# Information Systems Technology & Management: Technology Concentration

Associate in Science

**DIVISION OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS**

Students completing Information Systems Technology & Management:  Technology will be knowledgeable and experienced in systems and technologies. Students will be able to:  support various types of technologies related to operating systems, have experience working with various web technologies related to design, understand fundamental cybersecurity issues, know how to support and build Computer Networks in Windows and Linux, design, create and use databases, write scripts to perform administrative operations related to computer systems.

The current job market requires that students have a broader background that includes exposure to the latest technologies related to web technologies as well as cybersecurity and exposure to administrative tasks in the Windows and Linux systems.  This degree will prepare students for careers in fields related to helpdesk, technology, networks, and web support.

Students completing this program will be prepared and are encouraged to gain industry credentials by taking industry standard examinations offered by leading Networking and Cybersecurity certification organizations.

Upon successful completion, the Associate in Science Degree in Information Systems Technology & Management: Technology is awarded.

**PROGRAM FOOTNOTES**

**Humanities Electives:**
Art, Communication, English (EN 103 or higher), ESL (ES 100 or higher; up to 6 credits), Film, Foreign Language, Humanities, Literature, Music, Oral Communication, Philosophy, Photography, Sign Language, Theater Arts

**Social Science Electives:**
Anthropology, Economics, Geography, Government, History, Law, Psychology, Sociology

**Program Electives:**
CS 120 Programming I, CS 123 Python Programming, CS 126

| COURSE | COURSE TITLE | CREDITS |
|---|---|---|
| *First Year* | *Semester 1* | |
| CS 107 | Fundamentals of the Internet | 1 |
| CS 108 | Fundamentals of Web Design | 1 |
| CS 109 | Web and Social Media | 1 |
| CS 110 | Introduction to Computer Science | 4 |
| CT 100 | Critical Thinking | 3 |
| EN 101 | English Composition I | 3 |
| | **credits:** | 13 |
| *First Year* | *Semester 2* | |
| CS 118 | Scripting | 3 |
| CS 113 | Fundamentals of IT | 4 |
| CS 242 | Computer Networks | 4 |
| EN 102 | English Composition II | 3 |
| | Program Elective | 3/4 |
| | **credits:** | 17/18 |
| *Second Year* | *Semester 1* | |
| CS 213 | Database Management Systems | 4 |
| CS 116 | Fundamentals of Cybersecurity | 4 |
| MA 105 | Introduction to Statistics | 3 |
| | Program Elective | 3/4 |
| | **credits:** | 14/15 |
| *Second Year* | *Semester 2* | |
| | Social Science Elective | 3 |
| | Humanities Elective | 3 |
| | Humanities Elective | 3 |
| | OR | |
| | Social Science Elective | 3 |
| | Program Elective | 3 |
| | Program Elective | 4 |
| | **credits:** | 16 |
| | *Summer* | |
| CS 280 | Computer Science Internship | 1 |
| | **Total Credits:** | 61/63 |

Digital Imaging, CS 141 Linux Management, CS 176 Web Design, CS 180 Intro to Operating Systems, CS 200 Programming II, CS 235 Systems Analysis and Design, CS 241 Web Site Development, CS 243 Computer Networks II

Quantitative skills are a MassBay graduation competency for associate degree programs. Prior to graduation, students must demonstrate this competency by completing a 100-level math course (not MAC); or placing into a 200-level mathematics course.

*AY '24-'25*