



# Agriculture, Food & Natural Resources

The Agriculture, Food and Natural Resources programs prepare students for careers in a highly technical and ever changing sector of the global economy. These programs provide a career pathway to a wide variety of careers in agritechology, animal science, plant science, food products & processing and environmental science.

2018-19

## 47,326

enrollments in  
High School  
programs



+

## 30,293

enrollments in  
Middle School  
programs



=

# 77,619

= 10,000

## Top High School Programs

**Agritechology (14,866)**

**Veterinary Assisting (8,248)**

**Animal Science & Services (7,006)**

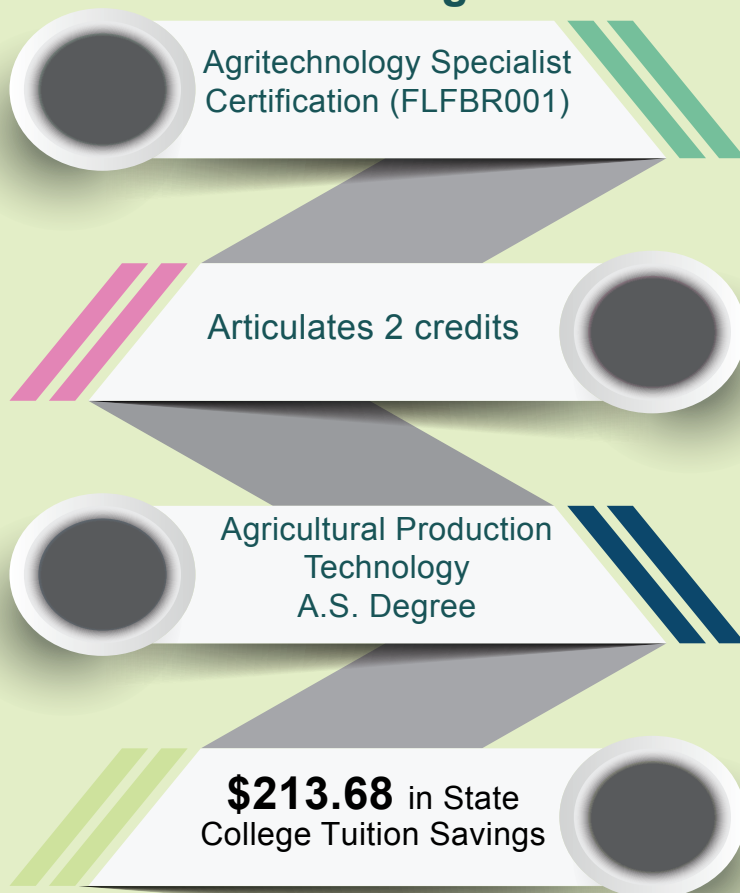
**Agricultural Communications (2,898)**

**Horticultural Science and Services (2,671)**

## Top Certifications Earned by K-12 Students



## Articulation Pathway to College





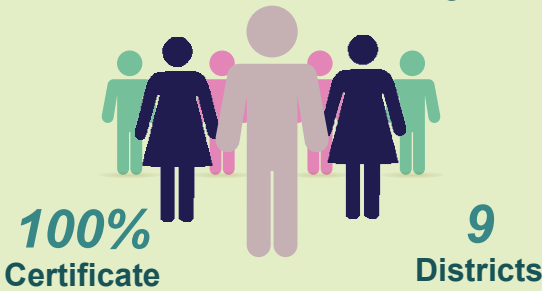
462

District  
Postsecondary  
Enrollments

Top Programs

Veterinary Assisting (401)

Waste/Wastewater  
Treatment Technologies (41)



Top Certifications Earned  
by District Postsecondary Students



Employment Outlook

High Wage



First Line Supervisors, Landscaping, Lawn  
Service and Groundskeeping Workers

Annual Openings



Sales Representatives, Wholesale &  
Manufacturing, Tech. & Scientific Products

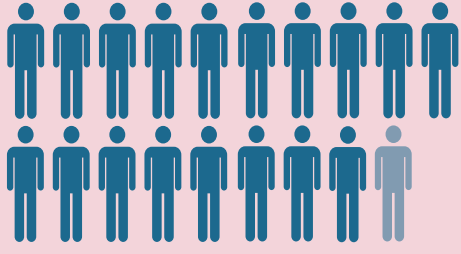


# Architecture & Construction

The Architecture and Construction Career Cluster prepares students for careers in designing, planning, managing, building and maintaining the built environment. Examples of careers include drafters, electricians, construction managers and plumbers.

2018-19

**18,925**  
enrollments in  
High School  
programs



+

**1,844**  
enrollments in  
Middle School  
programs

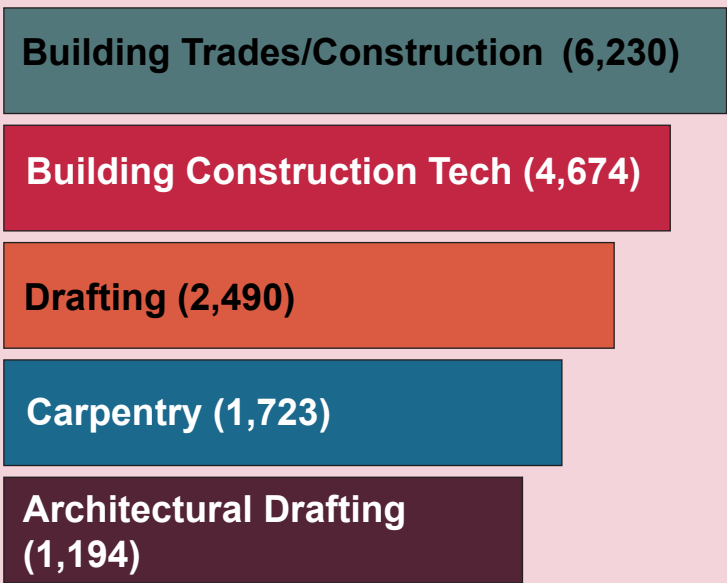


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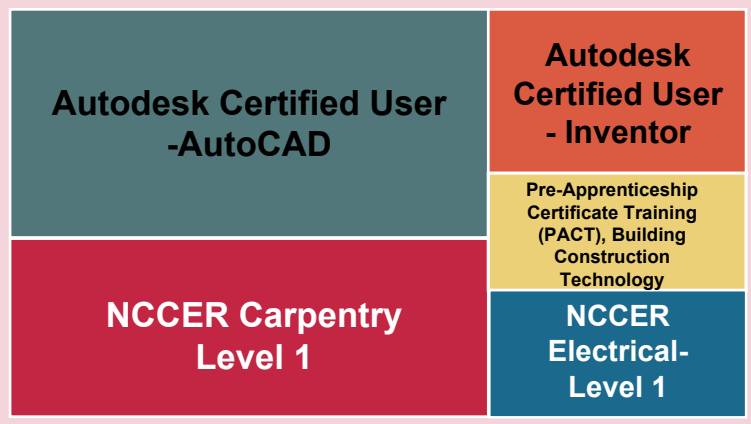
**20,769**

= 1,000

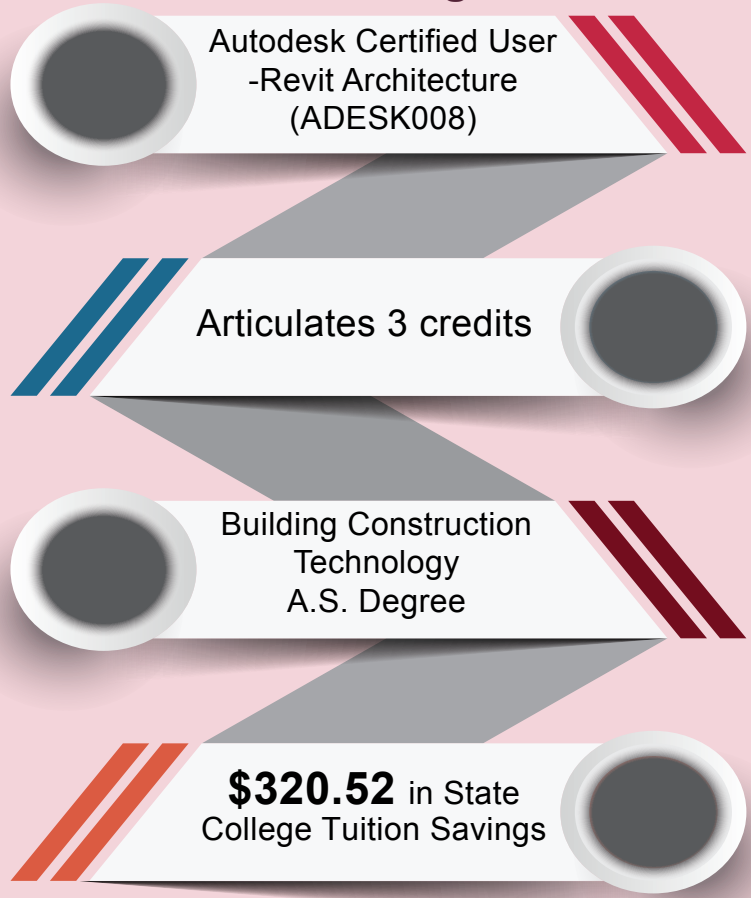
## Top High School Programs



## Top Certifications Earned by K-12 Students



## Articulation Pathway to College



# Postsecondary



# & Employment

**13,111**

**District  
Postsecondary  
Enrollments**

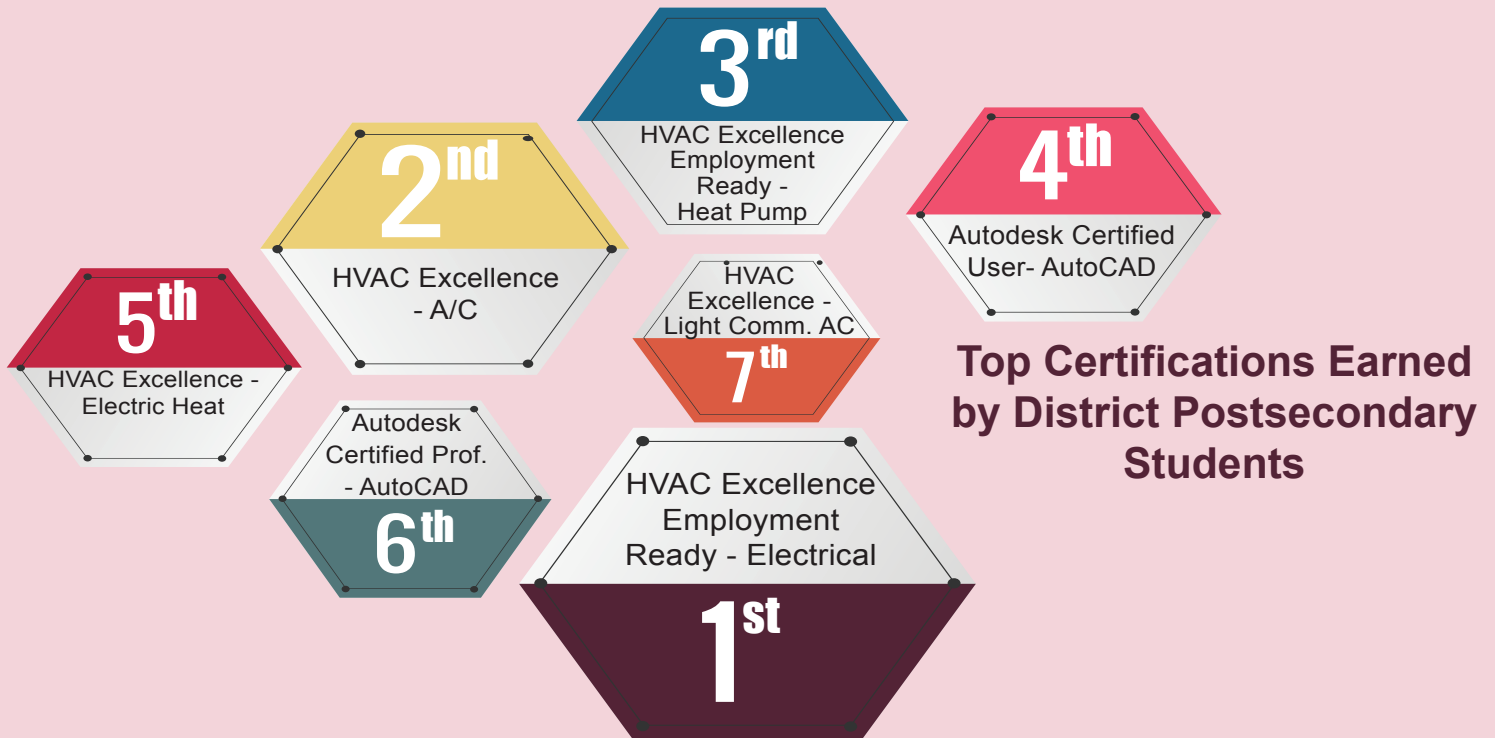
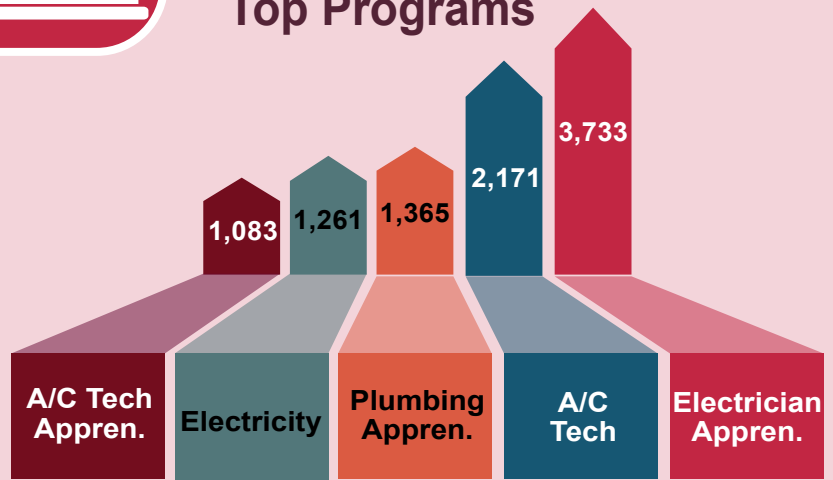


**39%**  
Certificate

**61%**  
Apprenticeship

**32**  
Districts

## Top Programs



## Employment Outlook

**High Growth**



**Structural Iron & Steel  
Workers**

**High Wage**



**Electricians**

**Annual Openings**



**Carpenters**

Notes: Based on 2018-19 data. Postsecondary enrollment is limited to district programs and includes dual enrollment students. Enrollment outlook is based on the 2019-20 Statewide Demand Occupations List.



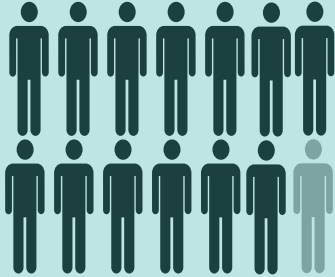
# Arts, A/V Technology & Communication

The Arts, A/V Technology and Communications Career Cluster encompasses audio/video technology and film, journalism and broadcasting, performing arts, printing technology, telecommunications, and visual arts. Students prepare for these careers by designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design.

2018-19

## 138,702

enrollments in High School programs



+

## 19,417

enrollments in Middle School programs



=

# 158,119

= 10,000

## Top High School Programs

Digital Design (73,809) (11,532)

Digital Media/Multimedia Design (14,641)

Television Production Technology (9,049)

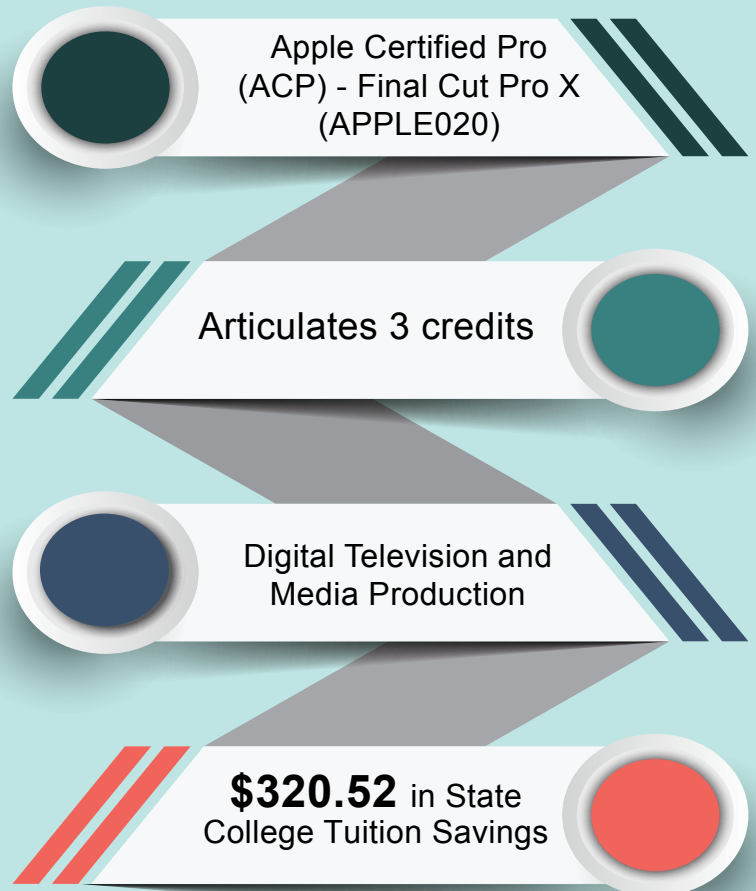
Television Production (8,946)

Digital Video Technology (7,235)

## Top Certifications Earned by K-12 Students



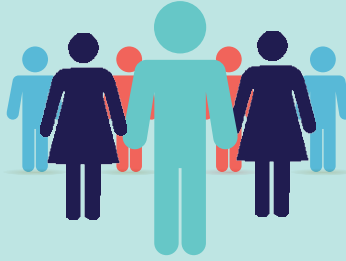
## Articulation Pathway to College





**3,120**

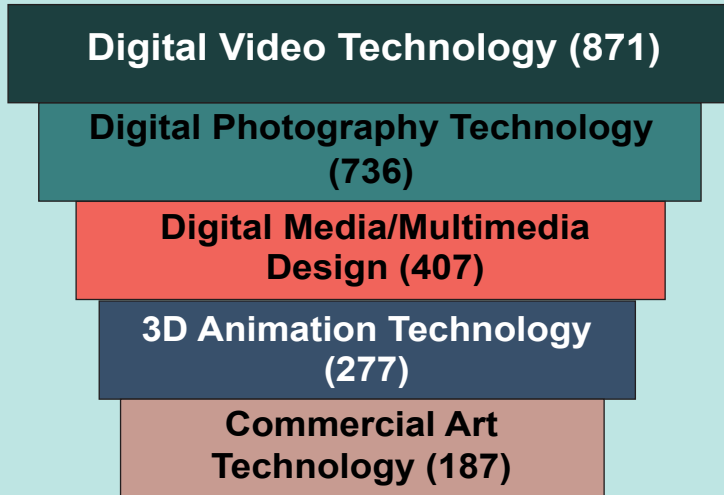
**District Postsecondary  
Enrollments**



**16**

**Districts**

### Top Postsecondary Programs



### Employment Outlook

**High Wage**

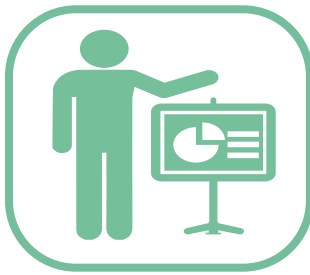


**Graphic Designer**

**Annual Openings**



**Graphic Designer**



# Business Management & Administration

The Business Management and Administration Career Cluster programs prepare students for careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Career opportunities in this cluster are available in every sector of the economy and require specific skills in organization, time management, customer service and communication.

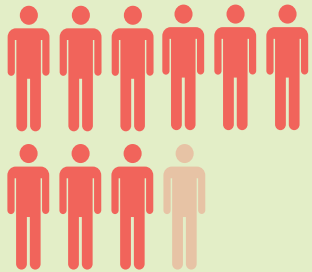
2018-19

**52,906**  
enrollments in  
High School  
programs



+

**95,070**  
enrollments in  
Middle School  
programs



= **147,976**

= 10,000

## Top High School Programs

**Administrative Office Specialist (15,754)**

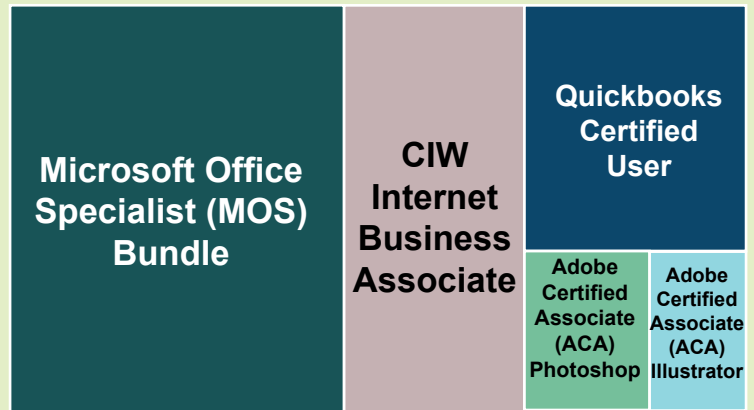
**Accounting Applications (6,567)**

**Emerging Technology in Business (5,886)**

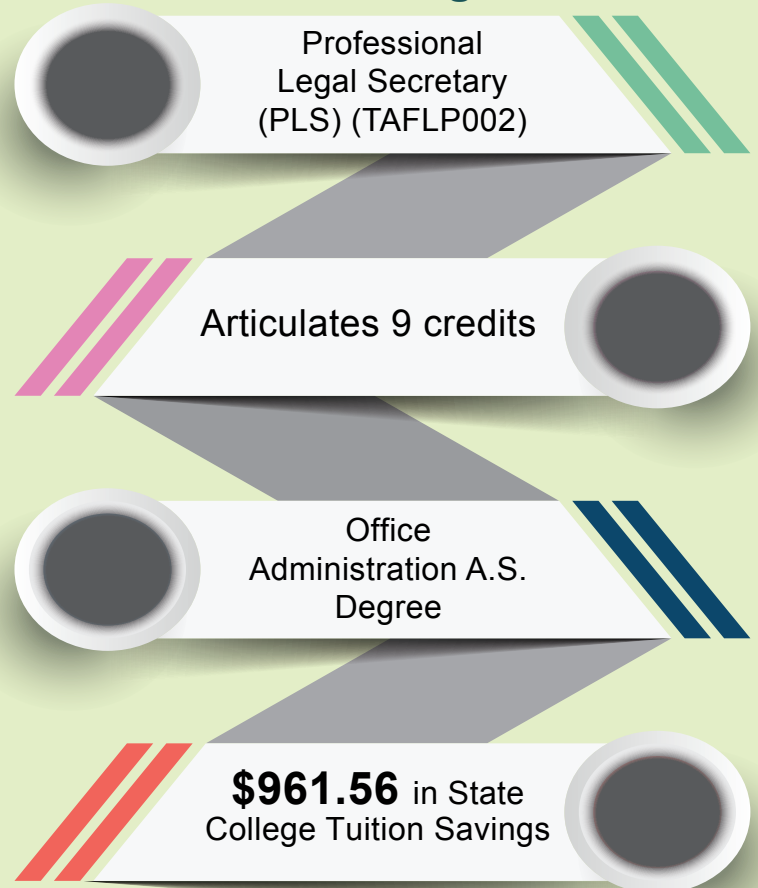
**Electronic Business Enterprise (5,511)**

**Business Management and Analysis (5,173)**

## Top Certifications Earned by K-12 Students



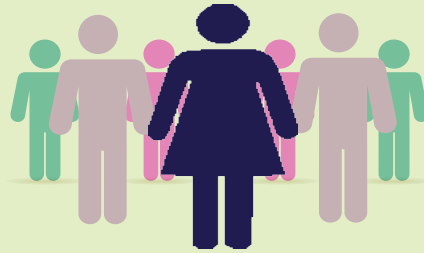
## Articulation Pathway to College





2,003

District  
Postsecondary  
Enrollments



20

Districts

### Top Postsecondary Programs



### Employment Outlook

High Growth



Medical Secretaries

High Wage



Web Developers

Annual Openings



General and Operations  
Managers



# Education and Training

The Education and Training Career Cluster programs offer students educational opportunities, training services, and related learning support with an emphasis on improving public education services. The three pathways include Administration and Administrative Support; Professional Support Services and Teaching/Training.

2018-19

**28,629**

enrollments in High School programs



+

**1,295**

enrollments in Middle School programs



=

**29,924**

1 human figure = 1,000

## Top High School Programs

**Early Childhood Education (18,661)**

**Principles of Teaching (6,124)**

**Child Development (3,058)**

## Top Certifications Earned by K-12 Students

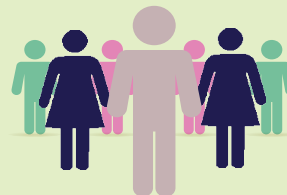
**Child Development Associate (CDA)**

**Certified Food Protection Manager (ServSafe®)**

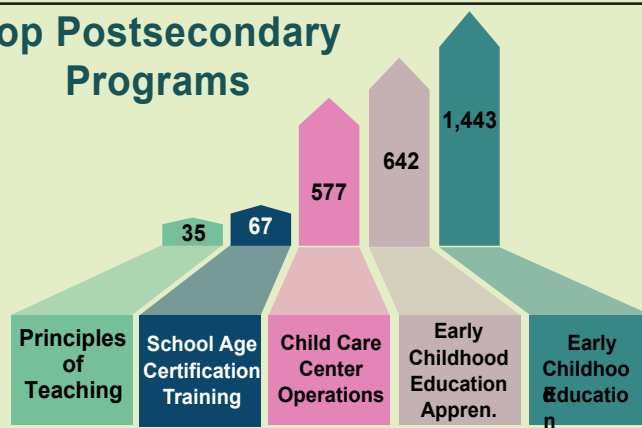
**2,764**

**District Postsecondary Enrollments**

**15 Districts**



## Top Postsecondary Programs



## Sample of Local Articulation Pathway to College

Child Development Associate (CDA) (CPREC001)

Articulates 9 credits

Early Childhood Education A.S. Degree

**\$961.56** in State College Tuition Savings

\*Articulation in this career cluster varies per local institution.

Notes: Based on 2018-19 data. Postsecondary enrollment is limited to district programs and includes dual enrollment students.



# Energy

The Energy Career Cluster programs prepare students for careers in planning, managing and providing technical support services related to generation, transmission and distribution of various types of energy. Examples of careers include technicians, lineworkers, pipelayers and welders.

2018-19

**463**  
enrollments in  
High School  
programs



+

**519**  
enrollments in  
Middle School  
programs



=

**982**

= 100

**410** District Postsecondary  
Enrollments



## Top Postsecondary Programs

**Electrical Line Service and  
Repair Appren. (318)**

**Solar Photovoltaic System Design,  
Installation & Maintenance (49)**

## Top High School Programs

**Energy Technician (277)**

**Energy Generation Technician (117)**

**Solar Energy Technology (66)**

## Sample of Local Articulation Pathway to College

**Energy Technician  
Program**

**Articulates 3 credits**

**Electrical Distribution  
Technology  
A.A.S. Degree**

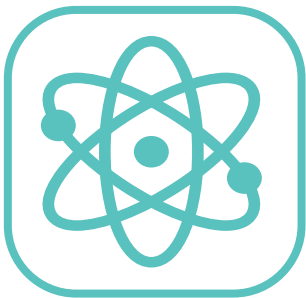
**\$320.52** in State  
College Tuition Savings

\*Articulation in this career cluster varies per local institution.

## Top Certification Earned by K-12 Students

**NCCER Electrical Level 1**

Notes: Based on 2018-19 data. Postsecondary enrollment is limited to district programs and includes dual enrollment students.



# Engineering & Technology Education

The Engineering & Technology Education Career Cluster prepares students for careers as engineers and technologists through the introduction of certain processes in mathematics, science and technology. Students learn how to apply mathematics, science and technology concepts to solve problems quantitatively in engineering projects involving design, development or production in various technologies.

2018-19

**48,651**  
enrollments in  
High School  
programs



+

**54,137**  
enrollments in  
Middle School  
programs



= **102,788**

= 10,000

## Top High School Programs

**Engineering Pathways (17,414)**

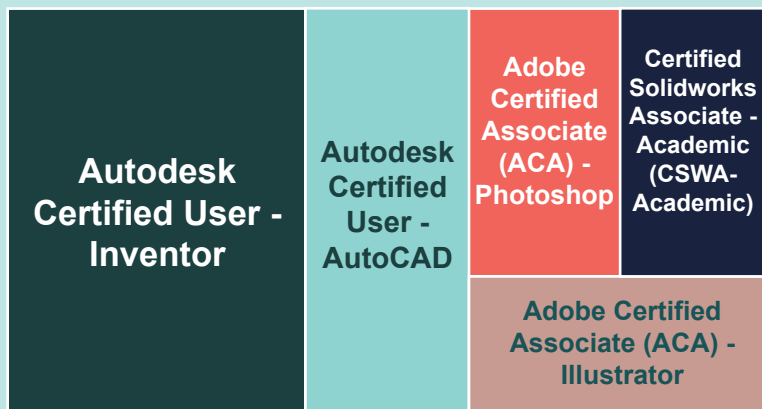
**Applied Engineering Technology (6,521)**

**Communications Technology (6,000)**

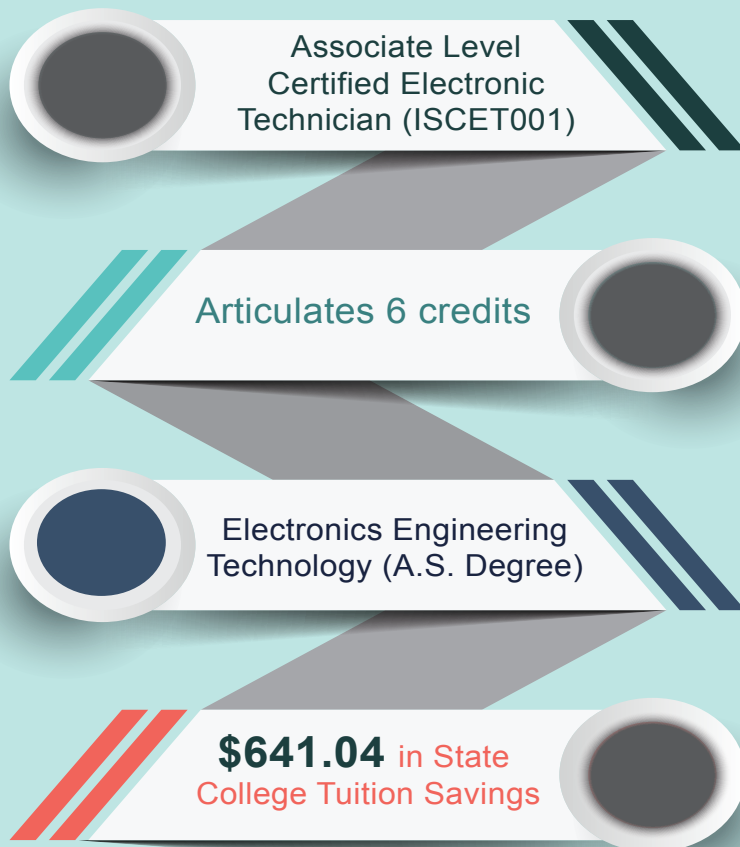
**Applied Robotics (5,193)**

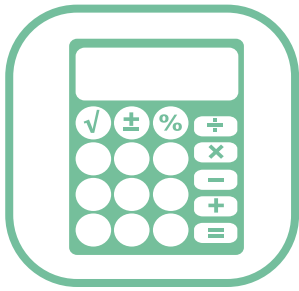
**Technical Design (4,209)**

## Top Certifications Earned by K-12 Students



## Articulation Pathway to College





# Finance

The Finance Career Cluster programs prepare students for careers in financial and investment planning, banking, insurance and business financial management. Finance career opportunities are available in every sector of the economy and require organizational, time management, customer service and communication skills.

2018-19

## 15,866

enrollments in High School programs



+

## 1,098

enrollments in Middle School programs



=

# 16,964

= 1,000

## Top Programs

**Finance (9,989)** (11,532)

**Personal & Family Finance (5,388)**

**\*Fundamentals of Finance (483)**

**\*Intro to Finance (457)**

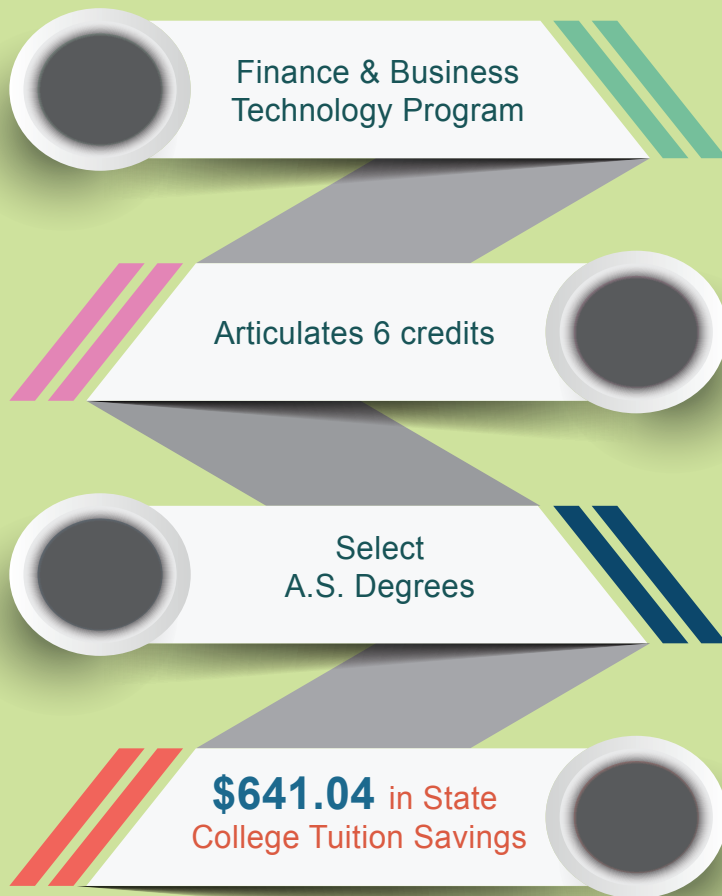
**Global Finance (423)**

\* Middle School Programs

## Top Certifications Earned by K-12 Students



## Sample of Local Articulation Pathway to College



\*Articulation in this career cluster varies per local institution.

Notes: Based on 2018-19 data. Postsecondary enrollment is limited to district programs and includes dual enrollment students.



# Health Science

The Health Science Career Cluster is divided into five pathways: Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, and Biotechnology Research & Development. Hundreds of Health Science educational opportunities in a variety of professions are offered throughout the state at the secondary and postsecondary level.

2018-19

**62,519**

enrollments in  
High School  
programs



**9,557**

enrollments in  
Middle School  
programs

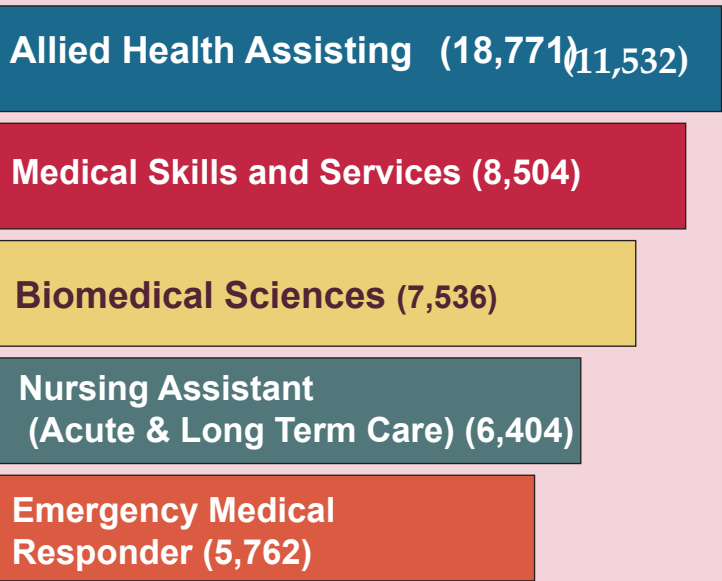


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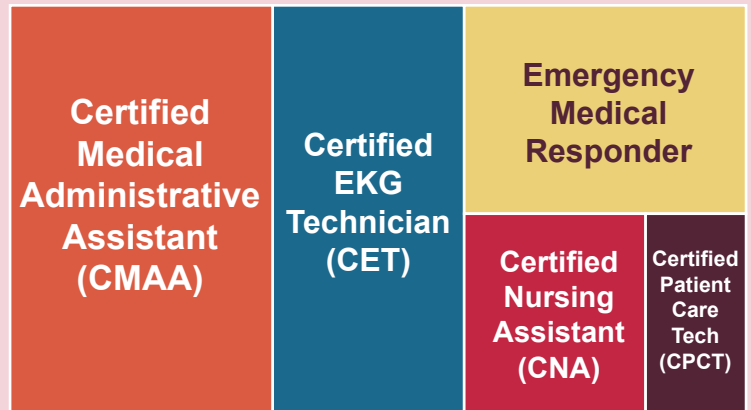
**72,076**

= 10,000

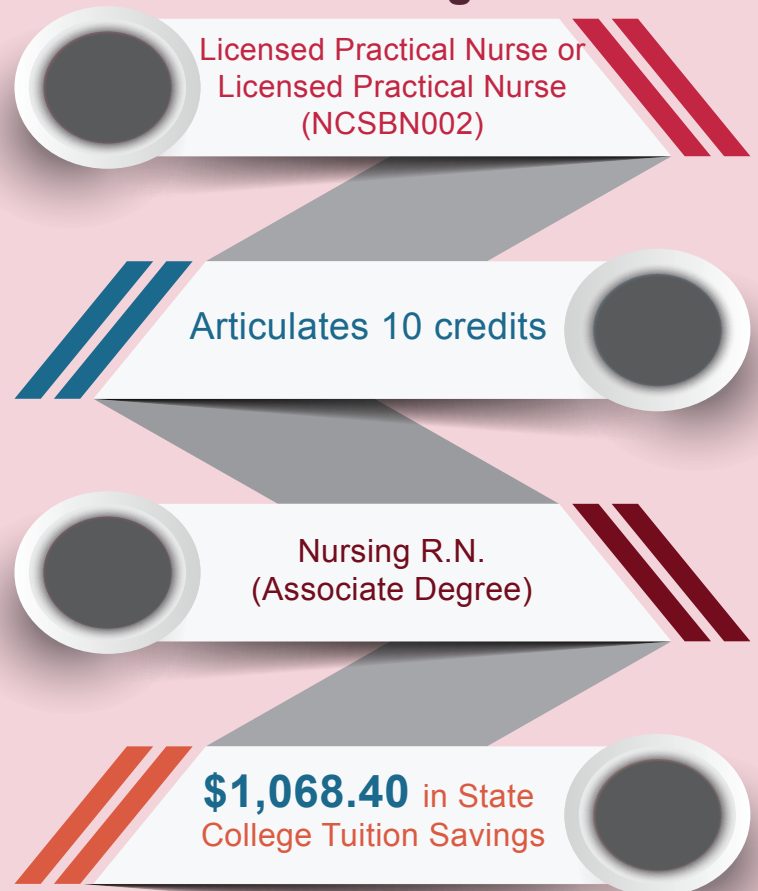
## Top High School Programs



## Top Certifications Earned by K-12 Students



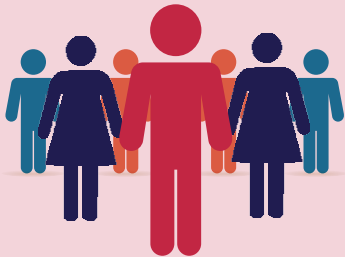
## Articulation Pathway to College





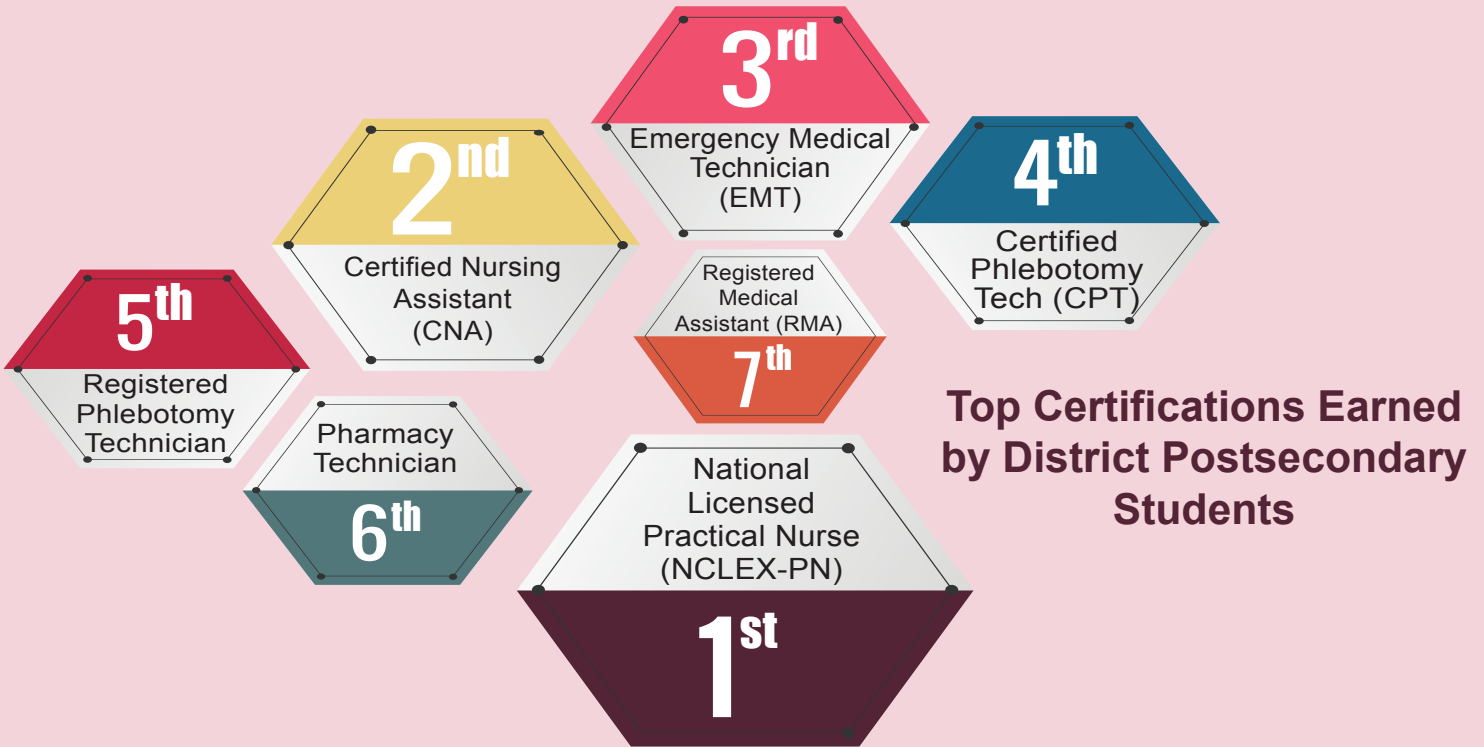
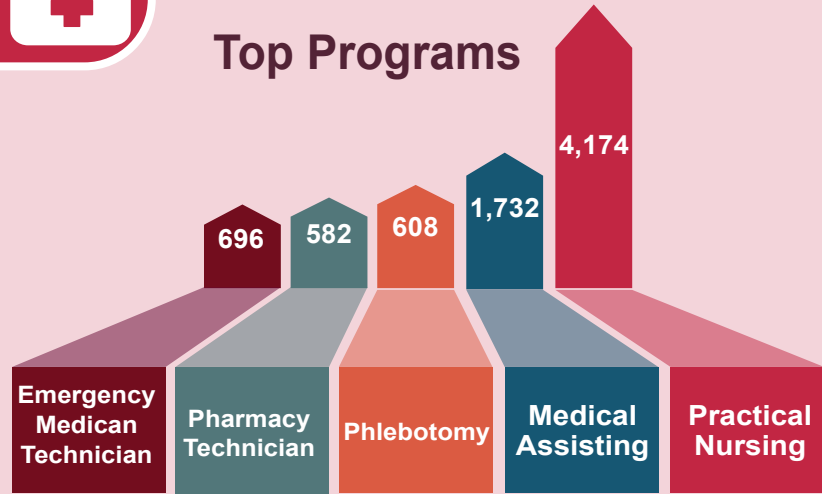
12,210

District Postsecondary Enrollments



36 Districts

Top Programs



Top Certifications Earned by District Postsecondary Students

Employment Outlook

High Growth



Dental Assistants

High Wage



Radiologic Technologist

Annual Openings



Licensed Practical Nurse (LPN)

Notes: Based on 2018-19 data. Postsecondary enrollment is limited to district programs and includes dual enrollment students. Enrollment outlook is based on the 2019-20 Statewide Demand Occupations List.



# Hospitality & Tourism

The Hospitality & Tourism Career Cluster programs offer students educational opportunities, training services, and related learning support with an emphasis on improving education services. The pathways in this cluster include restaurant and food/beverage services; lodging; travel, tourism & recreation; and amusements & attraction.

2018-19

**78,817**  
enrollments in  
High School  
programs



+

**30,807**  
enrollments in  
Middle School  
programs



=

**109,624**

= 10,000

## Top High School Programs

**Culinary Arts (54,626)**

**Principles of Food (7,989)**

**Nutrition and Wellness (6,992)**

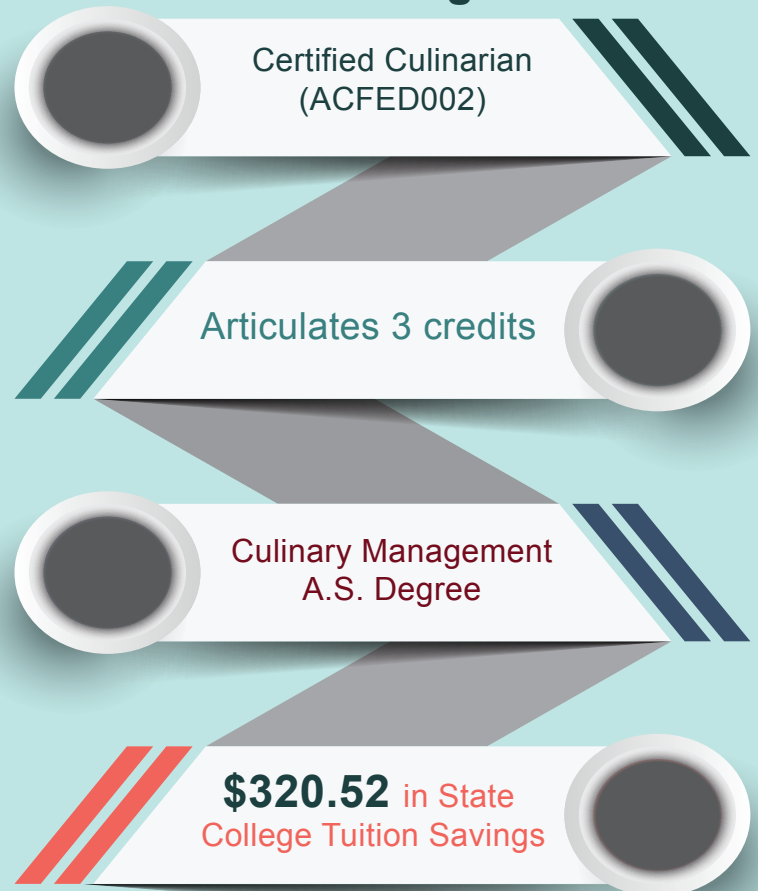
**Hospitality and Tourism Management (4,662)**

**Hospitality and Tourism (2,242)**

## Top Certifications Earned by K-12 Students

<b>Certified Food Protection Manager (ServSafe)</b>	<b>Certified Food Safety Manager</b>
	<b>National ProStart Certificate of Achievement</b>
	<b>Certified Front Desk Supervisor</b>
	<b>Microsoft Office Specialist (MOS) Bundle Certification (3 of 6)</b>

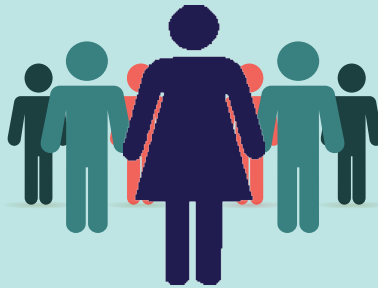
## Articulation Pathway to College





2,877

District  
Postsecondary  
Enrollments



23

Districts

### Top Postsecondary Programs



### Employment Outlook

High Growth



First Line Supervisors  
of Housekeeping and  
Janitorial Workers

High Wage



Food Service Managers

Annual Openings



Food Service Managers

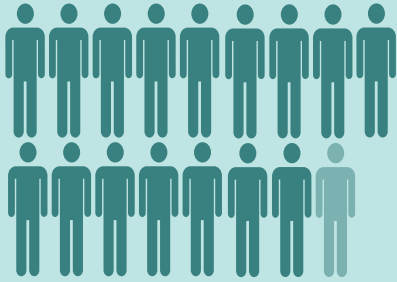


# Human Services

The Human Services career cluster is divided into three pathways: counseling and mental health services; family and community services; and consumer services. Hundreds of human services programs prepare high school and postsecondary students for rewarding careers in this diverse cluster.

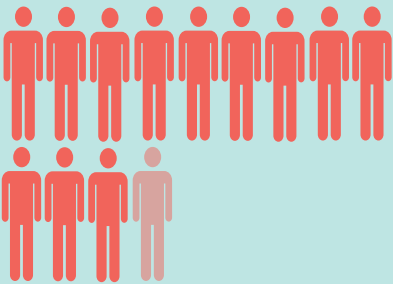
2018-19

**16,920**  
enrollments in  
High School  
programs



+

**12,235**  
enrollments in  
Middle School  
programs



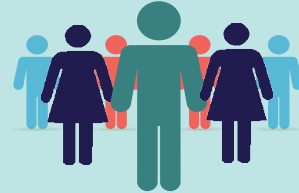
=

**29,155**

1 icon = 1,000

**3,341**

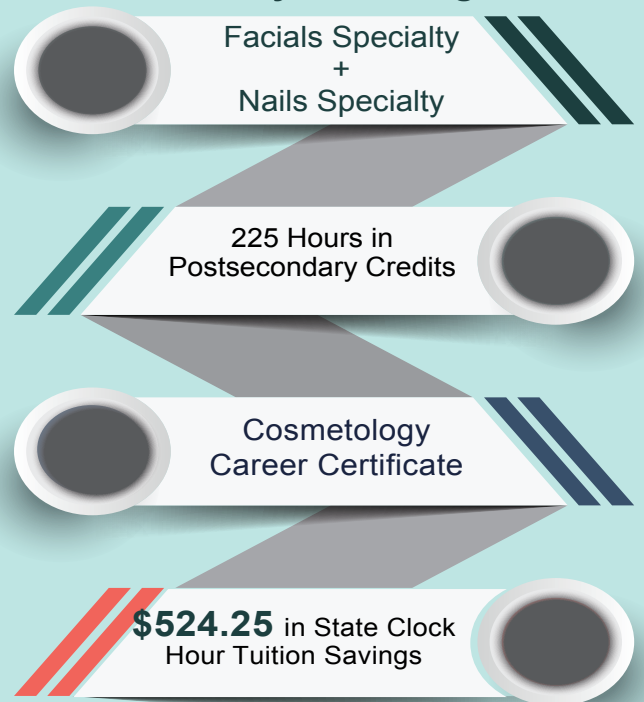
**District  
Postsecondary  
Enrollments**



**Top  
Postsecondary  
Programs**



**Sample of Local Articulation  
Pathway to College**



\*Articulation in this career cluster varies per local institution.

**Top High School Programs**

**Cosmetology (3,293)**

**Barbering (861)**

**Nails Specialty (531)**

**Facials Specialty (289)**

**Dry Cleaning and  
Laundering (136)**



# Information Technology

Information technology (IT) is the study of design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware. Information technology deals with the use of computers and computer software to convert, store, protect, process, transmit and securely retrieve information.

2018-19

**77,639**

enrollments in  
High School  
programs



+

**44,753**

enrollments in  
Middle School  
programs



=

**122,392**

= 10,000

## Top High School Programs

**Applied Information Technology (19,715)**

**Web Development (16,036)**

**Game/Simulation/Animation  
Visual Design (8,145)**

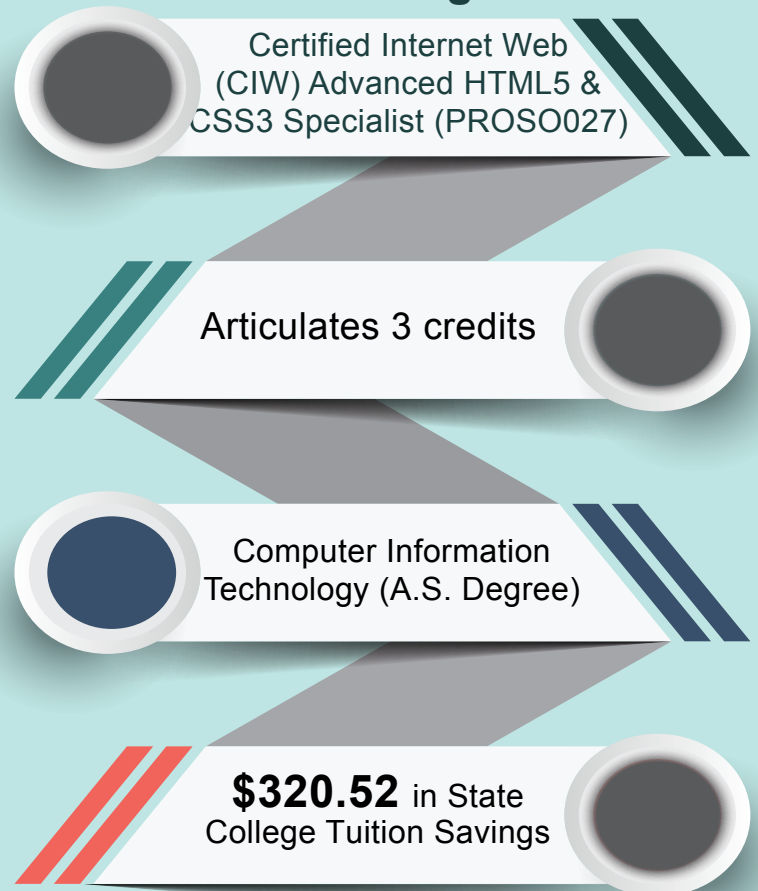
**Digital Media Technology (6,883)**

**Computer Science Principles  
(3,956)**

## Top Certifications Earned by K-12 Students

<b>Microsoft Office Specialist (MOS) Bundle</b>	<b>Certified Internet Web (CIW) Internet Business Associate</b>	<b>Certified Internet Web (CIW) Site Development Associate</b>	<b>Adobe Certified Associate (ACA) Dreamweaver</b>
		<b>Adobe Certified Associate (ACA) Photoshop</b>	

## Articulation Pathway to College





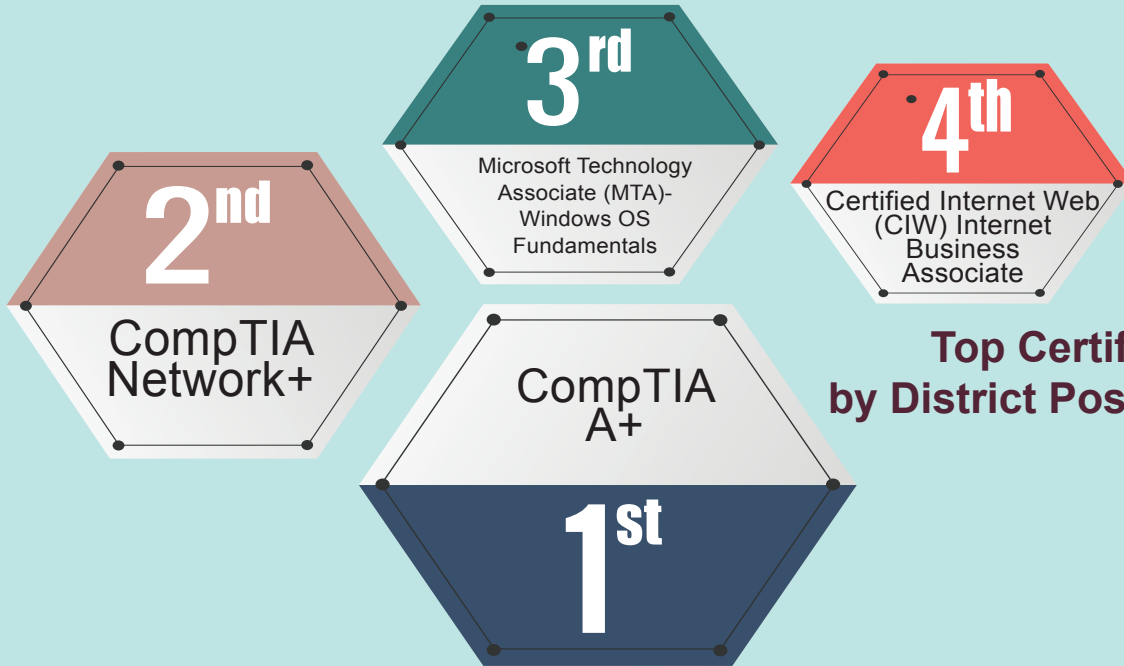
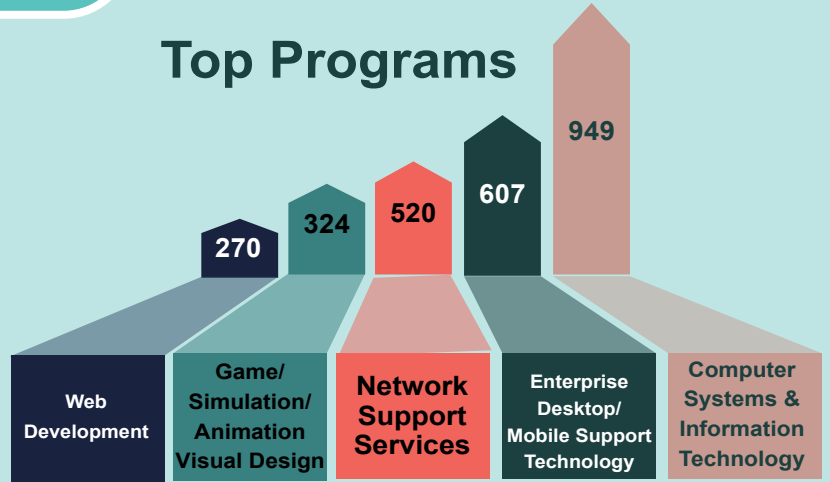
3,661

District Postsecondary Enrollments



25 Districts

Top Programs



Top Certifications Earned by District Postsecondary Students

Employment Outlook

High Growth

High Wage

Annual Openings



Software Developers, Applications

Computer Network Architects

Software Developers, Applications



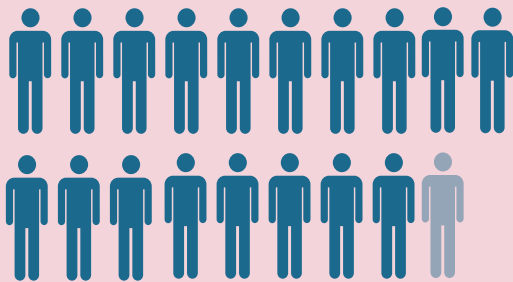
# Law, Public Safety & Security

The Law, Public Safety and Security Career Cluster is divided into five pathways: corrections; emergency and fire management; law enforcement; legal; and security protection. Students in these programs are preparing to plan, manage and provide legal, public safety, protective services and homeland security, including professional and technical support services.

2018-19

**18,758**

enrollments in High School programs



+

**1,991**

enrollments in Middle School programs



=

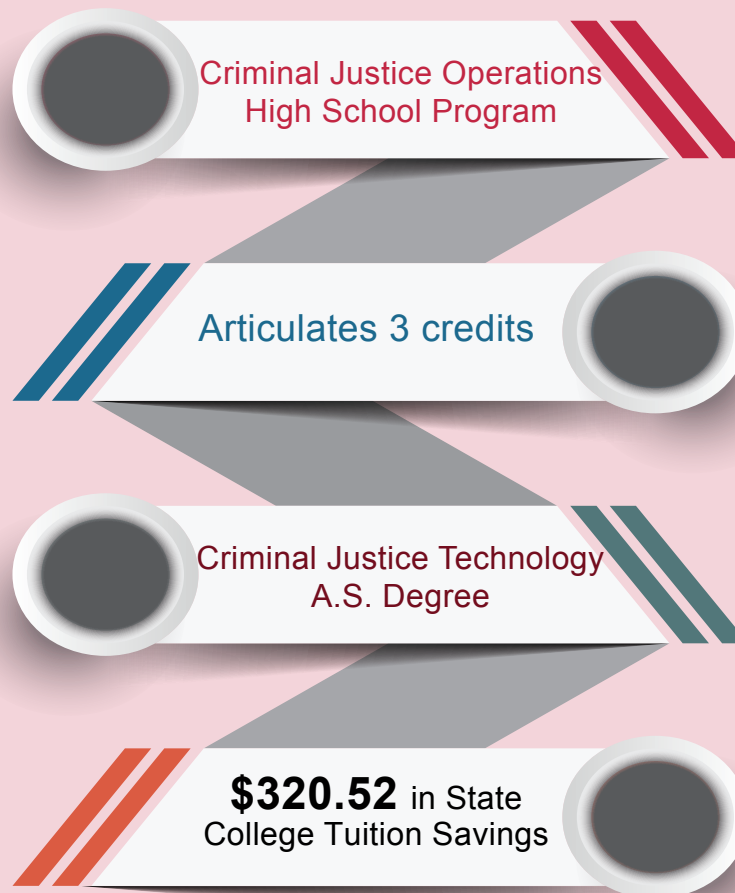
**20,749**

= 1,000

## Top Certifications Earned by K-12 Students



## Sample of Local Articulation Pathway to College



## Top High School Programs

**Criminal Justice Operations (16,880)**

**Introduction to Fire Fighting (1,397)**

**Public Safety Telecommunication (232)**

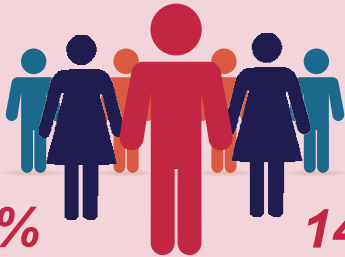
**Private Security Officer (79)**

\*Articulation in this career cluster varies per local institution.



2,651

District Postsecondary Enrollments

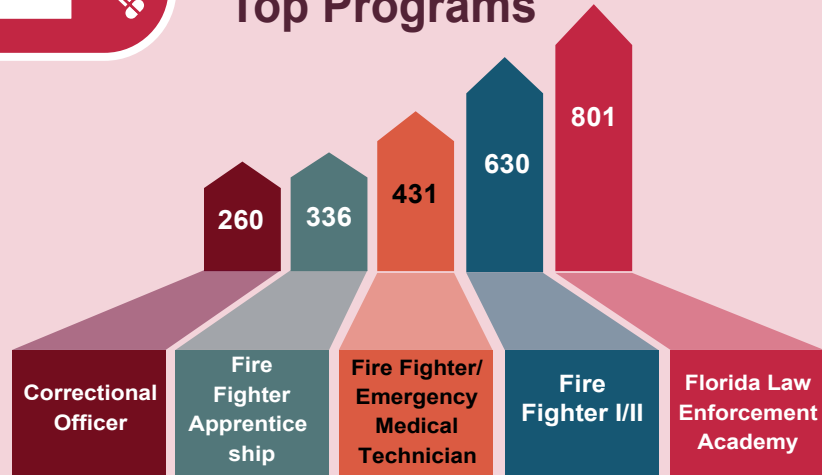


86% Certificate

14% Apprenticeship

18 Districts

Top Programs



Top Certifications Earned by District Postsecondary Students

Employment Outlook

High Growth



Police, Firefighter and Ambulance Dispatchers

High Wage



Firefighters

Annual Openings



Police and Sheriff's Patrol Officers

Notes: Based on 2018-19 data. Postsecondary enrollment is limited to district programs and includes dual enrollment students. Enrollment outlook is based on the 2019-20 Statewide Demand Occupations List.



# Manufacturing

The Manufacturing Career Cluster incorporates six pathways: production; manufacturing production process development; maintenance, installation & repair; quality assurance; logistics & inventory control, and health, safety & environmental assurance. Students prepare for careers that require planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities.

2018-19

**6,394**  
enrollments in  
High School  
programs



+

**1,084**  
enrollments in  
Middle School  
programs



=

**7,478**

= 1,000

## Top High School Programs

**Welding Technology Fundamentals (2,013)**

**Industry Biotechnology (1,619)**

**Advanced Manufacturing Technology (1,485)**

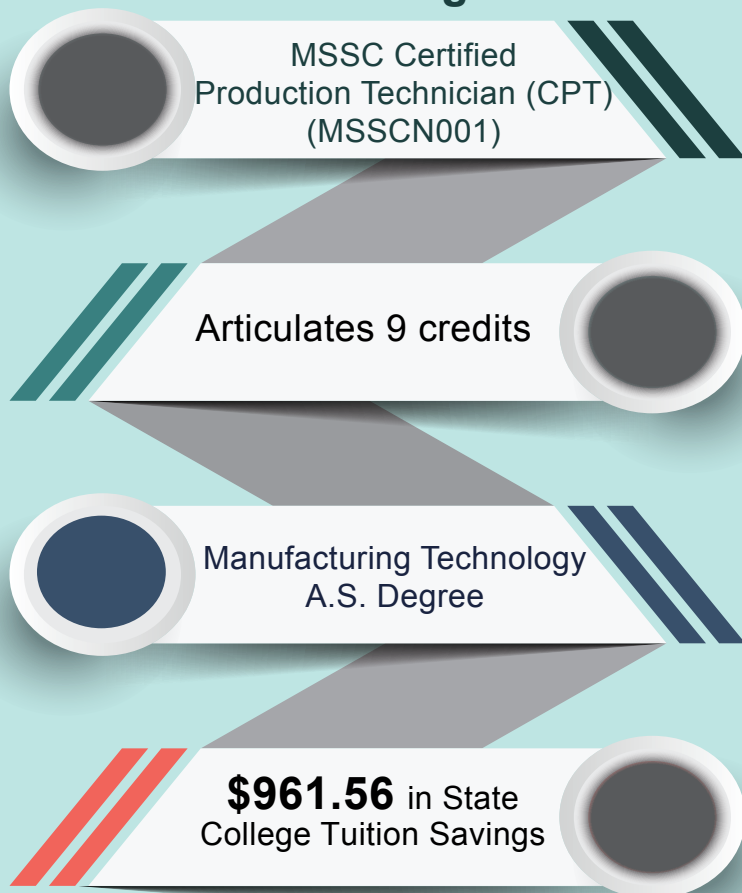
**Machining Technology (356)**

**Applied Welding Technology (266)**

## Top Certifications Earned by K-12 Students



## Articulation Pathway to College





3,258

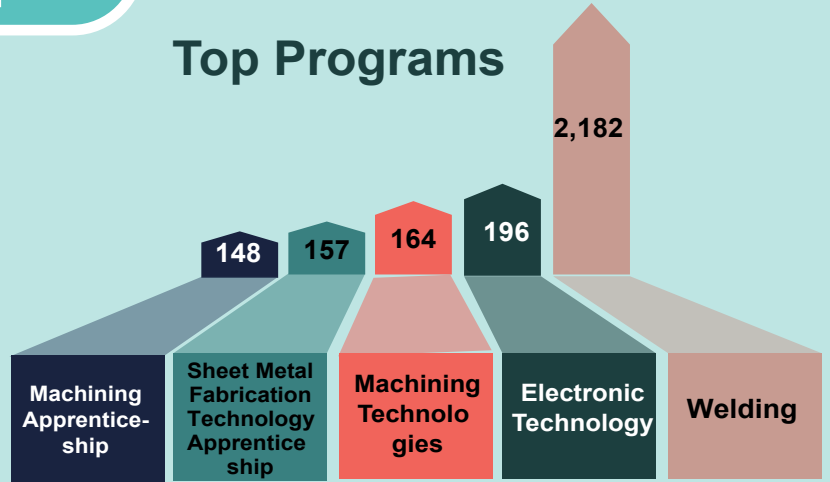
District Postsecondary Enrollments



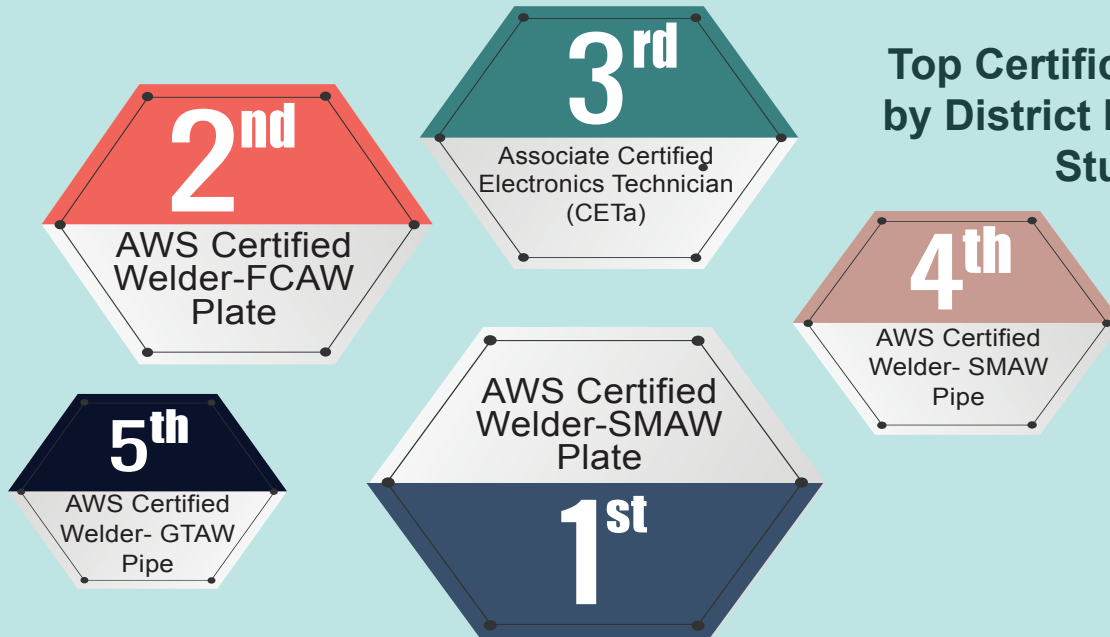
82% Certificate

18% Apprenticeship

Top Programs



Top Certifications Earned by District Postsecondary Students



Employment Outlook

High Growth



Welders, Cutters, Solderers & Brazers

High Wage



Industrial Machinery Mechanics

Annual Openings



Welders, Cutters, Solderers, and Brazers

Notes: Based on 2018-19 data. Postsecondary enrollment is limited to district programs and includes dual enrollment students. Enrollment outlook is based on the 2019-20 Statewide Demand Occupations List.

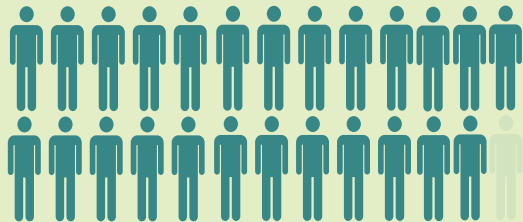


# Marketing, Sales & Service

The Marketing, Sales and Service Career Cluster consists of five pathways: marketing management; professional sales; merchandising; marketing communications and marketing research. Students in high school and postsecondary programs are preparing for careers in planning, managing and performing marketing activities to reach organizational objectives. Some examples of careers include customer service representatives, store managers and public relations managers.

2018-19

**25,009**  
enrollments in High School programs



+

**1,624**  
enrollments in Middle School programs



=

**26,663**

= 1,000

## Top High School Programs

**Marketing, Management and Entrepreneurial Principles (6,118)**

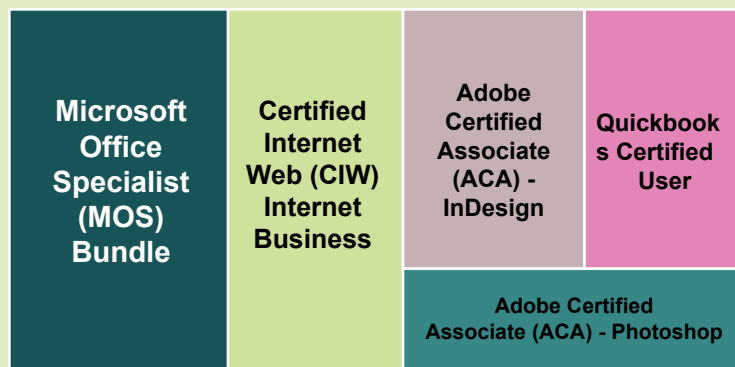
**Customer Service Representative (5,603)**

**Entrepreneurship (5,209)**

**Sports, Recreation, and Entertainment Marketing (4,180)**

**Fashion Marketing (998)**

## Top Certifications Earned by K-12 Students



## Sample of Local Articulation Pathway to College



\*Articulation in this career cluster varies per local institution.



# Transportation, Distribution & Logistics

The Transportation, Distribution and Logistics Career Cluster consists of planning, management, and movement of people, materials and goods by road, pipeline, air, rail and water. These programs also contain related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

2018-19

**13,243**  
enrollments in  
High School  
programs



+

**51**  
enrollments in  
Middle School  
programs



=

**13,294**

= 1,000

## Top High School Programs

**Automotive Maintenance & Light Repair (7,717)**

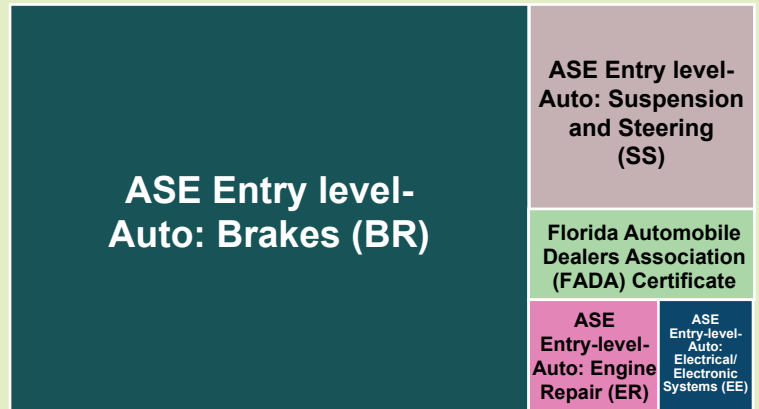
**Global Logistics & Supply Chain Technology (1,777)**

**Automotive Collision Technology (606)**

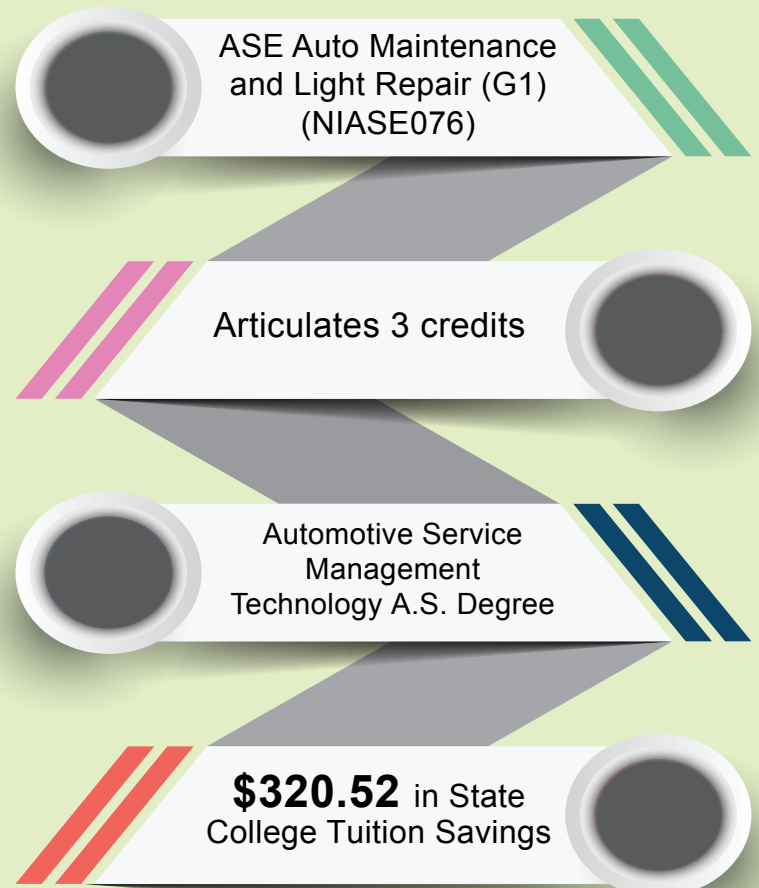
**Outboard Marine Service Technology (564)**

**Automotive Collision Repair & Refinishing (501)**

## Top Certifications Earned by K-12 Students



## Articulation Pathway to College



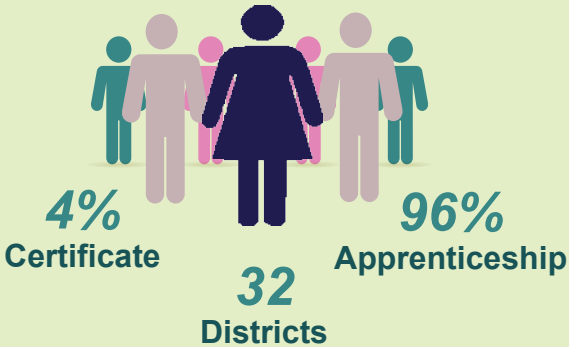
# Postsecondary



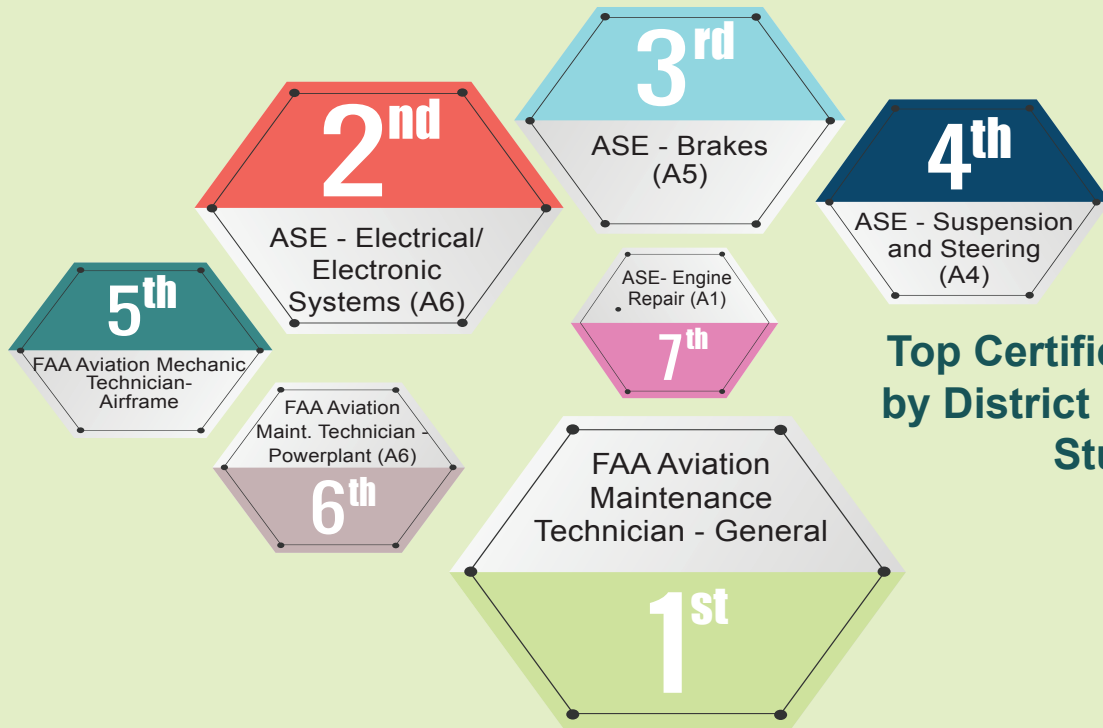
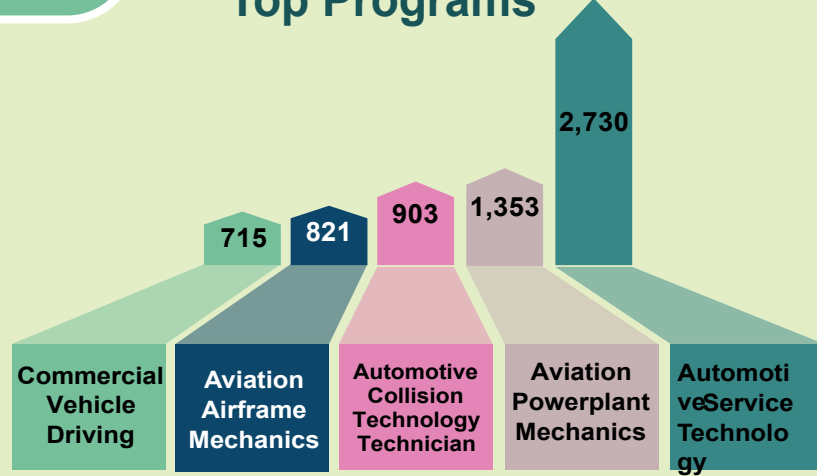
# & Employment

7,549

District  
Postsecondary  
Enrollments



## Top Programs



## Top Certifications Earned by District Postsecondary Students

## Employment Outlook

High Growth



Operating Engineers/  
Construction Equipment Operators

High Wage



Aircraft Mechanics and  
Service Technicians

Annual Openings



Operating Engineers/  
Construction Equipment Operators