SCIENCE, MATH & ENGINEERING PATHWAY
PROGRAM MAP: CATALOG YEAR: 2023-24

MSJC
MT. SAN JACINTO COLLEGE

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: A local degree requires a minimum of 60 degree-applicable units with a minimum 2.0 GPA overall. Contact a Counselor to create an education plan customized to meet your needs.

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.

Semester 1 ***14 Units***

	COURSE	TITLE	UNIT
☐	ENGL-101	College Composition	4
☐	MATH-105	College Algebra [1]	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
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.

Notes: [1] AREA G (Math Competency) can be demonstrated by a high school math course at or above the level of Algebra 2 with a grade of C or better.

Semester 3 ***16 Units***

	COURSE	TITLE	UNIT
☐	CSIS-118B	Computer Organization & Assembly Language	3
☐	CSIS-126E	Python Programming - Level 2[1]	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-514A	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 Macroeconomics or 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 and earn credits.