

Information Technology

Program

Information Technology

Degree Type

Associate in Science

This associate degree is under revision and is not currently accepting new students.

Information Technology (IT) is a STEM discipline that covers the computing hardware, software, networks, and other technology that most modern organizations use. As the complexity and performance of technology have increased, so has the demand for highly skilled workers. WMCC offers an extremely flexible Associate in Science hybrid degree in IT that suits personal lifestyles and work commitments and generates excellent opportunities for college transfer and employment.

Industry Focused: The Associate in Science degree in Information Technology provides students with extensive training in three areas:

Networking: This IT degree is offered in conjunction with Cisco Networking Academy program. As of 2021, students work with the new CCNA Version 7.0 curriculum. The courses in the CCNAv7 curriculum help students develop a comprehensive foundation for designing, securing, operating, and troubleshooting modern computer networks, ranging from small business networks to enterprise networks. The curriculum emphasizes hands-on learning and essential career skills, including problem solving and collaboration. This degree also prepares students for the Cisco Certified Networking Associate (CCNA) certification examination.

Operating Systems and Security: This module of courses covers network operating systems. It also prepares students for the cybersecurity challenges they will face in the IT industry, and it prepares them for the CompTIA Security+ Examination.

Programming: This degree introduces programming in several languages. Students start with a foundation in C# and then expand to object-orientated programming with Java and a course on SQL databases. According to Coding Dojo's list of the Most In-Demand Programming Languages for 2019, Java and SQL are in the top three.

Flexibility: This IT degree is offered in a face-to-face/hybrid (FH) format. Consequently, students see their professors on campus every other week for laboratory work and questions. They also have the flexibility to learn much of the material at home on their own schedule. This flexibility offers the best of both worlds. Note: This degree has general education requirements.

Pathways: Cisco and CompTIA certifications are industry-recognized achievements that are continually updated. These certifications provide students with credentials that boost their already excellent employment opportunities. WMCC's IT program also has an active advisory board that not only reviews the curriculum but also provides opportunities for real-world IT experiences. Students completing the associate degree in Information Technology with course grades of C or better can transfer all credits earned at WMCC to Plymouth State University's Bachelor of Science in Information Technology or Rivier University's Bachelor of Science in Cybersecurity Management and enter as a junior. The IT program has also developed a pathway to a bachelor's degree in Computer Science at the University of New Hampshire Manchester and Granite State College.

Students may also opt to enroll in the two-semester IT certificate, designed to provide specific skills and competencies for the computer user.

First Year, Fall Semester

Course Number	Title	Lecture	Lab	Credits
ENGL120W	College Composition	4	0	4
IST113W	IT Essentials	3	2	4
IST125W	Introduction to Programming	3	2	4
IST151W	Computer Networking I	3	0	3
Sub-Total Credits		13	4	15

First Year, Spring Semester

Course Number	Title	Lecture	Lab	Credits
IST114W	Linux Essentials	3	0	3
IST153W	Computer Networking II	3	2	4
PHYS118W	The Physics Raspberry Pi	2	2	3
	Mathematics	3	0	3-4
Sub-Total Credits		11-12	4	14

Summer Semester

Course Number	Title	Lecture	Lab	Credits
IST200W	IT Internship	0	3	1
Sub-Total Credits		0	3	1

Second Year, Fall Semester

Course Number	Title	Lecture	Lab	Credits
ENGL211W	Professional Writing	3	0	3
IST232W	Computer Security	3	0	3
IST251W	Computer Networking III	3	0	3
	Humanities	3	0	3
	Mathematics	3	0	3-4
Sub-Total Credits		15-16	0	16

Second Year, Spring Semester

Course Number	Title	Lecture	Lab	Credits
IST115W	Object Oriented Programming with Java	3	2	4
IST230W	Network Servers and Security	3	0	3
IST235W	SQL Databases	3	0	3
IST253W	Computer Networking IV	3	0	3
	Social Science	3	0	3
Sub-Total Credits		15	2	16
Total Credits				62