

Tips for Including Labor Market Information in your CTE Program Approval

Career & Technical Education programs prepare learners for a range of occupations that are high skill, high wage, and in demand. Accordingly, when reviewing the type of program you are proposing, review labor market information (alongside other sources, such as business and community feedback) to make sure you are on target to meet local industry need.

Check out the following tips to help you think through these concepts!

Employment Demand Information

When building a CTE program, review employment demand. The [Colorado Labor Market Information \(LMI\) Gateway](#) is a resource that provides long-term occupational projections and current annual wages associated with this program (click the “Occupation Information” link on the home page). You can also find projections and wages on <https://www.onetonline.org/> and <https://www.bls.gov/ooh/>, or via subscription-based resources such as Emsi or Burning Glass.

Many secondary programs will be in a position to include information for a broader field, as they generally offer more general exploration of related careers, while postsecondary programs tend to have a narrower career focus. We will work on providing more standardized responses, where applicable.

Examples of narrative

Here’s an example that works well for a more general secondary business program:

According to the Colorado Department of Labor and Employment, 2018-2028 projections for Business and Financial Operations jobs will increase 1.95% on average per year. Accountants and Auditors show a 2.04% average increase per year. Appraisers and Assessors of Real Estate show a 2.46% average increase per year. Market Research Analysts and Marketing Specialist show an average increase of 3.01% and Management Analysis show 3.01%. Many of these occupations will require advanced degrees. Seven of the top 10 fastest growing high wage jobs are in business, marketing, finance and sales. Occupations include: Sales representatives, Market research analysts and Marketing Specialists, Accountants and Auditors, Business Operations Specialists, Management Analysts, General and Operations Managers, and Financial Managers. Median hourly wages: Management: \$57.54, Business and Financial: \$35.18 and Sales & Related: \$24.35

Here's an example that focuses on a more specific career:

Current state projections for Mechanical Engineers for years 2018 to 2028 shows that the employment demand is Medium with employment outlook as growing. There are 544 projected annual openings. Current entry and experienced wages are \$62,732 and \$124,955, respectively, with a mean annual wage of \$104,214. The education level required for currently posted positions varies as follows: Bachelor's Degree: 83%; Associate's Degree: 7%; Some College, No Degree: 5%.

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Here's an example of analysis for a cybersecurity program—it includes information from a couple of legitimate sources:

In the Denver metropolitan area, on average, over the last 12 months, there were 843 unique job postings per month for Information Security Analysts, while 73 positions were filled according to an August 2018 report by Economic Modeling Specialists Intl. The location quotient that measures the concentration of cybersecurity job demand in Colorado relative to the national average is very high (1.9 versus 1.0) indicating a high need for this profession. The supply/demand ratio is very low in Colorado for this profession indicating a critical gap and a workforce shortage. CyberSeek, a project supported by the National Initiative for Cybersecurity Education (NICE), a program of the National Institute of Standards and Technology (NIST) in the U.S. Department of Commerce, estimates a total of 10,338 current open cybersecurity positions in Colorado with 9,299 in the Denver Metro area and Colorado Springs.

Occupations students will be prepared for upon program completion

In the new program approval system, a list of related occupations automatically populates for some programs. You can review the list and remove or add occupations, as needed. If no information appears, visit O*NET Online and input the program CIP code or the broader CIP code family (first two digits of CIP code) in the [Education Crosswalk Search](#) to identify occupations associated with your program or career pathway.

Examples of occupation lists:

11.0101 Computer and Information Sciences, General

- 11-3021.00 [Computer and Information Systems Managers](#) ☀ **Bright Outlook**
- 15-1111.00 [Computer and Information Research Scientists](#) ☀
- 15-1121.01 [Informatics Nurse Specialists](#) ☀
- 15-1141.00 [Database Administrators](#) ☀
- 15-1142.00 [Network and Computer Systems Administrators](#)
- 15-1143.00 [Computer Network Architects](#)
- 15-1143.01 [Telecommunications Engineering Specialists](#)
- 15-1199.01 [Software Quality Assurance Engineers and Testers](#) ☀
- 15-1199.03 [Web Administrators](#) ☀
- 25-1021.00 [Computer Science Teachers, Postsecondary](#)

15.1301 Drafting and Design Technology/Technician, General

- 17-3011.01 [Architectural Drafters](#) 🟢 **Green**
- 17-3011.02 [Civil Drafters](#)
- 17-3012.01 [Electronic Drafters](#)
- 17-3012.02 [Electrical Drafters](#)

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17-3013.00 [Mechanical Drafters](#)

17-3019.00 [Drafters, All Other](#)

43.0203 Fire Science/Fire-fighting

33-1021.01 [Municipal Fire Fighting and Prevention Supervisors](#)

33-2011.01 [Municipal Firefighters](#)

33-2021.01 [Fire Inspectors](#)

33-2021.02 [Fire Investigators](#)

33-2022.00 [Forest Fire Inspectors and Prevention Specialists](#)

47.0604 Automobile/Automotive Mechanics Technology/Technician

49-2093.00 [Electrical and Electronics Installers and Repairers, Transportation Equipment](#)

49-2096.00 [Electronic Equipment Installers and Repairers, Motor Vehicles](#)

49-3023.01 [Automotive Master Mechanics](#)

Occupations are classified based on the following:

- 1: Some of these occupations may require a high school diploma or GED certificate
- 2: These occupations usually require a high school diploma
- 3: Most occupations in this zone require training in technical schools, related on-the-job experience, or an associate's degree.
- 4: Most of these occupations require a four-year baccalaureate degree, but some do not.
- 5: Most of these occupations require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D.