



## ASSOCIATE OF SCIENCE IN COMPUTER SCIENCE (ASCS)

## ASSOCIATE OF APPLIED SCIENCE IN COMPUTER SCIENCE (AASCS)

*(Offered in the States of Minnesota and Ohio Only)*

### PROGRAM DESCRIPTION

This program prepares students with the necessary academic knowledge and technical competencies for entry-level positions in the computer information systems development industry. These career opportunities may be in areas such as computer programming, desktop and distributed application design and development, database application design and development, and end-user support.

### PROGRAM OBJECTIVES

Upon completion of their program, the student should be able to:

1. Demonstrate the ability to define, evaluate, recommend, and apply appropriate information solutions to a range of programming methods and languages to formulate business solutions.
2. Demonstrate proficiency in designing and developing software solutions utilizing knowledge of operating systems, programming languages, and networking systems.
3. Demonstrate the ability to write clear and concise technical reports and business communications in a variety of environments.
4. Demonstrate the ability to design and implement data-based solutions to meet organizational needs.
5. Think critically, both conceptually and by using mathematical analysis; write and speak effectively; use basic computer applications; and understand human behavior in the context of the greater society.

### POTENTIAL JOB POSITION TITLES

Potential entry-level job position titles include junior programmer, software developer, junior database developer, analyst, and junior support or help-desk professional.

### PROGRAM LENGTH

The average length of time for a student taking a full course load is 5 semesters.

### PROGRAM CONTENT

A minimum of 60 semester credit hours is required for graduation.

### REQUIRED COURSES

All courses, 30 semester credit hours, are required.

Course Number	Course Name	Prerequisite	Credit Hours
IS 103	Programming Logic	None	4.0
IS 109	Object-Oriented Programming 1	IS 103	4.0
IS 112	Computer Networks	IS 102	4.0
IS 180	Database Concepts and Applications I	IS 103	4.0
IS 185	Computer Architecture and Troubleshooting I	None	4.0
IS 207	Object-Oriented Programming 2	IS 109	4.0
IS 210	Discrete Structures for Computer Science	IS 103 and MA 107	3.0
IS 272	Introduction to Computer Security	IS 112	3.0

## ELECTIVE COURSES

A minimum of 4 semester credit hours is required. Students may take any information systems (IS) or networking and security technology (NT) course.

## REQUIRED COURSES IN GENERAL EDUCATION

Students enrolled in this associate's degree must complete a minimum of 24 semester credit hours in general education distributed among the following disciplines. Refer to the General Education section of the catalog for Herzing University courses that would satisfy these requirements. \*

- 1 Semester Credit Hours in Information Literacy
- 3 Semester Credit Hours in English Composition
- 3 Semester Credit Hours in Speech
- 4 Semester Credit Hours in Computer Applications ♦
- 4 Semester Credit Hours in Mathematics (College Algebra or Above)
- 3 Semester Credit Hours in Social or Behavioral Science
- 3 Semester Credit Hours in Natural Science or Humanities With a Critical Thinking Focus \*\* ▲ ♦
- 3 Semester Credit Hours in General Education Electives ♦

\* Transfer students may transfer courses that are within 1 semester credit hour of the courses listed above to meet these discipline requirements. Any resulting deficiency in the total of 24 semester credit hours required in general education may be made up with general education electives from any of the listed disciplines.

\*\* A course with a critical thinking focus would be a course that addresses the theories and application of critical analysis with an emphasis on developing sequential reasoning skills. Examples may be courses in critical thinking, philosophy, logic, or science.

▲ Students in the state of Georgia must take a science course to fulfill this requirement.

♦ The state of Minnesota requires a minimum of 20 semester credit hours of general education for associate's degrees, not counting computer applications. However, all Herzing University students in the AASCS program must complete a minimum of 24 semester credit hours in general education, including computer applications, to complete the requirement for graduation from this associate's degree program. Minnesota students must complete at least 2 semester credit hours of general education in the humanities.

## PERSONAL DEVELOPMENT COURSES

2 semester credit hours are required. Students taking the IS 294 Internship must also take PD 214.

Course Number	Course Name	Prerequisite	Credit Hours
PD 120	Personal Financial Management	None	1.0
PD 155	Customer Services	None	1.0
PD 200	Career Development Seminar	None	1.0
PD 214	AS/AAS/BS Internship Preparation	None	0.0

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.herzing.edu/academics/computer-science>.