

Career and Technical Education

Career and Technical Education (CTE) in the United States is administered by the U.S. Department of Education, Office of Career, Technical, and Adult Education through funding allocated to states and authorized by the Carl D. Perkins Career and Technical Education Act of 2006. All 50 states, the District of Columbia. and the U.S. territories rely on this funding, as well as state and local investment, to support secondary, postsecondary, and adult CTE programs. CTE programs prepare students for college and careers.¹

Secondary CTE Participators, FY 2015²





In FY 2015, **46%** of secondary and **44%** of postsecondary students enrolled in CTE were economically disadvantaged.²

Career Clusters

Seven of the 16 career clusters in CTE lead to high-skill, high-wage, and high-demand STEM-related careers. These clusters include Agriculture, Architecture, Health, Information Technology, Manufacturing, STEM, and Transportation, Distribution, and Logistics and contain programs that prepare students for nontraditional careers.



Middle-Skill and STEM Jobs

The pipeline to middle-skill and STEM jobs loses young people at every level of the education system. Thus, the supply of sufficiently trained workers will not meet the demand of key industries.

Fast Facts

From 2014 to 2024...

- Computing jobs will grow by **19%**.⁴
- Engineering jobs will grow by **12%**.⁴
- Advanced manufacturing jobs will grow by 16%.⁴
- Of all job openings, 48% will require training at the middle skill-level.⁵

Yet...

- 28% of students who enter an associate's degree program graduate.⁴
- **60%** of students who enter a bachelor's degree program graduate.⁴
- 43% of workers are trained to the middle-skill level.⁵

2016 AP Test Taking and Passing⁶

Students pursuing careers in STEM, particularly computer science and engineering, must become academically prepared early in their educational trajectory.⁷



For the United States, in 2016, college-bound female students earned an average math SAT score of **494**, compared to **524** for male students.⁸

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Data Sources (retrieved April 2017)

¹ https://www.acteonline.org/stateprofiles/

- ⁶ https://research.collegeboard.org/programs/ap/data/participation/ap-2016
- ⁷ http://ieeexplore.ieee.org/document/1264690/

² https://perkins.ed.gov/pims/DataExplorer/CTEParticipant

³ https://perkins.ed.gov/pims/DataExplorer/CTEConcentrator (race not available for clusters)

⁴ http://vitalsigns.changetheequation.org/

⁵ http://www.nationalskillscoalition.org/state-policy/fact-sheets

⁸ https://reports.collegeboard.org/sat-suite-program-results/class-of-2016-results/state-reports