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



17 Units

15 Units

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

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. <u>Contact</u> a <u>Counselor</u> 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: 63

**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 <u>catalog</u>.

#### Semester 1

Jemester	17 011113		
	COURSE	TITLE	UNIT
	ENGL-101	College Composition	4
	MATH-105	College Algebra <sup>1</sup>	4
	CSIS-101	Introduction to Computers and Data Processing	3
	CSIS-103	Introduction to the Internet	3
	CSCR-100	College Success and Career Readiness	3

#### Semester 2

Junesie	15 01113		
	COURSE	TITLE	UNIT
	CSIS-115A	Web Development - Level 1 <sup>2</sup>	3
	PS-101	Introduction to American Government and Politics	3
	GEOG-108	World Regional Geography	3
	CSIS-525	Web Development - Level 2 <sup>3</sup>	3
	CSIS-111B	Fundamentals of Computer Programming	3

# **Career Options**

Networking & IT Administration (A, B) Web Development (A, B) Programming (A, B) Find more careers: <u>msjc.emsicc.com</u> 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.

Semeste	16 Units		
100	COURSE	TITLE	UNIT
	CSIS-113B or CSIS-116E	Java Programming - Level 1 or Python Programming - Level 1	3
	CSIS-786	Developing ASP.NET Web Applications	3
	BIOL-100 or BIOL-115	Human Biology or Topics in Biology	4
	ART-100	Art Appreciation	3
	ECON-201 or PSYC-101	Principles of Macroeconomics or Introduction to Psychology	3

# Semester 4

Semeste	15 Units		
<b>16</b> -	COURSE	TITLE	UNIT
	CSIS-514A	SQL Programming - Level 1 <sup>2</sup>	3
	CSIS-124A	SQL Programming - Level 2 <sup>3</sup>	3
	CSIS-201	System Analysis and Design	3
	CSIS-202	CCNA 1 Computer Networks	3
	COMM-103	Interpersonal Communication	3

#### Notes:

<sup>1</sup>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.

<sup>2</sup> Take first 8 weeks: CSIS-115A Web Development Level 1, CSIS 514A SQL Programming – Level 1,

<sup>3</sup> Take second 8 weeks: CSIS-525 Web Development - Level 2, CSIS-124A SQL Programming - Level 2

# Work Experience

Sign up for a special project or internship opportunity. Gain work experience and earn credits.