

# Information Technology

## Associate in Applied Science Degree Certificate of Proficiency

Program **A4700**  
CIP 110201



The associate degree, concentrations and certificates in Information Technology, based on guidelines from the Association for Computing Machinery, prepare students for entry-level employment that supports computing in a networked environment. Positions include PC technicians, network administrators, help desk specialists, technical support specialists, and customer service representatives.

The A.A.S. degree may also prepare students to transfer to career-oriented B.S. degree programs in web-site design and development, IT administration, e-commerce, network engineering, computer system support, and programming and database technology.

Successful graduates will be able to:

- explain computing practices and procedures found in most organizations;
- use printed and online technical documentation;
- understand, configure, and install hardware and software, including Internet user software;
- understand, describe, and apply network protocols and standards;
- describe how the Internet works;
- pass industry certifications relative to the student's specialization, including A+, NET+, Linux+, and Security+; Microsoft's MCTS, MCITP, MCSA, and MCSE; and Cisco's CCNA.
- work effectively individually and in workgroups to install and implement information technology;
- demonstrate written and oral communication skills.

The A.A.S. in Information Technology was not developed as a transfer curriculum. However, students have successfully transferred to, and completed bachelor's degrees at, several technically-oriented institutions including NJIT, DeVry University, and Pierce College.

Admission requires a high school diploma or its equivalent, one year of high school algebra, and computer literacy. Applicants must demonstrate competency in English composition, reading, and mathematics as determined by placement testing. Students who are required to complete foundations courses must plan their curriculum with an IT/IS faculty advisor.

The Information Technology A.A.S. degree and Certificate of Proficiency programs allow students to focus in the following areas:

- Computer Network Technology
- Computer Information Technology
- Programming and Database Management Technology
- Website Design and e-Commerce Technology
- Computer Support Technology
- Cyber Security Technology
- Open Source Applications Specialist

**NOTE:** All program listings are subject to periodic updates. Please consult your program advisor, academic division, or [www.mccc.edu/programs\\_degree](http://www.mccc.edu/programs_degree)

### A.A.S. Curriculum

Code	Course (lecture/lab hours)	Credits
ENG 101	English Composition I (3/0)	3
NET 102	Introduction to PC Hardware and Software (2/3)	3
NET 104	Fundamentals of Computer Networks (2/2)	3
IST —	Computer Concepts requirement (2/2) <sup>1</sup>	3
— —	NET or IST elective (2/2) <sup>2</sup>	3
ENG 102	English Composition II (3/0)	3
MAT 135	Intermediate Algebra with Applications <sup>3</sup> (4/0)	4
NET 103	IT Essentials (2/3)	3
— —	NET or IST elective (2/2) <sup>2</sup>	3
— —	NET or IST elective (2/2) <sup>2</sup>	3
ECO 111	Macroeconomics (3/0)	3
IST 253	Database Concepts (2/2)	3
CIS 173	PC Applications: Database (2/2)	3
— —	NET or IST elective (2/2) <sup>2</sup>	3
— —	NET or IST elective (2/2) <sup>2</sup>	3
— —	NET or IST elective (2/2) <sup>2</sup>	3
BUS 230	Global Environment of Business (3/0)	3
HPE 110	Concepts of Health and Fitness (1/2) <sup>†</sup>	2
— —	IT Management elective (2/2) <sup>4</sup>	2-4
— —	General Education elective <sup>5</sup>	3
— —	NET or IST elective (2/2) <sup>2</sup>	3
— —	NET or IST elective (2/2) <sup>2</sup>	3
		62-64

<sup>1</sup> Select from IST 102 (preferred), 101, 109.

<sup>2</sup> Options at [www.mccc.edu/info\\_tech](http://www.mccc.edu/info_tech).

<sup>3</sup> Students not intending to transfer may substitute a lower-level mathematics course.

<sup>4</sup> Select from ACC 111; IST 209, 251, 256, 298; NET 126.

<sup>5</sup> Select course from either Social Science or Humanities general education categories.

<sup>†</sup>HPE111 is an acceptable alternative.

The Certificate of Proficiency in Information Technology is intended to provide the technical material typically covered in the A.A.S. degree, or to provide working students with opportunities to learn new skills.

Certificate coursework may be applied toward the A.A.S. degree.

### Certificate Curriculum

Code	Course (lecture/lab hours)	Credits
ENG 101	English Composition I (3/0)	3
— —	General Education elective	3
— —	NET or IST electives	28-30
		34-36

Visit [www.mccc.edu/info\\_tech](http://www.mccc.edu/info_tech) for specific information about degree concentrations and available certificates.