

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



Computer Information Systems: Associate in Science – Non-Transfer Focus: Networking

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
<input type="checkbox"/>	ENGL-101	College Composition	4
<input type="checkbox"/>	MATH-105	College Algebra ¹	4
<input type="checkbox"/>	CSIS-101	Introduction to Computers and Data Processing	3
<input type="checkbox"/>	CSCR-100	College Success and Career Readiness	3

Semester 2

15 Units

	COURSE	TITLE	UNIT
<input type="checkbox"/>	CSIS-202	CCNA 1 Computer Networks	3
<input type="checkbox"/>	PS-101	Introduction to American Government and Politics	3
<input type="checkbox"/>	GEOG-108	World Regional Geography	3
<input type="checkbox"/>	CSIS-201	System Analysis and Design	3
<input type="checkbox"/>	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
<input type="checkbox"/>	CSIS-791	CCNA 2 Routing and Switching Essentials ¹	3
<input type="checkbox"/>	CSIS-592	CCNA 3 Scaling Networks ²	3
<input type="checkbox"/>	BIOL-100 or BIOL-115	Human Biology or Topics in Biology	4
<input type="checkbox"/>	CSIS-160	Information Security Systems	3
<input type="checkbox"/>	COMM-103	Interpersonal Communication	3

Semester 4**15 Units**

	COURSE	TITLE	UNIT
<input type="checkbox"/>	CSIS-581	OS Installation and Configuration	3
<input type="checkbox"/>	CSIS-115A	Web Development - Level 1	3
<input type="checkbox"/>	CSIS-514A	SQL Programming - Level 1	3
<input type="checkbox"/>	ECON-201 or PSYC-101	Principles of Macroeconomics or Introduction to Psychology	3
<input type="checkbox"/>	CSIS-164	Cybersecurity: Ethical Hacking	3

Notes:¹Take first 8 weeks: CSIS-791 CCNA 2 Routing and Switching Essentials²Take second 8 weeks: CSIS-592 CCNA 3 Scaling Networks**Work Experience**Sign up for a special project or internship opportunity. Gain [work experience](#) and earn credits.