



# PROGRAMS OF **study**

## **COMPUTER SCIENCE**

ASSOCIATE IN SCIENCE



### **PROGRAM DESCRIPTION**

The Computer Science program provides students with a solid grounding in both theoretical and practical topics in computer science, emphasizing the concepts that underlie computer design and development, languages, and systems. The program provides the foundational courses typically encountered in the first two years of study in most baccalaureate programs. Core courses in programming, algorithms and data structures, discrete math, and computer architecture constitute the nucleus of this program. Selected courses in the liberal arts support and enhance this central core. The curriculum is designed to develop problem-solving and critical-thinking skills and to prepare students for rewarding and challenging careers.

### **CAREER OPPORTUNITIES**

Opportunities for computer science graduates occur in a wide variety of settings including large or small software and computer services companies, private industry, government, banking, healthcare and many more. Graduates may also choose to continue their education at a four-year institution in Computer Science or a related field.



## COMPUTER SCIENCE, A.A.S. ASSOCIATE IN APPLIED SCIENCE

*The sequencing of courses in this program begins in the fall semester.*

*Students entering in the spring or summer will likely take longer than two years to complete the program.*

| Curriculum Requirements: 62 credits                          | Credits   | Grade | Semester |
|--|-----------|-------|----------|
| <b>First Year, Fall Semester</b>                             |           |       |          |
| CIS 170 Problem Solving and Programming                      | 4         |       |          |
| MAT 120 Discrete Math  | 3         |       |          |
| ENG 101 College Composition                                  | 3         |       |          |
| General Education, Core IV, Lab Science *                    | 4         |       |          |
| <b>Semester Total</b>  | <b>14</b> |       |          |
| <b>First Year, Spring Semester</b>                           |           |       |          |
| CIS 174 Algorithms in Programming                            | 4         |       |          |
| MAT 127 College Algebra <i>or</i> 200 Level MAT course **    | 3         |       |          |
| General Education, Core III                                  | 3         |       |          |
| General Education, Core IV, Lab Science *                    | 4         |       |          |
| Program Elective   | 3         |       |          |
| <b>Semester Total</b>  | <b>17</b> |       |          |
| <b>Second Year, Fall Semester</b>                            |           |       |          |
| CIS 272 Data Structures                                      | 3         |       |          |
| CIS 254 Computer Organization                                | 4         |       |          |
| SPE 101 Oral Communications                                  | 3         |       |          |
| ENG 211 Technical Writing or ENG 212 Business Communications | 3         |       |          |
| Any MAT 200 level course **                                  | 3         |       |          |
| <b>Semester Total</b>  | <b>16</b> |       |          |
| <b>Second Year, Spring Semester</b>                          |           |       |          |
| CIS 275 Systems Programming                                  | 3         |       |          |
| PHI 102 Ethics and Contemporary Society                      | 3         |       |          |
| Program Elective   | 3         |       |          |
| General Education, Core I-IV **                              | 3         |       |          |
| Open Elective  | 3         |       |          |
| <b>Semester Total</b>  | <b>15</b> |       |          |

\* Students planning on transferring to a four-year Computer Science program are advised to determine if they will need to complete a two-course sequence in a lab science, for example Chemistry I and Chemistry II.

*Articulation agreements exist between York County Community College and various colleges and universities.  
Please, contact Career and Transfer Services for information regarding these agreements.*

#### DISCLAIMER

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