***Computer Information Systems:*** *Associate in Science – Non-Transfer*

*Focus: Programming Database*

Computers are ubiquitous. They are in our hospitals, our educational institutions, our businesses, and our homes. In CIS you will explore how digital solutions are analyzed, developed, and implemented into artifacts that humans use every day. As a CIS graduate, the world will be your oyster. Your skills are in great demand in all fields of business, industry, and education.

***Please see a Pathways Counselor:*** Create an education plan customized to meet your needs. [Contact a Counselor](https://www.msjc.edu/hub/)

Transfer Majors/Award Focus

* Computer Science, A.S.-T CSU, CSUSM, UC
* Computer Information Systems, A.S., Focus: Authoring, Networking, Programming: General, Database, Web
* Internet Authoring, Networking, Programming Certificate

GE Pattern/Units

* GE Pattern: Option A
* Total Units: 60

**Program maps** indicate the major coursework and recommended general education courses to fulfill your degree in 2 years (approximately 15 units/semester or 30 units/year). If you are a part-time student, start Semester 1 courses and follow the course sequence. Some of the courses listed may be substituted by another course. Please view these options in the official course [catalog](https://catalog.msjc.edu/instructional-programs/).

***Semester 1 14 Units***

|  |  |  |  |
| --- | --- | --- | --- |
| ✔ | COURSE | TITLE | UNIT |
| ⬜ | ENGL-101 | College Composition | 4 |
| ⬜ | MATH-105 | College Algebra | 4 |
| ⬜ | CSIS-101 or  CSIS 111B | Introduction to Computers and Data Processing or  Fundamentals of Computer Programming | 3 |
| ⬜ | CSCR-100 | College Success and Career Readiness | 3 |

***Semester 2 15 Units***

|  |  |  |  |
| --- | --- | --- | --- |
| ✔ | COURSE | TITLE | UNIT |
| ⬜ | CSIS-116E | Python Programming - Level 1 | **3** |
| ⬜ | PS-101 | Introduction to American Government and Politics | 3 |
| ⬜ | GEOG-108 | World Regional Geography | 3 |
| ⬜ | CSIS-201 | System Analysis and Design | 3 |
| ⬜ | ART-100 | Art Appreciation | 3 |

Career Options

Networking & IT Administration (A, B)

Web Development (A, B)

Programming (A, B)

Find more careers: [msjc.emsicc.com](http://msjc.emsicc.com)

Required Education: SM: some college; C: Certificate; A: Associate, B: Bachelor’s, M: Master’s; D: Doctorate

Financial Aid

Financial aid is determined by the number of credit hours you take in a semester. Maximize your financial aid by taking 12-15 units per semester.

***Semester 3 16 Units***

|  |  |  |  |
| --- | --- | --- | --- |
| ✔ | COURSE | TITLE | UNIT |
| ⬜ | CSIS-118B | Computer Organization & Assembly Language | 3 |
| ⬜ | CSIS-126E | Python Programming - Level 21 | 3 |
| ⬜ | BIOL-100 or  BIOL-115 | Human Biology or  Topics in Biology | 4 |
| ⬜ | CSIS-160 | Information Security Systems | 3 |
| ⬜ | COMM-103 | Interpersonal Communication | 3 |

***Semester 4 15 Units***

|  |  |  |  |
| --- | --- | --- | --- |
| ✔ | COURSE | TITLE | UNIT |
| ⬜ | CSIS-115A or  CSIS-114A | Web Development - Level 1 or  SQL Programming - Level 1 | 3 |
| ⬜ | CSIS-525 or  CSIS-124A | Web Development - Level 21 or  SQL Programming - Level 21 | 3 |
| ⬜ | CSIS-113B | Java Programming - Level 1 | 3 |
| ⬜ | CSIS-211 | Introduction to Data Structures and Algorithms 1 | 3 |
| ⬜ | ECON-201 or  PSYC-101 | Principles of Macroeconomicsor  Introduction to Psychology | 3 |

Notes***:***

## 1 Take second 8 weeks: CSIS-525 Web Development - Level 2, CSIS-124A SQL Programming - Level 2, CSIS-123B Java Programming - Level 2, CSIS-211 Introduction to Data Structures and Algorithms.

Work Experience

Sign up for a special project or internship opportunity. Gain [work experience](https://msjc.edu/careereducation/cwee/index.html) and earn credits.