

Computer Science

Warriors on the Way to STEM
WOW2STEM

Diablo Valley College

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

For more information you may contact:

Iqbal Atwal, Transfer Specialist

209.667.3164

iatwal@csustan.edu

www.csustan.edu/STEM-success



Dr. Megan Thomas is a professor in the Computer Science department at Stanislaus State. “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 Diablo Valley College	Major Course Requirements at Stanislaus State
COMSC 110 or ENGIN 135 Recommended: MATH 192 and eligibility for ENGL 122	COMSC 165 (Advanced Prog with C and C++) <u>or</u> ENGIN 135 (Prog for Scientists and Engineers)	<p>MATH 2300 - Discrete Structures (3 units)</p> <p>CS 3100 - Data Structures and Algorithms (3 units)</p> <p>CS 3740 - Computer Organization (3 units)</p> <p>CS 3750 - Operating Systems (3 units)</p> <p>CS 4100 - Programming Languages (WP) (3 units)</p> <p>CS 4960 - Seminar in Computer Science (1 unit)</p> <p>Theory Requirement (6 units)</p> <p>Practice Requirement (3 units)</p> <p>Electives—Student Choice (12 units)</p> <p>Note: 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.</p>
Recommended: COMSC 110 or ENGIN 135 or equivalent	COMSC 210 (Program Design and Data Structures)	
COMSC 165	COMSC 260 (Assembly Language Prog./Computer Organization)	
MATH 191 or equivalent	MATH 192 (Analytic Geometry and Calculus I)	
MATH 192 or equivalent	MATH 193 (Analytic Geometry and Calculus II)	
MATH 119 or MATH 120	MATH 142 (Elementary Statistics with Probability)	
Co-requisite: MATH 193 or equivalent	<u>Choose any one sequence:</u> PHYS 130 (Physics for Engr. and Scientists A: Mechanics and Wave Motion) &	
PHYS 130 & MATH 292 (may be taken concurrently)	PHYS 230 (Physics for Engr. and Scientists B: Heat and Electro-Magnetism) &	
PHYS 230 & MATH 294 (may be taken concurrently)	PHYS 231 (Physics for Engr. and Scientists C: Optics and Modern Physics)	
CHEM 108 & MATH 120 or MATH 120SP CHEM 120	<u>or</u> CHEM 120 (General College Chemistry 1) & CHEM 121 (General College Chemistry 2)	

For all degree requirements, visit www.csustan.edu/roadmaps

Last Updated 09/22/2018