

# Computer Science

Warriors on the Way to STEM  
WOW2STEM

## *College of the Sequoias*

**Do you like puzzles? Problem solving? Math? Science? How about working in teams? Computer Science might be for you. CS majors will use their skills in technological areas such as computer networking, image processing, database design and development and artificial intelligence. Students focus on problem solving, taking into account available technological resources.**

## **What can I do with a degree in Computer Science?**

**Possible careers/fields of work include computer security specialist, game designer, systems analyst, programming, system administrator, network administrator, software engineering, database manager and web development.**

## **How can I participate in WOW2STEM?**

- **Meet with a counselor each semester at your community college.**
- **Follow a student educational plan (SEP) as outlined by a counselor.**
- **Attend presentations and workshops throughout the year.**
- **Follow application dates and deadlines as directed by the Transfer Advisor and CSU Stanislaus.**

For more information you may contact:

**Iqbal Atwal, Transfer Specialist**

**209.667.3164**

**[iatwal@csustan.edu](mailto:iatwal@csustan.edu)**

**[www.csustan.edu/STEM-success](http://www.csustan.edu/STEM-success)**



*Dr. Megan Thomas is a professor in the Computer Science department at CSU Stanislaus. “My own research focuses on exploring how to improve computer science education; this means I’m frequently trying out new types of homework or class activities. When students are interested in research, I’ll help them learn more about whatever they’re interested in—I’ve helped students explore how to make robots react appropriately when they see things, or how to make them move. My students have built web sites for campus projects and mobile apps to help other students”.*

## Computer Science B.S. Roadmap

Prerequisites to Lower-Division Courses	Lower-Division Courses at College of the Sequoias	Major Course Requirements at CSU Stanislaus
MATH 070 or equivalent	CSCI 001 (Programming Concepts/ Method 1)	MATH 2300 - Discrete Structures
CSCI 001 or equivalent	CSCI 002 (Programming Concepts/ Method 2)	CS 2700 - Assembly Language and Computer Architecture (3 units)
MATH 070 or equivalent	MATH 065 (Calculus 1)	CS 3100 - Data Structures and Algorithms (3 units)
MATH 065 or equivalent	MATH 066 (Calculus 2)	CS 3740 - Computer Organization (3 units)
MATH 230 or equivalent	MATH 021 (Intro to Statistics) <u>or</u> SSCI 025 (Statistics-Social Sciences)	CS 3750 - Operating Systems (3 units)  CS 4100 - Programming Languages (WP) (3 units)
MATH 066 or equivalent PHYS 055 & MATH 067 PHYS 056 & MATH 067	<b><u>Choose any one sequence:</u></b> PHYS 055 (Physics 1) & PHYS 056 (Physics 2) & PHYS 057 (Physics 3)	CS 4960 - Seminar in Computer Science (1 unit)  Theory Requirement (6 units)
CHEM 20 or 1 year HS CHEM, & MATH 230 CHEM 001 or equivalent	<u>or</u> CHEM 001 (General Chemistry 1) &  CHEM 002 (General Chemistry 2)	Practice Requirement (3 units)
MATH 230 or equivalent BIOL 001	<u>or</u> BIOL 001 (Principles of Biology 1) & BIOL 002 (Principles of Biology 2)	Electives—Student Choice (12 units)

***Students seeking this major are encouraged to complete lower division courses prior to transferring to Stanislaus State. Students are recommended to meet with a counselor every semester.***

***For all degree requirements, visit [www.csustan.edu/roadmaps](http://www.csustan.edu/roadmaps)***

***Last Updated 09/22/2018***