#### **INACTIVE PROGRAM**

## (025) Associate in Applied Science

This program consists of a core of courses that provide skills in the area of computer programming. This program can also be the foundation for advancement to higher level positions in an expanding field. In addition to learning to design and write programs students also learn the fundamentals of information systems, so that they will be equipped to understand the role of programs in specific business environments.

# Work and Employment

Computer programmers write software and prepare lists of logical steps the computer follows to organize data, solve a problem, or do other tasks. Applications programmers write programs to handle specific jobs such as programs to control inventory or provide access to online databases. They may work for all types of firms that use computer systems. Systems programmers usually work for organizations with large computer centers and for firms that manufacture computers or develop software. They make changes in the sets of instructions that determine how the computer handles the various jobs it has been given. Programming requires logic, abstract thinking and attention to detail.

## **Program Contacts at Sauk Valley Community College**

Counseling Office, 815/835-6208;

Kevin Megill, Associate Professor of Computer Information Systems, 815/835-6251; Valarie Wittman, Associate Professor of Computer Information Systems, 815/835-6388.

Major Field Requirements

- CIS Elective 1 Semester hour(s)
- \* Programming Electives 9 Semester hour(s)
- \*\* Advanced Programming Electives 3 Semester hour(s)
- ACC 101 Financial Accounting 4 Semester hour(s)
- ACC 102 Managerial Accounting 4 Semester hour(s)
- BUS 103 Introduction to Business 3 Semester hour(s)
- CIS 101 Fundamentals of Computer Information Systems 3 Semester hour(s)
- CIS 130 Information Systems Management 3 Semester hour(s)
- CIS 150 Fundamentals of Business Computer Programming 3 Semester hour(s)
- CIS 210 Systems Analysis and Design 3 Semester hour(s)
- CIS 214 Computer Operating Systems 3 Semester hour(s)
- CIS 222 Assembler Language Programming 3 Semester hour(s)
- OI
- MAT 230 Discrete Mathematics 3 Semester hour(s)
- CIS 229 Database Management Systems 3 Semester hour(s)

Minimum Hours for Major Field Requirement: 45

General Education Requirements - Sem/Hrs: 19-20

- Communications 6 Semester hour(s)
- Humanities/Fine Arts 3 Semester hour(s)
- Social/Behavioral Science 3 Semester hour(s)
- Physical/Life Science 3 Semester hour(s)
- Mathematics (MAT 121 or MAT 220) 3-4 Semester hour(s)
- Orientation (PSY 100) 1 Semester hour(s)

Total Hours Required for A.A.S. Degree: 64-65

### Suggested Program

#### First Semester - Sem/Hrs: 17

- Humanities/Fine Arts 3 Semester hour(s)
- ACC 101 Financial Accounting 4 Semester hour(s)
- BUS 103 Introduction to Business 3 Semester hour(s)
- CIS 150 Fundamentals of Business Computer Programming 3 Semester hour(s)
- ENG 101 Composition I 3 Semester hour(s)
- PSY 100 Orientation\*\* 1 Semester hour(s)

Second Semester - Sem/Hrs: 16-17

- CIS \*Programming Electives 6 Semester hour(s)
- ACC 102 Managerial Accounting 4 Semester hour(s)
- CIS 101 Fundamentals of Computer Information Systems 3 Semester hour(s)
- MAT 121 College Algebra 4 Semester hour(s)
- OI
- MAT 220 Finite Mathematics 3 Semester hour(s)

Third Semester - Sem/Hrs: 15

- CIS \*Programming Electives 3 Semester hour(s)
- CIS 130 Information Systems Management 3 Semester hour(s)
- CIS 210 Systems Analysis and Design 3 Semester hour(s)
- CIS 214 Computer Operating Systems 3 Semester hour(s)
- CIS 222 Assembler Language Programming 3 Semester hour(s)
- or
- MAT 230 Discrete Mathematics 3 Semester hour(s)

Fourth Semester - Sem/Hrs: 16

- CIS Elective 1 Semester hour(s)
- CIS \*\*Advanced Programming Elective 3 Semester hour(s)
- Physical/Life Science 3 Semester hour(s)
- Social/Behavioral Science 3 Semester hour(s)
- CIS 229 Database Management Systems 3 Semester hour(s)
- ENG 111 Business and Technical Communication 3 Semester hour(s)

#### Footnotes

<sup>\*</sup>Select 9 hours from: CIS 122, CIS 203, CIS 204, CIS 205, CIS 206, CIS 207, CIS 208

<sup>\*\*</sup>Select 3 hours from: CIS 204, CIS 208, CIS 234