

Open Enrollment Guide

2017-18 CTE Programs of Study

Overview

Each spring, all Tennessee school districts wishing to receive Perkins funds for the upcoming school year are required to select their CTE programs of study in eTIGER. In preparation for the 2017-18 school year’s open enrollment window, the division have developed this guide for districts. District administrators are strongly encouraged to review the following information on each career cluster prior to making final program of study selections.

Please contact the appropriate career cluster consultant listed below or Candi.Norwood@tn.gov with questions pertaining to the selection process or any of the programs of study and associated courses listed in this guide. If you have questions regarding eTIGER, please contact Li-Zung.Lin@tn.gov.

Career Cluster	Consultant	Email	Phone
Advanced Manufacturing	Deborah Knoll	Deborah.Knoll@tn.gov	(615) 532-2844
Agriculture, Food, & Natural Resources	Steven Gass	Steven.Gass@tn.gov	(615) 532-2847
Architecture & Construction	Gregory Francescon	Gregory.Francescon@tn.gov	(615) 532-2835
Arts, Audio/Visual Technology, & Communications	Gregory Francescon	Gregory.Francescon@tn.gov	(615) 532-2835
Business Management & Administration	Candi Norwood (interim)	Candi.Norwood@tn.gov	(615) 532-6248
Education & Training	Elizabeth Rafferty	Elizabeth.Rafferty@tn.gov	(615) 532-2840
Finance	Candi Norwood (interim)	Candi.Norwood@tn.gov	(615) 532-6248
Government & Public Administration	Sloan Hudson	Sloan.Hudson@tn.gov	(615) 532-2839
Health Science	Sloan Hudson	Sloan.Hudson@tn.gov	(615) 532-2839
Hospitality & Tourism	Elizabeth Rafferty	Elizabeth.Rafferty@tn.gov	(615) 532-2840
Human Services	Elizabeth Rafferty	Elizabeth.Rafferty@tn.gov	(615) 532-2840
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Law, Public Safety, Corrections, & Security	Sloan Hudson	Sloan.Hudson@tn.gov	(615) 532-2839
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Science, Technology, Engineering, & Mathematics (STEM)	Deborah Knoll	Deborah.Knoll@tn.gov	(615) 532-2844
Transportation, Distribution, & Logistics	Gregory Francescon	Gregory.Francescon@tn.gov	(615) 532-2835

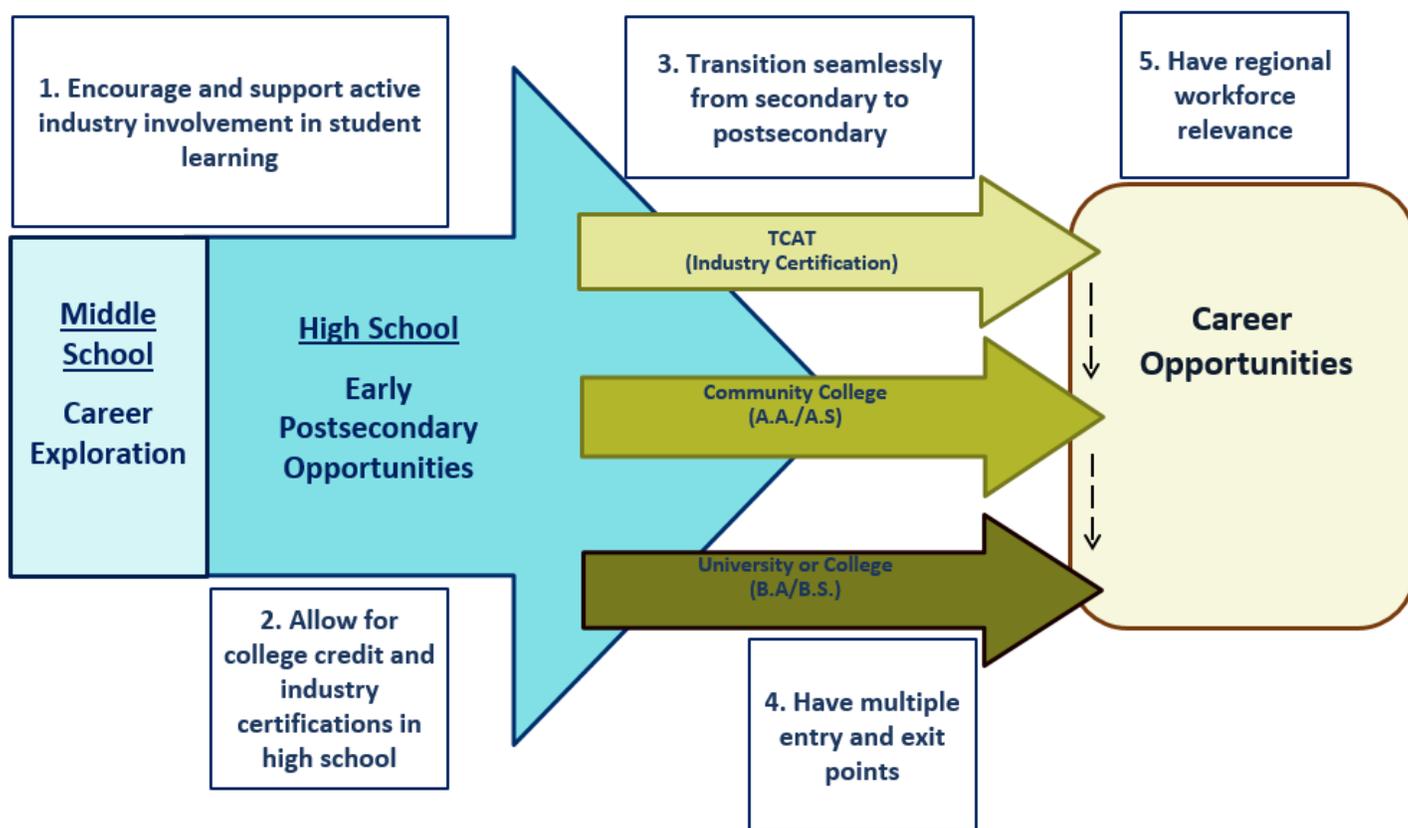
Making your Program of Study Selections

Before you log into eTIGER to make your program of study selections for the 2017-18 school year, it is important that you take the time to review the following information and materials. This selection process should go hand-in-hand with your preparation for (1) developing your 2017-18 local plan, (2) determining your staffing decisions, and (3) building education-to-career learning pathways for your students. As you prepare to select your programs of study, we recommend having the following resource materials available:

- Definition of CTE concentrator (effective 2017-18 school year): a student who completes three or more courses within a **program of study**. (To access the CTE Concentrator FAQ, click [here](#).)
- *Career Cluster Considerations* (pages 4-20 in this guide)
- 2017-18 [Programs of Study](#) (POS)
- 2017-18 POS and course revisions [document](#)
- 2017-18 POS [instructions](#) for eTIGER
- Labor market/industry data for your city, county, and region
 - Useful resources for labor data:
 - Local chamber of commerce
 - Tennessee Department of Labor and Workforce Development's Jobs 4 TN [portal](#)
- 2016 Tennessee Department of Economic and Community Development's [LEAP Report](#)
- Available postsecondary program offerings and early postsecondary opportunities, at local or regional postsecondary schools
 - Useful resources for postsecondary:
 - University of Tennessee [system](#)
 - Tennessee Board of Regents [system](#)
 - CollegeforTN web [portal](#)
 - TCAT and department of education program of study [alignment](#)
- Input from local business and industry advisory council
- TDOE promoted industry [certifications](#), embedded within the 2017-18 programs of study and aligned to specific courses
- Student industry certification [guidance](#)
- [Work-Based Learning](#) opportunities
- List of your district's current CTE staff, including licensure, endorsements, and training of each and the 2017-18 Correlation of Course [Codes](#)

After collecting and reviewing this information, it is important that you have meaningful conversations with your teachers and other school personnel to ensure your program of study selections meet the following criteria:

- Encourage and support active industry involvement in student learning
- Allow for postsecondary credit and industry certifications while progressing through a course sequence outlined in the 2017-18 programs of study
- Transition seamlessly from secondary program offerings to postsecondary program offerings
- Provide a clear pathway to available **employment** and **postsecondary** training in your region



Career Cluster Considerations

For more information on the following career clusters, please visit the office of CTE's [website](#).

Advanced Manufacturing

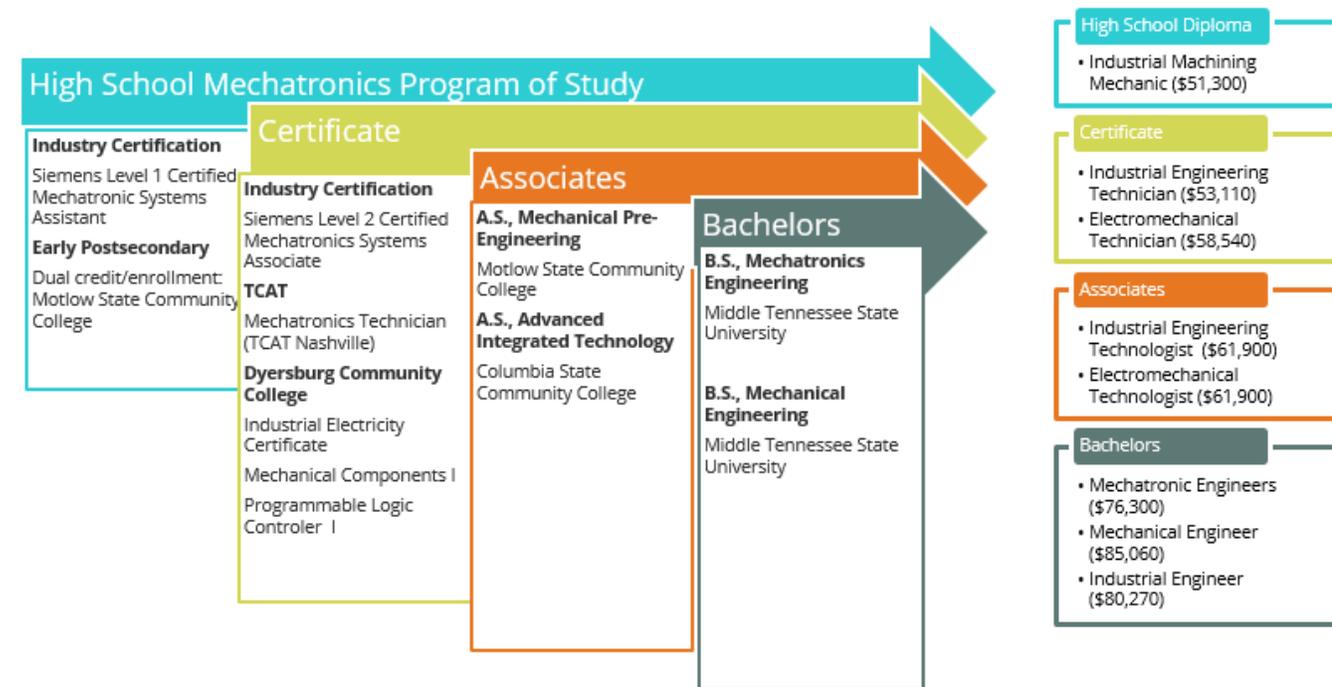
Changes from 2016-17

- There are no major changes in this career cluster since last year.

Additional Considerations

- We continue to see an increase in the use of the *Mechatronics* program of study based on employer needs in the state. There are dual enrollment and dual credit opportunities available at postsecondary institutions which may allow you to implement this program of study at a lower cost. Reach out to your local community college or college of applied technology to inquire about potential partnerships.
- Industry certification alignment: It is important to note that the appropriately aligned industry certification for *Mechatronics* is the Siemens Level 1 certification and **not** the Certified Production Technician (CPT) certification. CPT is appropriately aligned with the *Machining Technology* program of study. Properly aligning industry certifications to course content prepares students to be successful in attaining the industry certification.

Example program of study with seamless industry and postsecondary alignment:



Agriculture, Food, & Natural Resources

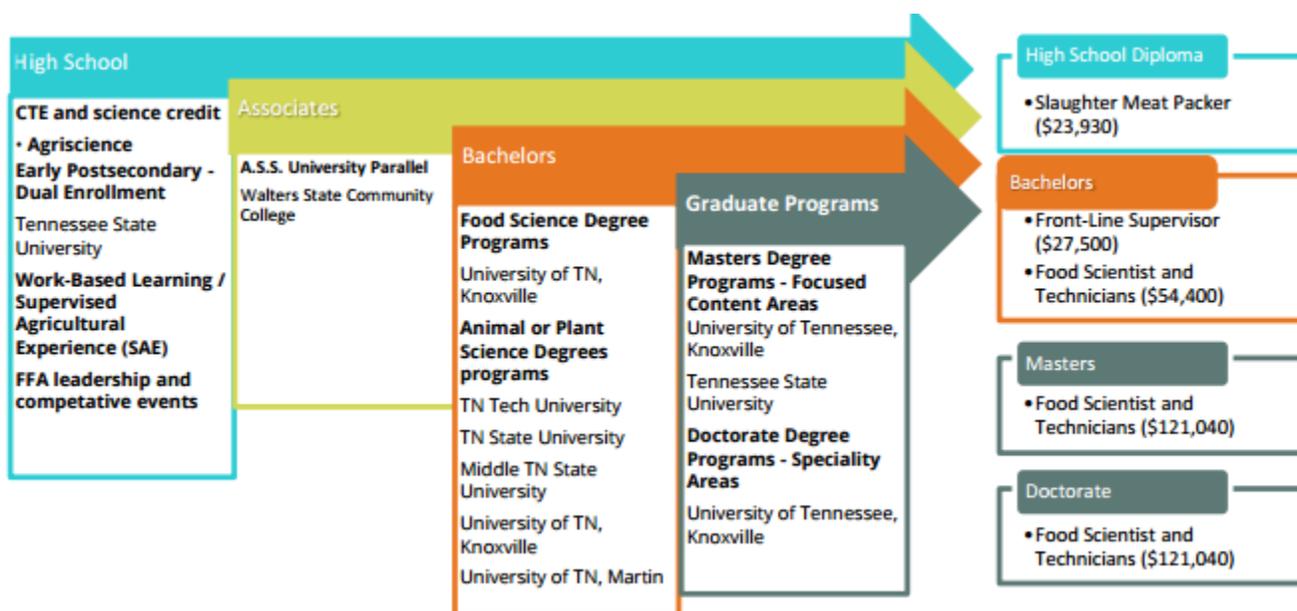
Changes from 2016-17

- There are no major changes in this career cluster since last year.

Additional Considerations

- The *Animal Science* Tennessee Specific Industry Certification, in pilot during the 2016-17 school year, will be available to schools in the *Veterinary and Animal Science* program of study. This certification is recognized by organizations such as the Tennessee Department of Agriculture and the Tennessee Farm Bureau.
- *Food Science* is a program of study with a positive job outlook. Industry has shown a particular interest in seeing this program of study expand at the secondary level.
- For those districts with a strong Agriculture program, we recommend offering *Introduction to Agricultural Sciences* at the middle school level.

Example program of study with seamless industry and postsecondary alignment:



Architecture & Construction

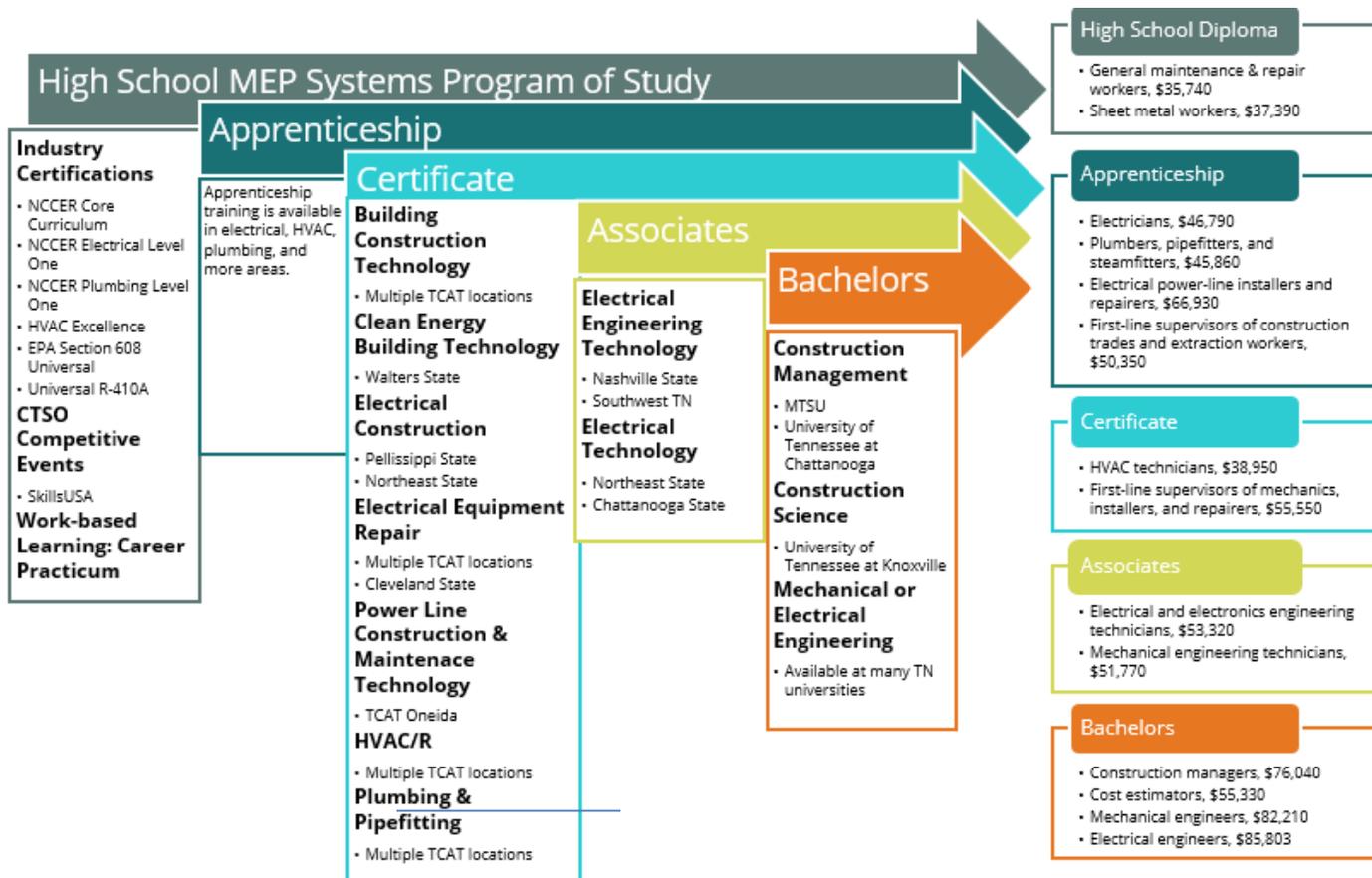
Changes from 2016-17

- There are no major changes in this career cluster since last year.

Additional Considerations

- *Residential & Commercial Construction* works well in schools or districts with the capacity to offer only one construction pathway and/or job outlooks in the community demand students with a diverse set of construction skills, as it focuses on basic skills useful in many construction career pathways.
- Industry certification alignment: There is a desire from industry and postsecondary to see industry certifications in this area exceed the basic NCCER Core Curriculum certification. NCCER certifications in specific content such as the NCCER Construction Technology and NCCER Electrical Level One will allow for students to earn postsecondary credit in addition to industry recognition.

Example program of study with seamless industry and postsecondary alignment:

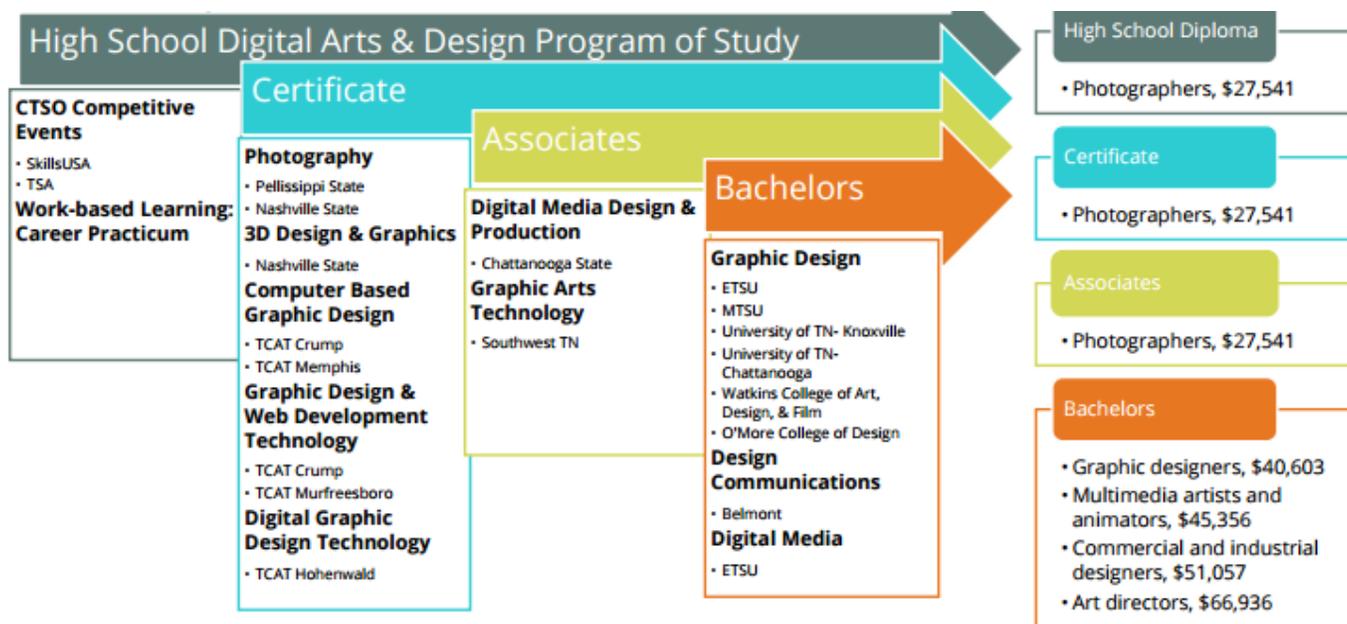


Arts, Audio/Visual Technology, & Communications

Changes from 2016-17

- There are no major changes in this career cluster since last year.

Example program of study with seamless industry and postsecondary alignment:



Business Management & Administration

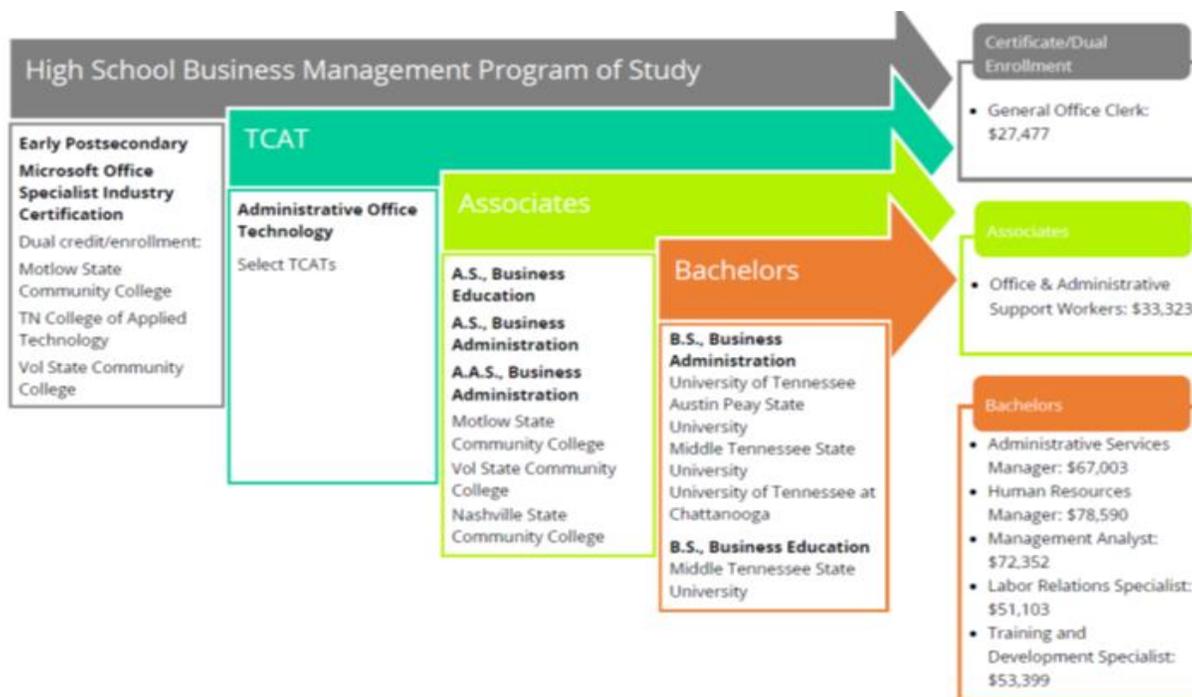
Changes from 2016-17

- *Human Resources Management* is a new program of study in this career cluster. Focusing on the business aspect of human capital, this program of study is relevant in both small businesses and corporations.
- *Health Informatics* program of study, previously located within the Health Science career cluster, has been moved to this career cluster under the *Health Services Administration* program of study.

Additional Considerations

- For districts looking for industry certifications in software applications that are valued by industry and prepare students for both immediate employment and matriculation to postsecondary programs or looking for a more customizable course to support existing school programs (available through *Advanced Computer Applications*), we recommend offering the *Office Management* program of study.
- For those districts with a strong Business Management & Administration program, we recommend offering *Computer Applications* at the middle school level to ensure students are entering the program with the appropriate technical expertise to move effectively through the program of study's advanced courses.

Example program of study with seamless industry and postsecondary alignment:



Education & Training

Changes from 2016-17

- *Educational Therapy & Support* is a new program of study in this career cluster focusing on occupations such as school counselors, school social workers, school psychologists, and other school services personnel. This program of study will explore how these individuals affect student development in an educational environment.

Example program of study with seamless industry and postsecondary alignment:

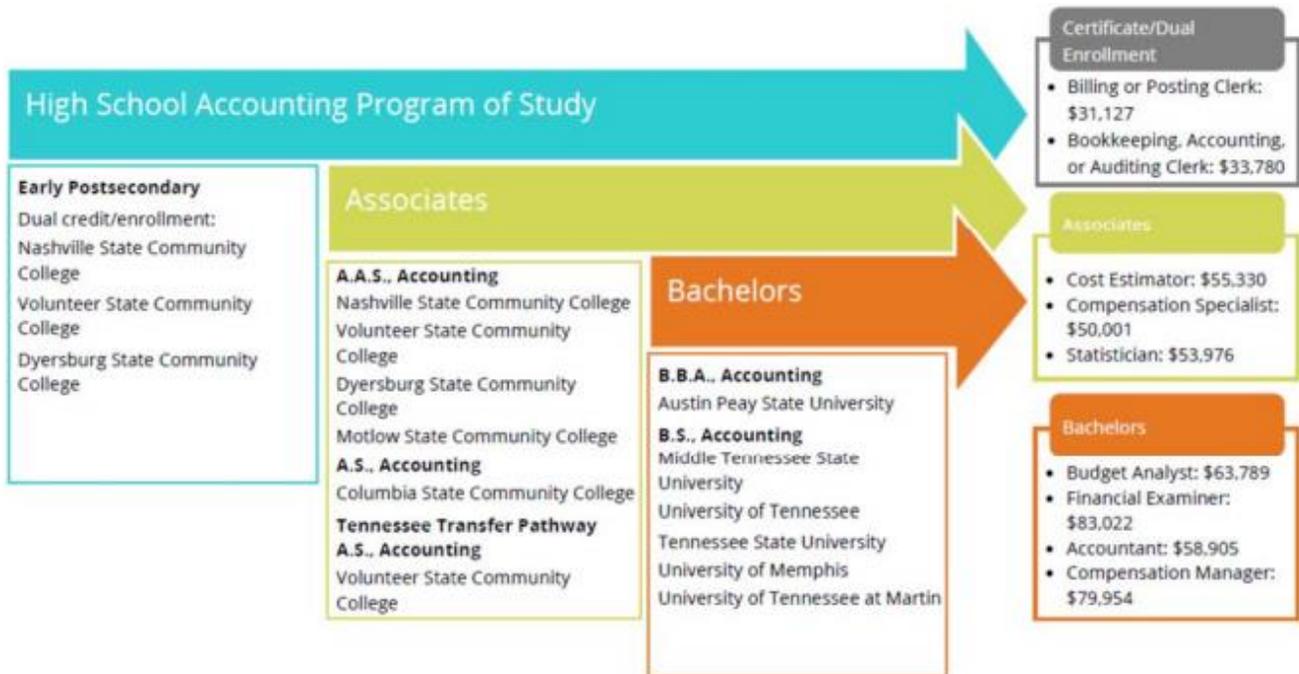


Finance

Changes from 2016-17

- There are no major changes in this career cluster since last year.

Example program of study with seamless industry and postsecondary alignment:

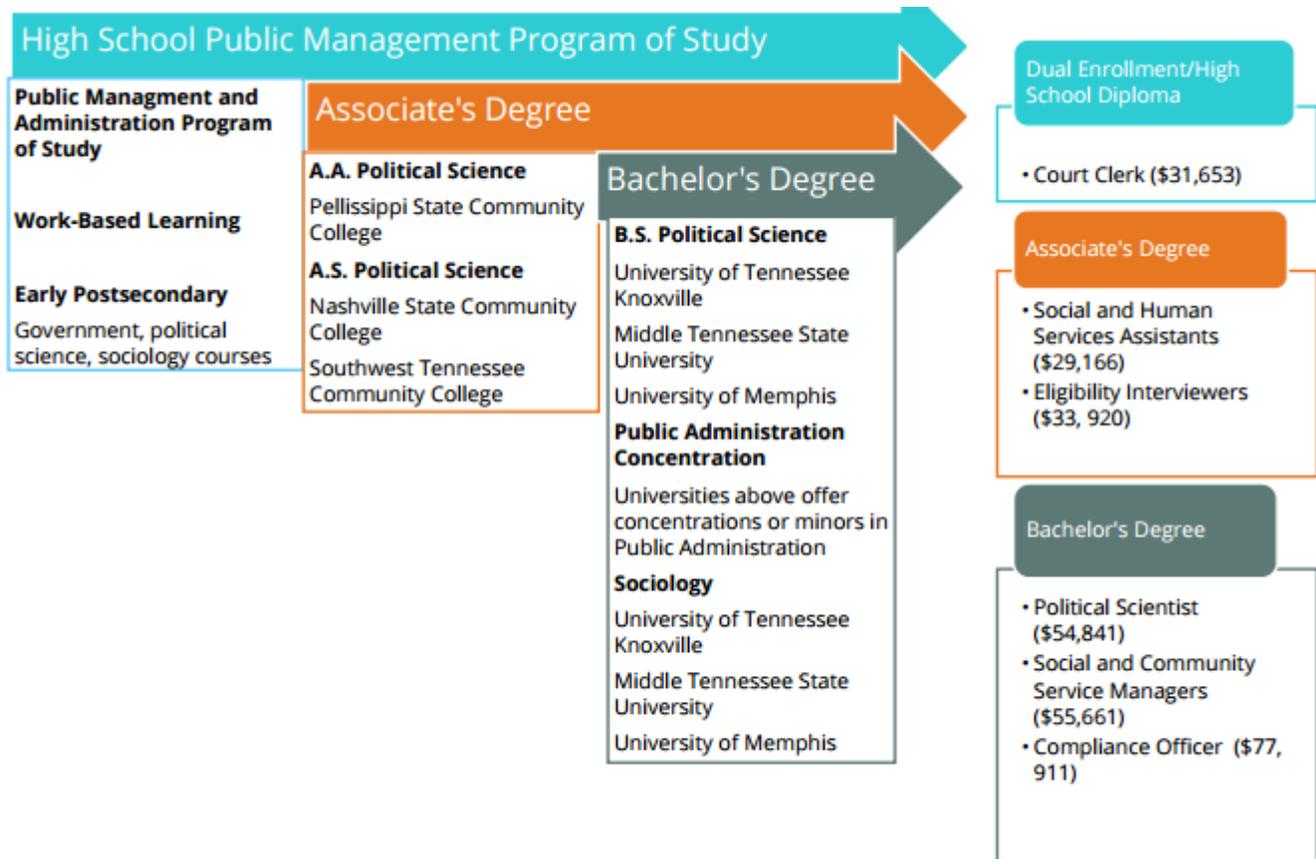


Government & Public Administration

Changes from 2016-17

- There are no major changes in this career cluster since last year.

Example program of study with seamless industry and postsecondary alignment:



Health Science

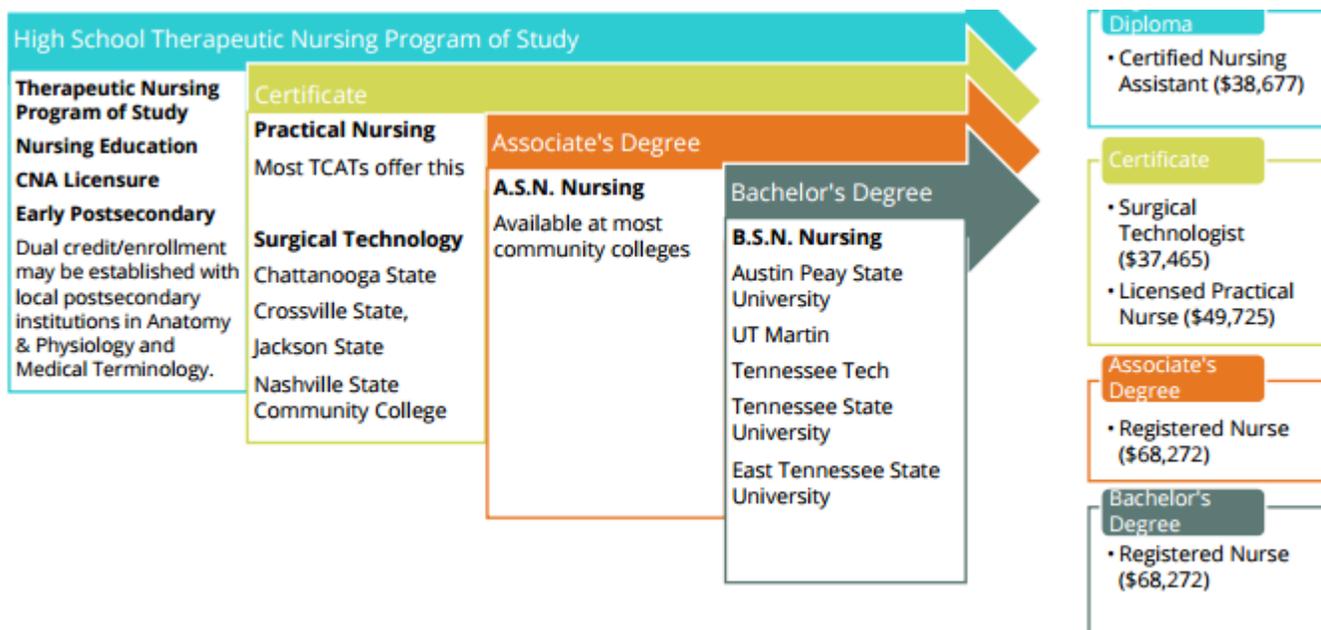
Changes from 2016-17

- While there are no new programs of study added this year, there are program of study name changes (*Therapeutic Services and Nursing Services*) and revisions to the available courses. Teachers will need to download the revised standards and make necessary planning and pacing guide changes.
- *Biotechnology Research* program of study is being retired due to inadequate labor data in Tennessee.
- Most programs of study in this career cluster have updated practicum options specific to the program.

Additional Considerations

- For those districts with a strong Health Science program, we recommend offering *Introduction to Health Science* at the middle school level.

Example program of study with seamless industry and postsecondary alignment:



Hospitality & Tourism

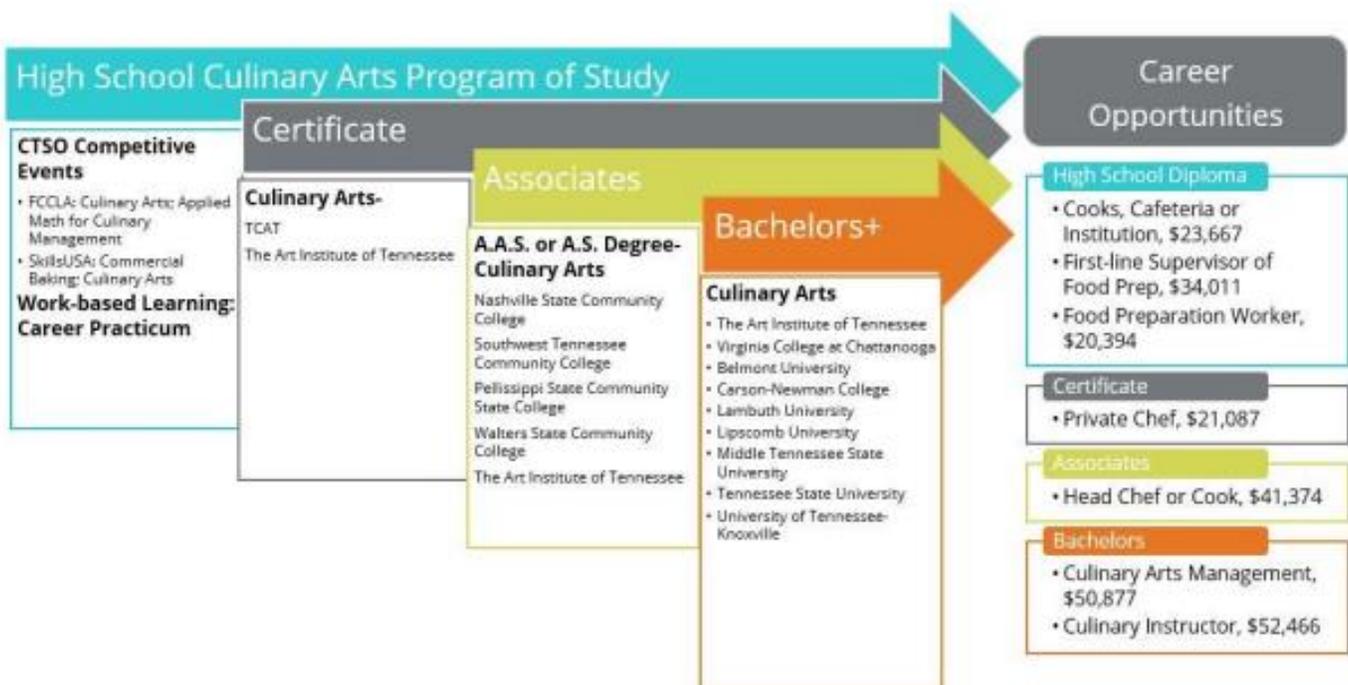
Changes from 2016-17

- There are no major changes in this career cluster since last year.

Additional Considerations

- The *Hospitality and Tourism Management* program of study is highly customizable based on local community needs. It can be used to address not only available employment opportunities but also continued postsecondary training in the hospitality and hotel management, sports, and entertainment fields of study. The *Event Planning & Management* course is designed to build on partnerships with local businesses and organizations and includes flexibility to focus on a particular area of interest for your students.

Example program of study with seamless industry and postsecondary alignment:



Human Services

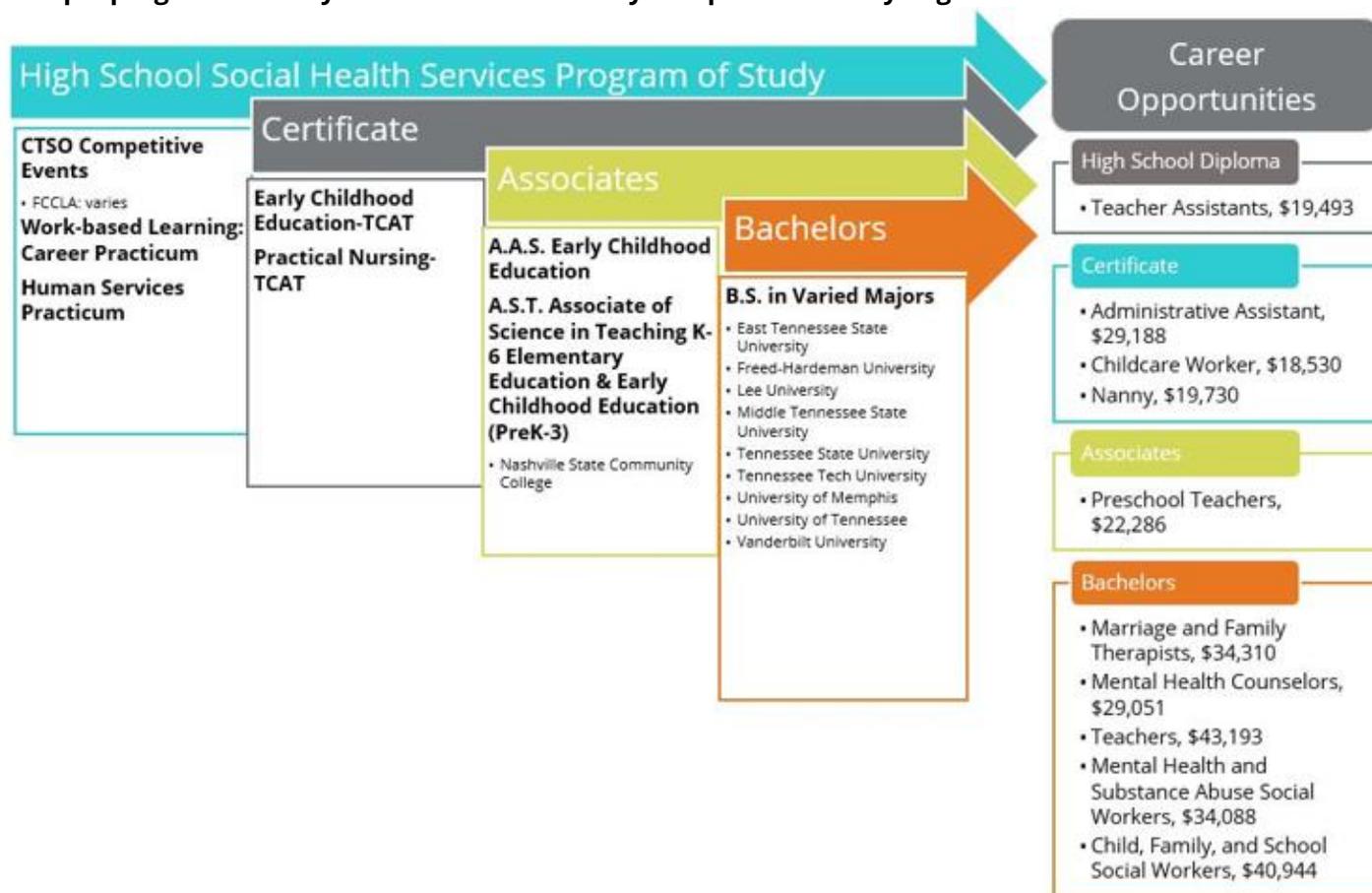
Changes from 2016-17

- The *Cosmetology* program of study has been completely re-written to allow for better alignment to TCAT programs. Teachers will need to download new standards in all four courses and revise lesson plans and pacing guides.
- *Child Development Services* program of study has been moved from this career cluster to the Education & Training career cluster in the *Early Childhood Education* program of study.

Additional Considerations

- If you are currently offering the *Cosmetology* or *Barbering* programs of study, we recommend that you build relationships with your local postsecondary institution to ensure appropriate transition of student hours toward a license. This is also a good area to establish a dual enrollment program.

Example program of study with seamless industry and postsecondary alignment:



Information Technology

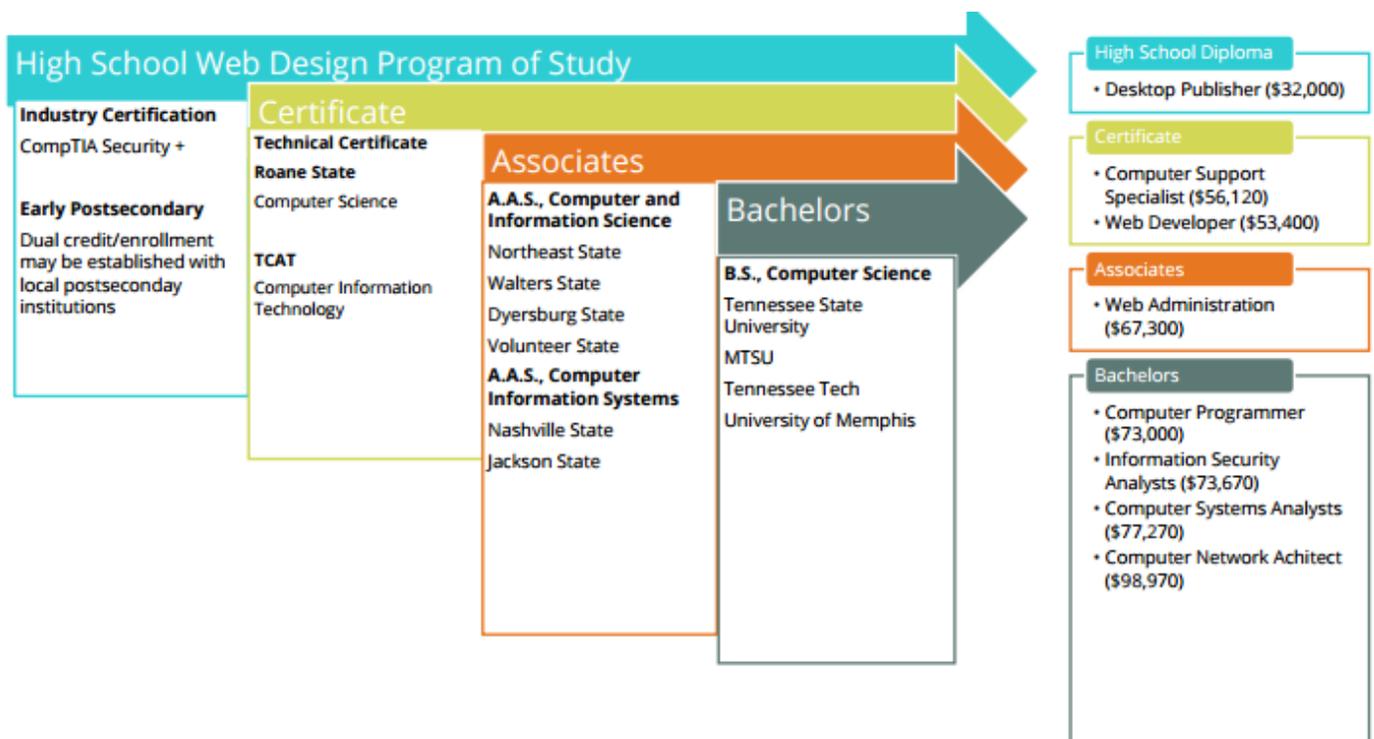
Changes from 2016-17

- A new *Cybersecurity* program of study has been added due to labor market data indicating job growth in this area.
- *Programming and Logic* program of study has been renamed *Coding* program of study in order to better align to industry terminology.
- *Mobile App Development* course has been added to *Coding* program of study as a Level 3 option in response to labor market data indicating job growth in this area.
- *Information Technology Foundations* course name has been changed to *Computer Science Foundations* and additional cybersecurity standards have been added to better align to industry terminology.

Additional Considerations

- *Coding Practicum* and *Web Design Practicum* are customizable courses available as capstones for these programs of study. You can find those standards listed with the corresponding program of study.

Example program of study with seamless industry and postsecondary alignment:



Law, Public Safety, Corrections, & Security

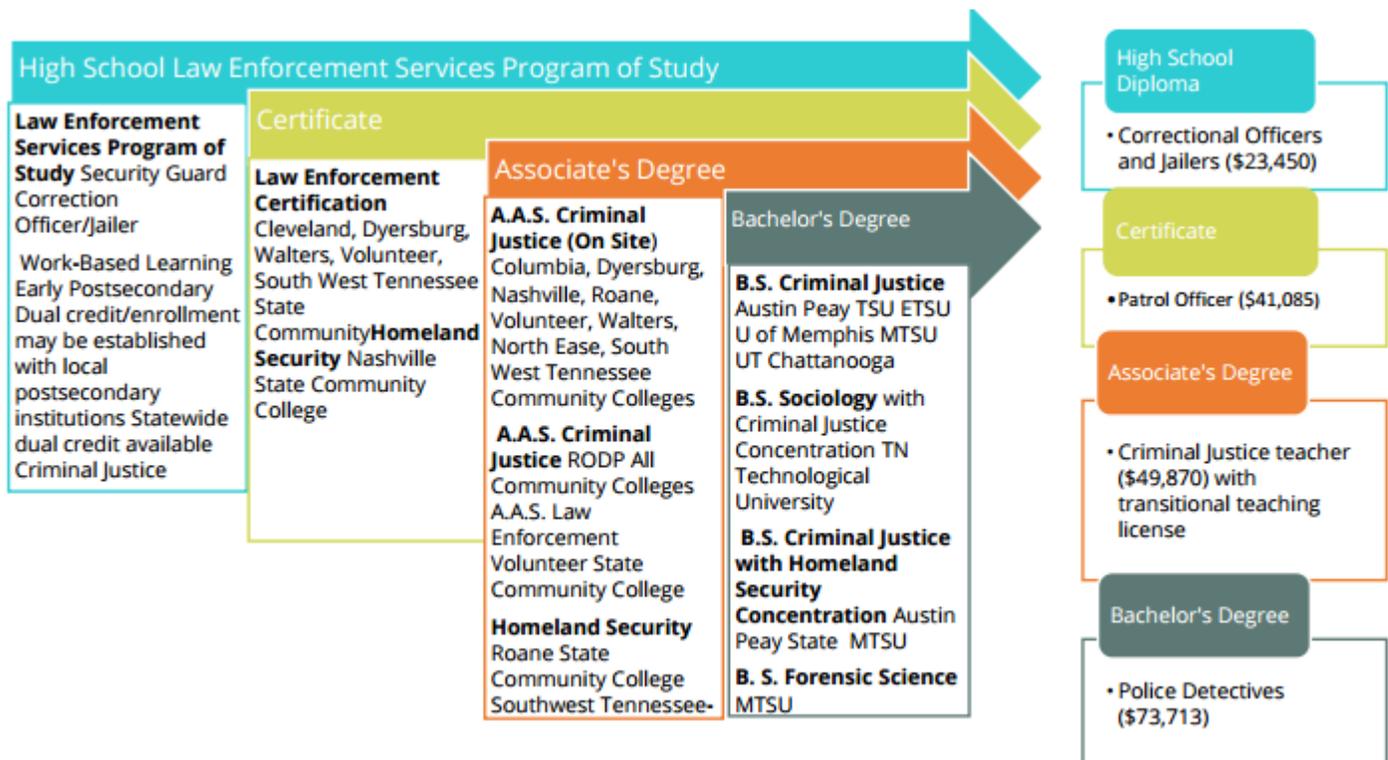
Changes from 2016-17

- Legal and Correction Services program of study:** Removing U.S. Government and Civics allows for the addition of a more rigorous capstone class: A.P. U.S. Government and Politics. This addresses the problem of ½ credit government courses making it difficult for students to concentrate. The addition of the portfolio component to each of the courses allows students to demonstrate mastery of content throughout the program of study.

Additional Considerations

- If a district is considering *Fire Management Services* program of study, assistance with equipment may be available from local fire departments. For more information, please contact Sloan.Hudson@tn.gov.

Example program of study with seamless industry and postsecondary alignment:



Marketing

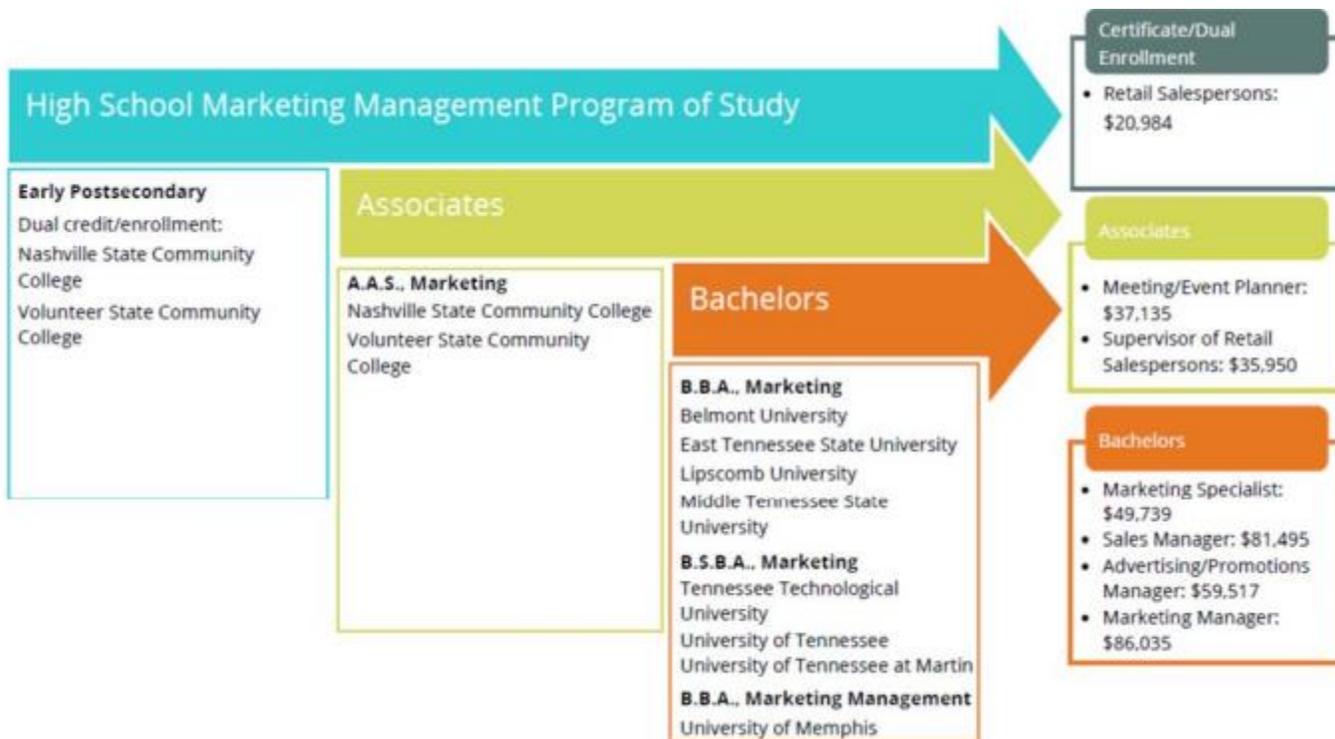
Changes from 2016-17

- One standard has been added to Marketing I and Marketing II focusing on social media in marketing.

Additional Considerations

- A capstone course, *Business & Entrepreneurship Practicum*, is available to further customize the experience for students in the *Entrepreneurship* program of study. Students now have an additional year to work on ideas for start-up business ventures while earning credit toward a concentrator status.

Example program of study with seamless industry and postsecondary alignment:



Science, Technology, Engineering, & Mathematics (STEM)

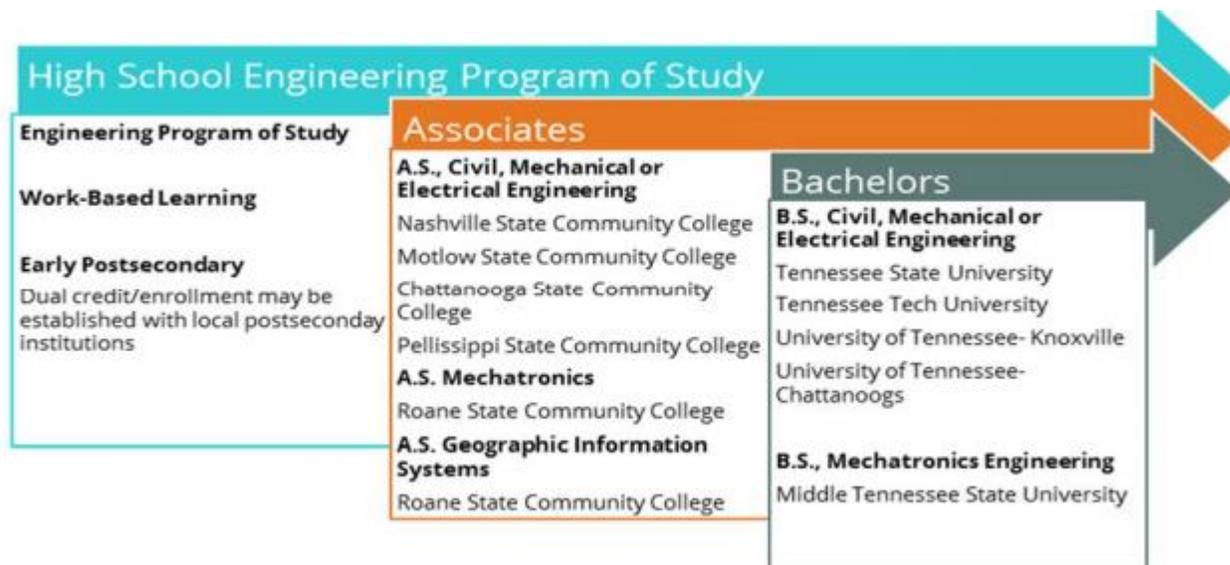
Changes from 2016-17

- There are no major changes in this career cluster since last year.

Additional Considerations

- For those districts with a strong STEM program, we recommend offering the suite of available middle school STEM courses between sixth and eighth grade in order to prepare students for advancement in high school.
- *STEM Practicum* is a customizable course available as a capstone for these programs of study. You can find those standards listed with the corresponding program of study.

Examples of programs of study with seamless transitions to industry and postsecondary



Transportation, Distribution, & Logistics

Changes from 2016-17

- There are no major changes in this career cluster since last year.

Additional Considerations

- Districts close to one of Tennessee's many distribution centers may consider *Distribution & Logistics* program of study. The state has several hubs offering interstate, waterway, railway, and airport distribution options that lead to positive job growth in logistics.

Examples of programs of study with seamless transitions to industry and postsecondary

