COMPUTER SCIENCE EDUCATION MINOR

The Computer Science Education minor provides a pathway for students interested in teaching computer science, merging core computational concepts with educational theory and practice. The minor seeks to prepare students for the changing nature of K-12 education and various educational settings. Students will gain a comprehensive overview of key computational concepts, the intricacies of programming, and pedagogical strategies tailored for computer science instruction. Students then have the flexibility to tailor their learning through elective options related to advanced software development, data organization, project development frameworks, web design, and protecting digital assets. It prepares students to navigate and deliver computer science content effectively, fostering critical thinking, problem-solving, and digital literacy skills among learners. With a focus on creating inclusive and engaging learning environments, this minor equips future educators with the knowledge and tools to introduce students to the ever-evolving field of computer science, ensuring they are prepared to thrive in a technology-driven world.

Contact Information

education@css.edu

Learning Outcomes

Upon completion of a minor in Computer Science Education, the student will be able to:

1. Students will deepen their understanding of computer science concepts and principles.
2. Students will learn to teach computer science in various educational settings such as K-12 schools, community colleges, after-school programs, and summer camps.
3. Students will learn effective teaching strategies for computer science education.
4. Students will learn strategies for promoting diversity, equity, and inclusion in computer science education.

Requirements

Students must achieve the following program requirements for all courses listed under Program Requirements and Program Required Courses for the Computer Science Education minor.

Program Requirements

Minor Credits: 16
Minimum Grade: 2.0 GPA

Program Required Courses

Code	Title	Credits
Required Courses		
CIS 1001	Computer Science Principles	4
CIS 2085	Programming I with/Java	4
EDU 4777	Topics in Education (Computer Science Methods)	4
Elective Courses		
An additional 4 credits of CIS electives from the following:		4
CIS 2011	Computer Architectures	
CIS 2087	Programming II w/Java	
CIS 3107	Database Modeling	
CIS 3108	Systems Analysis and Design	
CIS 4041	Web Design	
CIS 4042	Computer Security	
Total Credits		**16**