education Electives .....	9
	Distribution Requirement .....	4
	<b>Program Total .....</b>	<b>64</b>

### Program Advisors

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## Information Systems Associate of Arts Degree

### I. General Education Core

#### A. English and Speech (minimum of 9 credits)

ENG 105 and 106  
SPC 112

#### B. Mathematics and Laboratory Sciences (minimum of 8 credits)

Must include one math course and one lab science course. Math and science course selections should be made with advisor's recommendation.

MAT 110, 117, 121, 129, 130, 141, 157, 201, 211, 217, 219  
PHS 120, 151, 170 (no lab)  
BIO 105, 116, 125, 151 (no lab), 163, 169, 197  
CHM 122, 166  
ENV 111  
PHY 162, 212

#### C. Social and Behavioral Sciences (minimum of 9 credits)

Choose one course from each section:

##### Section 1. History and Diverse Cultures

ANT 105  
GEO 121  
HIS 110, 111, 151, 152, 211  
SOC 200, 210

##### Section 2. Social and Political Sciences

ECN 120, 130  
POL 111, 112, 121, 125, 151, 211  
PSY 111, 121  
SOC 110, 120

#### D. Humanities (minimum of 9 credits)

Choose three courses from at least two of the following disciplines

ART 101, 203, 204  
DRA 101, 112  
ENG 221  
FLF 141, 142  
FLG 141, 142, 231, 232  
HUM 101, 220  
LIT 101, 124, 133, 185, 189  
MMS 101  
MUS 100, 202  
PHI 101, 105, 111  
FLS 141, 142, 231, 232  
REL 101, 150  
SPC 122, 140

#### E. Computer Literacy/Computer Technology (minimum of 3 credits)

CSC 110

#### F. Distribution Requirement (minimum of 4 credits)

Minimum of 4 additional credits from B, C, or D above)

### II. Area of Concentration (minimum of 9 credits)

CSC 142, CSC 152

### III. Electives ..... Credits Vary

Consult advisor when selecting electives

**TOTAL CREDITS..... (Minimum) 64**