

ASSOCIATE OF APPLIED SCIENCE IN COMPUTER INFORMATION SYSTEMS

The computer information systems program offers students the flexibility of earning either a two-year AAS degree or continuing for an additional two years to obtain a four-year BSAS degree through the two-plus-two program.

This discipline covers both the technical and end-user aspects of computing, using PCs through mainframe computers with hands-on experience.

Student skills are developed in computation that includes:

- application programming
- networking and telecommunications
- database design
- cyber security
- analysis of complex business and technical environments

CIS graduates of the AAS degree program will continue their studies towards a bachelor's degree in a computer or information technology area or obtain employment as programmers, computer specialists, and in other closely related fields.

CIS graduates of the BSAS degree program will obtain full-time employment as programmers, network administrators, systems analysts, computer specialists, and in other closely related fields.

Associate Degree Program

The computer information systems associate degree program emphasizes the use of computers to solve business or science problems. The graduate may be employed in positions involving direct use of microcomputers and mainframe computers for business or science administration and decision support applications. This degree may be earned in four semesters if students average 16 hours per semester.

Students wishing to receive the Associate of Applied Science in computer information systems must complete the following:

| COURSE | TITLE | S.H. |
|---|--|------|
| FIRST YEAR REQUIREMENT - STUDENT SUCCESS | | |
| YSU 1500 | Success Seminar | 1-2 |
| or SS 1500 | Strong Start Success Seminar | |
| or HONR 1500 | Intro to Honors | |
| General Education Requirements | | |
| ENGL 1550 | Writing 1 | 3-4 |
| or ENGL 1549 | Writing 1 with Support | |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| MATH 1570 | Applied Calculus 1 | 4 |
| 2 Gen Ed courses from two of the three areas: NS (one must have a lab), AH, or SS | | 6 |
| Major Requirements | | |
| CSIS 1590 | Survey of Computer Science and Information Systems | 3 |
| CSIS 1595 | Fundamentals of Programming and Problem-Solving 1 | 3 |
| CSIS 2605 | Fundamentals of Programming and Problem-Solving 2 | 3 |
| CSIS 3722 | Development of Databases | 3 |
| CSIS 3723 | Networking Concepts and Administration | 3 |

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|--|------------------------------------|--------------|
| CSIS 3726 | Visual/Object-Oriented Programming | 4 |
| CSIS 3760 | Electronic Commerce Programming | 3 |
| ACCT 2602 | Financial Accounting | 3 |
| Support Courses | | |
| ACCT 2603 | Managerial Accounting | 3 |
| ENGL 3743 | Professional and Technical Writing | 3 |
| PHIL 2619 | Introduction to Logic | 3 |
| Electives | | |
| Select at least 5-6 additional semester hours of upper division CIS electives. | | 6-7 |
| Total Semester Hours | | 60-63 |

Year 1

| Fall | S.H. | |
|-----------------------|--|-----------|
| YSU 1500 | Success Seminar | 1 |
| CSIS 1590 | Survey of Computer Science and Information Systems | 3 |
| CSIS 1595 | Fundamentals of Programming and Problem-Solving 1 | 3 |
| ENGL 1550 | Writing 1 | 3 |
| MATH 1570 | Applied Calculus 1 | 4 |
| Natural Science GER | | 3 |
| Semester Hours | | 17 |

Spring

| | | |
|-----------------------|---|-----------|
| CSIS 2605 | Fundamentals of Programming and Problem-Solving 2 | 3 |
| ENGL 1551 | Writing 2 | 3 |
| CMST 1545 | Communication Foundations | 3 |
| PHIL 2619 | Introduction to Logic | 3 |
| PHIL 2625 | Introduction to Professional Ethics | 3 |
| Semester Hours | | 15 |

Year 2

| Fall | S.H. | |
|-----------------------|--|-----------|
| CSIS 3722 | Development of Databases | 3 |
| CSIS 3723 | Networking Concepts and Administration | 3 |
| CIS or CSIS Elective | | 3 |
| CIS or CSIS Elective | | 3 |
| ACCT 2602 | Financial Accounting | 3 |
| Semester Hours | | 15 |

Spring

| | | |
|-----------------------------|------------------------------------|-----------|
| CSIS 3726 | Visual/Object-Oriented Programming | 4 |
| CSIS 3760 | Electronic Commerce Programming | 3 |
| CIS or CSIS Elective | | 3 |
| ACCT 2603 | Managerial Accounting | 3 |
| ENGL 3743 | Professional and Technical Writing | 3 |
| Semester Hours | | 16 |
| Total Semester Hours | | 63 |

Learning Outcomes

1. The Associates program in Computer Information Systems provides preparation for students to develop problem-solving techniques to aid in the design, coding, debugging and documentation of high-level programming languages.
2. The Associates program in Computer Information Systems provides preparation for students to understand the basic structure, design, development, implementation, and modification of databases for use in management of information systems.

2 Associate of Applied Science in Computer Information Systems

3. The Associates program in Computer Information Systems provides preparation for students to understand network topologies and the design, administration, and performance monitoring of computer networks and network applications.
4. The Associates program in Computer Information Systems provides preparation for students to use visual/object-oriented programming languages to develop interactive, database and internet programs.
5. The Associates program in Computer Information Systems provides preparation for students to write programs for client/server systems related to electronic commerce using server-side languages such as Perl and client-side languages such as JavaScript.