

The Computer Science Career Education Act of 2017

The Problem: Right now, there are over 500,000 open computing jobs across diverse sectors in the U.S., from banking to cybersecurity, healthcare to agriculture. Yet only 50,000 students graduate with computer science degrees each year. According to the Bureau of Labor Statistics, by 2024, 1 in every 2 STEM jobs will be in computing and there will be 1.3 million jobs openings thanks to growth in the field. Despite the growth of these high-paying jobs, most states do not offer computer science courses as part of their core curriculum in math and science.. The future workforce needs in computer science related fields require that schools, in partnership with the business community, community colleges, universities, and other relevant stake-holders:

- Align secondary education curricula with postsecondary institutions so that students can earn a computer science related degree;
- Ensure computer science curricula are responsive to industry employment demands; and
- Create innovative educational opportunities for students that lead to attainment of industry-recognized credentials.

Computer Science Career Education Act: The CSCE Act will establish a grant program under the Department of Education that will encourage the development of computer science career education programs that meet the market needs of employers and better integrate secondary and postsecondary education. Grants will be awarded to partnerships between State or local education agencies with institutions of higher education, non-profit organizations, and employers with a documented need in the computer science sector. Consortia can apply for funds to develop and operate a 4- or 6-year computer science career education training program that is carried out under an articulation agreement between the members of the consortia.

The program should:

- Include the development of computer science programs for both secondary (grades 6-12) and postsecondary education that are consistent with computer science K-12 standards;
- Link secondary schools and institutions of higher education;
- Create workplace experiences for students through internships, apprenticeships and mentorships with business partners;
- Provide professional development for teachers;
- Include training programs that prepare students for careers in computing; and
- Provide equal access to individuals who are members of underrepresented groups and special populations.