

# Career Statewide Articulation Agreements

Report 23-10

November 2023



# OPPAGA

Office of Program Policy Analysis and Government Accountability

# Career Statewide Articulation Agreements

## EXECUTIVE SUMMARY

Statewide career articulation agreements provide students guaranteed course credit from a first credential, such as an industry certification, to a second credential, such as an associate in science degree. OPPAGA's analysis found that few students take advantage of the statewide agreements. Students' ability to enroll in the career credential programs in the agreements varied substantially by region due to limited program offerings in some service regions. Few students complete the credential programs as specified in statewide articulation agreements. Only 8.1% of students enrolled in a second credential program after completing the first credential within the three-year period required by most statewide articulation agreements. Moreover, only 5.0% of students then went on to complete the second credential.

### REPORT SCOPE

As directed by Ch. 2023-81, *Laws of Florida*, OPPAGA reviewed approved career statewide articulation agreements pertaining to industry certifications, career certificate programs, and applied technology diploma programs that articulate to associate in applied science or associate in science degrees; early childhood education programs; and associate in science to baccalaureate degree programs.

## METHODOLOGY

For this review, OPPAGA conducted interviews with state and institutional education stakeholders, including those from agencies outside of Florida, to learn about processes involved in developing articulation agreements for postsecondary career programs. To provide the necessary context and framework for this analysis, OPPAGA reviewed statewide and local career articulation agreements, state laws and State Board of Education rules, and research studies; deployed a questionnaire to selected colleges; and interviewed education officials from other states about the states' articulation policies. OPPAGA also analyzed student-level data from the Florida Department of Education (FDOE) to determine the number of students who enrolled in and completed a first and second credential in an active statewide articulation agreement during the period from academic years 2010-11 through 2021-22. In addition, OPPAGA's analysis identified students who, during the review period, completed credentials within the three-year time requirement but out of sequence. (See Appendix A for more information regarding OPPAGA's methodology.)

# BACKGROUND

## What are articulation agreements?

Articulation agreements are documents and policies that ensure students can move either between or within institutions without losing credit for previously completed coursework or previously demonstrated skills and knowledge attainment. Articulation agreements formalize transfer agreements between institutions, focus on academic processes and policies that guide transfer, and can include reverse transfer provisions and other student benefits like admissions guarantees.<sup>1</sup> Some articulation agreements specify courses between institutions that are equivalent, while others allow for block transfers of credit hours for a partial or full credential. Institutional inclusion in articulation agreements can vary, ranging from agreements between individual institutions (i.e., local agreements) to statewide agreements (i.e., system-wide agreements). (See Exhibit 1.)

### Exhibit 1

#### Examples of Variation Among Articulation Agreements

Types of Agreements	
<b>Formal</b>	Formalize the transfer relationships by stating the purpose of the arrangements between institutions. Articulation agreements typically <ul style="list-style-type: none"><li>• are long-form agreements designed to formalize transfer agreements between or within institutions;</li><li>• focus on academic processes and policies that guide transfer, such as credit transfer between schools; and</li><li>• may include reverse transfer provisions and other student benefits like admissions guarantees.</li></ul>
<b>Memorandums of Understanding (MOU)</b>	Focus on specific outcomes or responsibilities between parties. Institutions use MOUs to establish partnerships and leave articulation agreements to cover the academic components of transfer. MOUs typically <ul style="list-style-type: none"><li>• formalize business relationships between institutions through short form agreements;</li><li>• establish general broad terms between parties; and</li><li>• contain information around financial or resource obligations, such as tuition, faculty exchanges, space rental, data sharing, or legal issues.</li></ul>
Scope of Agreements	
<b>Course-to-Course</b>	Focus on the transfer of academic coursework. In these agreements, institutions determine how individual courses match or are equivalent to each other in terms of content, learning outcomes, relevance, and value and typically exclude admissions guarantees and related benefits. These agreements may be organized as <ul style="list-style-type: none"><li>• master lists of courses that are deemed equivalent;</li><li>• courses that make up institutional general education/core requirements; or</li><li>• program or major-specific curricula, including electives.</li></ul>
<b>Program-to-Program</b>	Align community college associate degrees with comparable bachelor's degree options. These agreements detail how specific courses match up with and count toward major requirements, general education requirements, and electives. In most cases, comparable associate and bachelor's programs exist at both institutions, facilitating the alignment of degrees (e.g., business to business). In other cases, community college programs may match one or more comparable bachelor's degrees offered (e.g., liberal arts to multiple arts & science options, human services to psychology, social work, or urban studies).
<b>Major-to-Major</b>	Built on the structure and format of program-to-program agreements. These agreements align program coursework based on external accreditation. Program coursework at both institutions address necessary competencies that follow accreditation standards.

<sup>1</sup> Reverse transfer occurs when students transfer credits back to a previously attended institution to complete a degree even after leaving that institution.

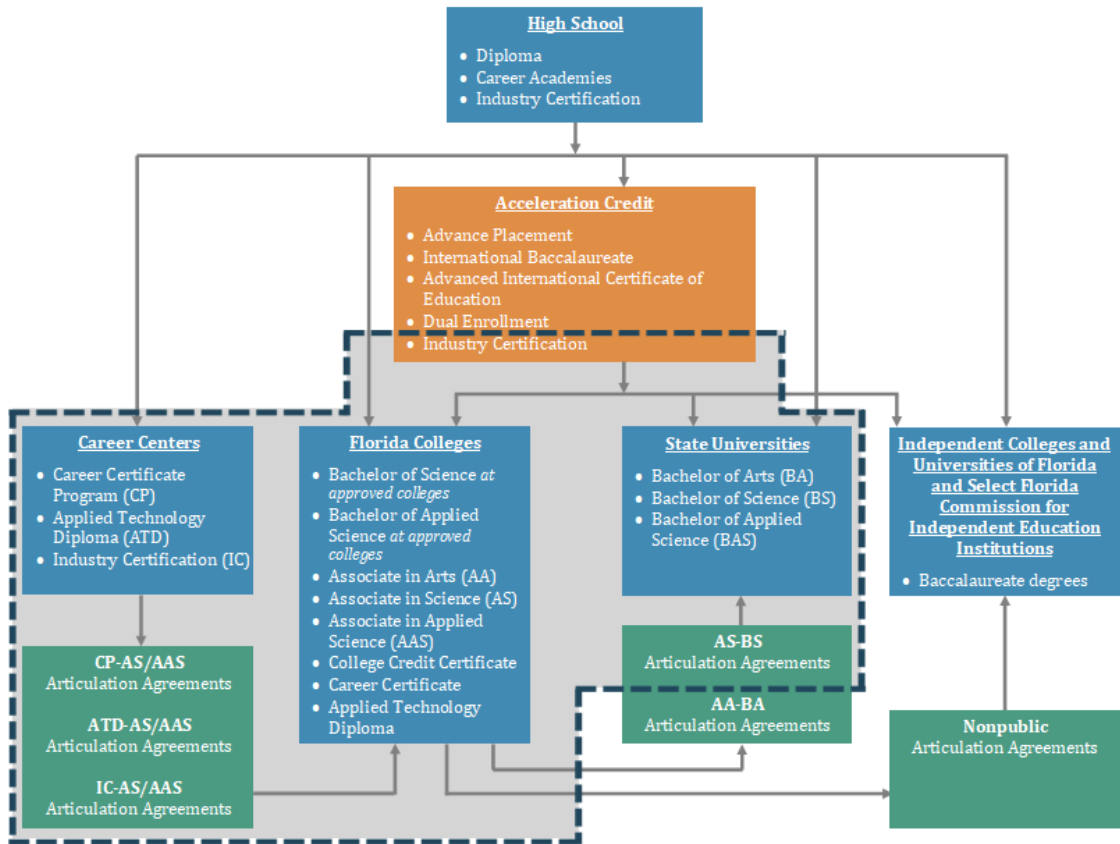
**Institutional Inclusion**

<b>Block Transfer</b>	Refers to the transfer of a partial or full credential in a bundle. This may be the block transfer of general education or as a degree in its totality. With block transfer arrangements, the receiving institution does not have to perform a course-by-course transfer credit evaluation and can satisfy degree or general education requirements in bulk.
<b>Statewide</b> (i.e., system-wide agreements)	Exclusive to public higher education institutions in a particular state. Articulation provisions such as course equivalencies, admissions guarantees, and financial benefits may be included. Individual public two-year and four-year institutions retain rights to enter into agreements with private and independent institutions. Some states mandate or allow private institutions to participate in these agreements, usually in statewide employment shortage areas.
<b>Institution-to-Institution</b> (i.e., local agreements)	May be generic or specific. These agreements are an all-encompassing agreement that provides the basis for establishing and/or expanding a partnership. Local articulation agreements may be at the institution-level or within a specific college or discipline area. Institutions may formalize a generic partnership agreement, and then create addendums for specific courses and credentials that may be easily updated or edited.

Source: OPPAGA adaptation from American Association of Collegiate Registrars and Admissions Officers, *Guide to Best Practices: Articulation Agreements*.

Articulation agreements can be useful particularly to states, such as Florida, with complex educational systems involving multiple institutions, numerous educational credentials, and numerous pathways to attain these credentials. For example, Florida students may begin earning credentials in high school that may transfer and be used toward credential completion at career centers, state colleges, state universities, and private colleges and universities. (See Exhibit 2.) OPPAGA reviewed the career programs and articulation agreements shown within the navy border in the exhibit.

**Exhibit 2  
Articulation Program Sequences<sup>1</sup>**



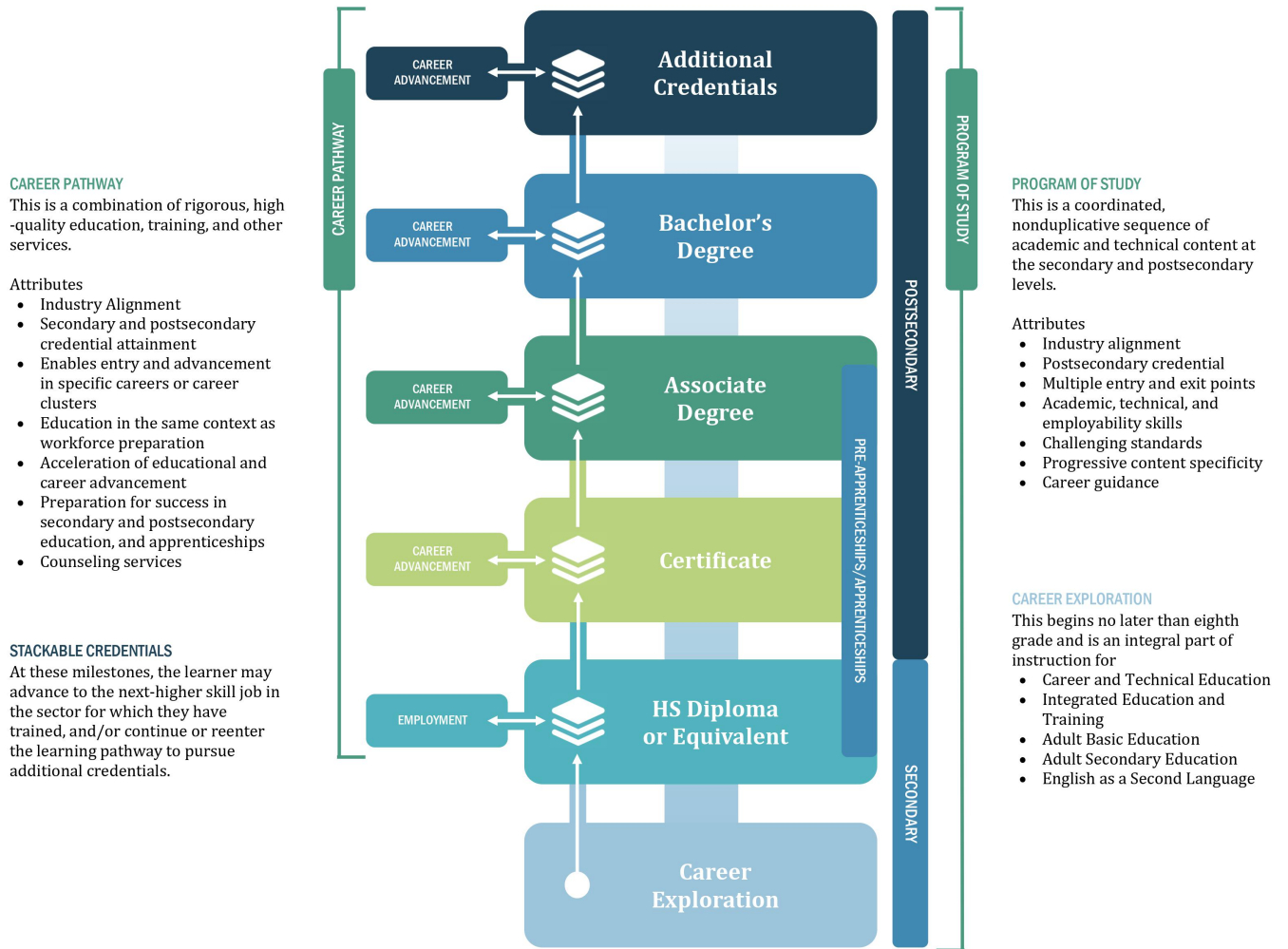
<sup>1</sup> Programs and articulation agreements inside the navy border represent the career articulation agreements and programs reviewed in this report. Source: OPPAGA adaption from FDOE *Statewide Articulation Manual*.

Research studies that OPPAGA reviewed identified several benefits associated with articulation agreements. For example, one study found that students who have all or almost all of their credits transferred are 2.5 times more likely to graduate than students who have fewer than half of their credits transferred, underscoring the importance of articulation agreements and the transfer of previously earned credit. One study found additional benefits associated with articulation agreements including increasing standardization of course numbers, content, and assessment across institutions.

## **What is the relationship between articulation agreements and career pathways?**

Articulation agreements can facilitate the awarding of credit for knowledge gained from previous educational experiences when a student continues their studies to advance their career. There are several ways that institutions can implement career pathways using articulation agreements. One way is through stacking credentials. Stackable credentials provide a structure that builds on educational content from one credential to the next, providing progressively advanced levels of learning required for a specific career field. The U.S. Department of Labor defines stackable credentials as “part of a sequence of credentials that can be accumulated over time to build up an individual’s qualifications and help [them] to move along a career pathway or up a career ladder to different and potentially higher-paying jobs.” A credential is considered stackable when it is part of a sequence of industry-recognized credentials that can be accrued over time, represent an individual’s knowledge and competencies, and help advance an individual within a career pathway. Stackable credentials allow students to pursue career advancement in a specific credential program or return to school after previously receiving a credential to earn additional credentials. Each credential stacks for a career pathway or program of study. (See Exhibit 3.)

### Exhibit 3 Multiple Pathways to Career Technical and Adult Education Credentials



Source: Adapted from U.S. Department of Education, Office of Career, Technical, and Adult Education. Perkins Collaborative Resource Network.

Students who are unable to commit to long educational programs due to family, work, or other obligations but who want to develop the knowledge and skills needed to advance in their careers can use stackable credentials. Stackable credentials offer a pathway of content that builds from one credential to the next and provides a level of learning that is desirable to a specific career field. There are various ways to stack credentials, including vertical, horizontal, and value-added stacking. (See Exhibit 4.)

## Exhibit 4

### Various Ways to Stack Credentials

Type	Description
<b>Vertical Stacking</b>	Also known as “traditional” or “progressive” stackable credentials, this approach follows a linear path. Students can earn a short-term credential (e.g., certificate) and continue to higher-level credentials along the career path (e.g., associate or bachelor’s degree).  <b>Example:</b> High school diploma → Certificate → Associate degree → Bachelor’s degree
<b>Horizontal Stacking</b>	In this type of stacking, a student earns a variety of credentials in related career fields that, when taken collectively, prepare them for a specific type of job.  <b>Example:</b> Certificate in CompTIA (information technology-IT) + Certificate in Microsoft Certified Solutions Expert + Certificate in Cisco Certified Network Associate = job as IT systems administrator
<b>Value-added or Supplemental Stacking</b>	This approach adds an area of expertise to an existing degree to be better prepared for a specific type of job. These types of stackable credentials do not follow a linear path, but students can still enter and exit the postsecondary system as needed.  <b>Example:</b> Master of Business Administration + Certificate in Biotechnology = job as biotechnology manager

Source: Higher Learning Advocates. *Stackable Credentials Backgrounder*. February 2020; Utah System of Higher Education. *What is ‘reverse transfer’ and a ‘stackable credential’?* June 2015.

According to research that OPPAGA reviewed, some of the benefits associated with stackable credentials include

- providing flexibility to adult learners with multiple entry points to earn credentials to gain entry and progress in their careers;
- strengthening the talent pipeline of workers by connecting postsecondary credentials to industry needs;
- building one credential on another to demonstrate attainment of broader, more complex or more specialized knowledge and skills over time; and
- giving institutions flexibility to address technology advancements that require more education and training at all levels of employment.

For example, a community college and a university can articulate credits in such a way that a student earns a certificate tied to an industry-recognized certification that applies toward an associate degree at the community college. The student then transfers the associate degree for full credit directly to the university where the student earns a baccalaureate degree with advanced preparation in the student’s career field because of the progression of learning.<sup>2</sup> Career pathways can also be achieved by the recognition of alternative or career-oriented credit.

## How does articulation work in Florida?

In 1971, the State Board of Education enacted the Florida Statewide Articulation Agreement, which was a set of policies and procedures to facilitate the seamless articulation of student credit between and among Florida’s secondary and postsecondary educational entities. The provisions of this agreement are codified in s. 1007.23, *Florida Statutes*; rules 6A-10.024 and 6A-10.0401, *Florida Administrative Code*; and the Florida Board of Governors Regulation 8.007.

Currently, the Florida Statewide Articulation Agreement facilitates the progression and transfer of students between the state’s 12 state universities, 28 state colleges, and 52 career centers. Statewide program-level articulation agreements and local/regional program-level articulation agreements

<sup>2</sup> American Association of Collegiate Registrars and Admissions Officers. *Guide to Best Practices—Articulation Agreements*. 2019.

guarantee minimum articulated credits for transfer students. The statewide program-level agreements do not preclude institutions from granting additional credits in local or regional program-level agreements. The number of local agreements state colleges reported to OPPAGA ranged from 0 to 63. Colleges with the most local agreements include Hillsborough Community College (63), St. Petersburg College (45), Broward College (34), and Pensacola State College (34). Nine state colleges reported having 10 to 63 local agreements, and the remaining 14 colleges reported having fewer than 10 local agreements.<sup>3</sup> Florida State College at Jacksonville and The College of the Florida Keys reported having no such agreements.

The Articulation Coordinating Committee (ACC), established by the Commissioner of Education in consultation with the Chancellor of the State University System, makes recommendations regarding articulation matters to the Florida Talent Development Council (formerly the Higher Education Coordinating Council), State Board of Education, and Board of Governors. The ACC, which receives administrative support from the Office of Articulation, consists of two members each representing the State University System, Florida College System, public career and technical education, K-12 education, and nonpublic postsecondary education and one member representing students. The ACC has a broad range of responsibilities including overseeing implementation of the statewide articulation agreement and recommending revisions to the agreement. (See Exhibit 5.)

**Exhibit 5**  
**Responsibilities of the Articulation Coordinating Committee**

Description
<ul style="list-style-type: none"> <li>Monitoring the alignment between the exit requirements of one education system and the admissions requirements of another education system into which students typically transfer and making recommendations for improving the alignment of these requirements</li> </ul>
<ul style="list-style-type: none"> <li>Proposing guidelines for inter-institutional agreements between and among public schools, career centers, state colleges, state universities, and nonpublic postsecondary institutions</li> </ul>
<ul style="list-style-type: none"> <li>Annually recommending dual enrollment course and high school subject area equivalencies for approval by the State Board of Education and the Board of Governors</li> </ul>
<ul style="list-style-type: none"> <li>Annually reviewing the statewide articulation agreement and making recommendations for revisions</li> </ul>
<ul style="list-style-type: none"> <li>Annually reviewing the statewide course numbering system, levels of courses, and application of transfer credit requirements among public and nonpublic institutions participating in the statewide course numbering system and identifying instances of student transfer and admissions difficulties</li> </ul>
<ul style="list-style-type: none"> <li>Annually publishing a list of courses that meet common general education and common degree program prerequisite requirements at public postsecondary institutions</li> </ul>
<ul style="list-style-type: none"> <li>Fostering timely collection and reporting of statewide education data to improve the K-20 education performance accountability system including, but not limited to data quality, accessibility, and protection of student records</li> </ul>
<ul style="list-style-type: none"> <li>Recommending roles and responsibilities of public education entities in interfacing with the single, statewide computer-assisted student advising system</li> </ul>

Source: OPPAGA analysis of FDOE documents.

<sup>3</sup> OPPAGA sent questionnaires to all 28 Florida colleges and received 23 responses. The five non-responsive colleges are Gulf Coast State College, North Florida College, Santa Fe College, Seminole State College of Florida, and South Florida State College.



# AVAILABILITY

## How many career-related statewide postsecondary articulation agreements are currently in effect?

As of June 2023, there were five broad categories of career-related statewide postsecondary articulation agreements among public postsecondary institutions, each of which has a number of specific articulation agreements.<sup>4</sup> (See Exhibit 6.) Each of these types of career statewide articulation agreements is discussed in more detail below.

### Exhibit 6

#### Types of Statewide Articulation Agreements and the Number of Agreements for Each Type

171	<b>Gold Standard Career Pathways Agreements</b> (Industry Certification to Associate in Science/Associate in Applied Science Degree)
75	<b>Career Ladder Agreements<sup>1</sup></b> (Associate in Science Degree to Bachelor of Science/Bachelor of Applied Science Degree)
29	<b>Career Pathways Agreements</b> (Career Certificate to Associate in Science/Associate in Applied Science Degree)
10	<b>Early Childhood Education Agreements</b> (Child Care Credential to Associate in Science/Associate in Applied Science Degree)
7	<b>Applied Technology Diploma Agreements</b> (Applied Technology Diploma to Associate in Science/Associate in Applied Science Degree)

<sup>1</sup> Of the 75 Career Ladder Agreement pathways that are currently active, 63 are part of the University of South Florida's (USF) statewide articulation agreement that requires that students complete their second credential in USF's bachelor of applied science program.

Source: OPPAGA analysis of FDOE data.

### Gold Standard Career Pathways Articulation Agreements (Industry Certification to AS/AAS Degree)

As of June 2023, there were 171 statewide articulation agreements that allow individuals completing specified industry certifications to obtain credit hours toward certain associate in science (AS) or associate in applied science (AAS) degree programs at state colleges. For example, under these agreements students with a Marine Electrical Certification receive three credit hours toward an AAS degree in Marine Engineering, Management, and Seamanship. (See Exhibit 7.) (See Appendix B for a list of Gold Standard Career Pathways of industry certification to AS or AAS articulation agreements.)

<sup>4</sup> In this report, OPPAGA generally refers to any approved pathway from a first credential to a second credential as an articulation agreement. For two types of career statewide articulation agreements (AS to BS degree and Early Childhood Credential to AS degree), there are multiple approved pathways specified within the articulation agreement.

## Exhibit 7

### Examples of Gold Standard Career Pathways of Industry Certification to AS or AAS Articulation Agreements

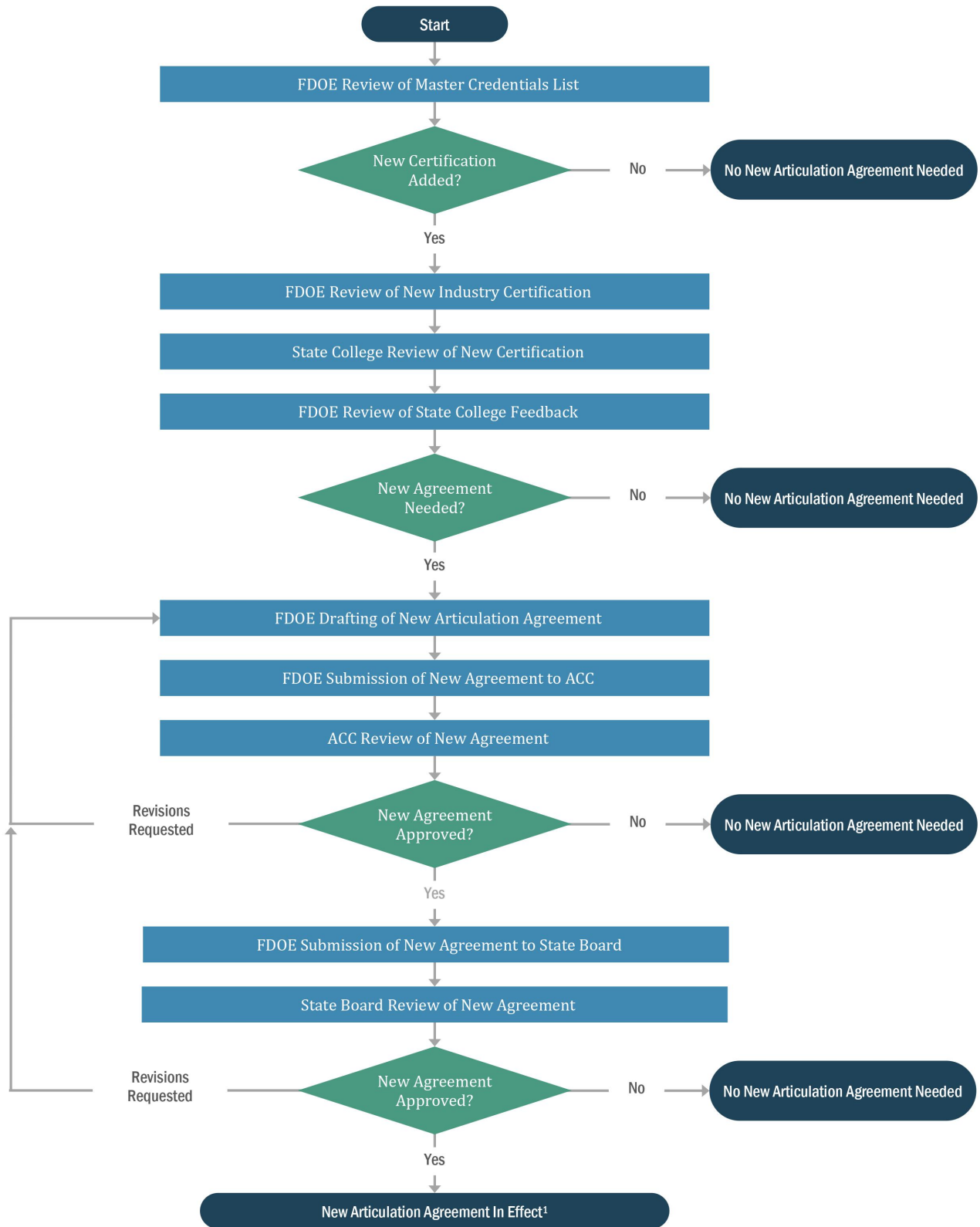
Industry Certification Title	AS or AAS Degree Program	Number of Credit Hours Awarded
Certified Culinarian	Restaurant Management	6
Autodesk Certified User – AutoCAD	Architectural Design and Construction Technology	3
Certified Culinarian	Culinary Management	3
Certified Fundamentals Cook	Hospitality and Tourism Management	3
Certified Survey Technician	Civil Engineering Technology	3
Marine Electrical Certification	Marine Engineering, Management, and Seamanship	3

Source: OPPAGA analysis of FDOE data.

FDOE initiates the process for adding a new industry certification to the statewide agreements when the Florida Credentials Review Committee adds a new industry certification to the Master Credentials List.<sup>5</sup> The Office of Articulation, in collaboration with the Division of Career and Adult Education, completes an internal review of all newly added industry certifications to determine if the certifications align with any AS/AAS degrees offered by state colleges. If this review identifies an alignment, the Office of Articulation coordinates an external review of each new industry certification with the workforce administrator at the state colleges that offer the aligned degree programs. Workforce administrators provide feedback, using a survey, regarding the proposed AS/AAS degree alignments and the number of credit hours that the new industry certifications should articulate. The Office of Articulation and Division of Career and Adult Education review the feedback to determine whether an articulation agreement is justified for each of the new industry certifications. If justified, the Office of Articulation drafts an articulation agreement for the new industry certifications and provides relevant information for the new articulation agreements to ACC board members. Board members individually review the materials and consult with subject matter experts as necessary. At the next ACC meeting, board members may approve the agreement as submitted, provide feedback and request that the agreement be resubmitted with revisions, or deny the agreement. If approved by the ACC, the Office of Articulation submits the agreement to the State Board of Education for final review and approval. (See Exhibit 8.)

<sup>5</sup> The Master Credentials List, established pursuant to s. 445.004, *F.S.*, includes both degree and non-degree credentials that the state has prioritized to prepare students for in-demand occupations with middle- to high-level wages.

**Exhibit 8**  
**Process for Adding a New Industry Certification to the Statewide Articulation Agreement**



<sup>1</sup> Rules approved by the State Board of Education become effective 20 days after being filed with the Department of State.

Source: OPPAGA interviews with FDOE administrators.

## Career Ladder Articulation Agreements (AS Degree to BS/BAS Degree)

As of June 2023, 75 statewide articulation agreements allow individuals completing specified AS degree programs to obtain credit hours toward certain bachelor of science (BS) and bachelor of applied science (BAS) degree programs at state colleges and state universities. For example, one of these agreements allows students with an AS degree in Electronics Engineering Technology to transfer 68 credit hours toward a BS degree in Electronics Engineering Technology. The number of credit hours required to earn the first credential (AS degree) varies depending on the program. (See Exhibit 9.)

### Exhibit 9

#### Seventy-Five Statewide Articulation Agreements Between AS and BS or BAS Degree Programs<sup>1</sup>

AS Degree Program	BS or BAS Degree Program	Number of Credit Hours Awarded
Radiography	Radiologic Technology	46
Computer Engineering Technology	Information Systems Technology	68
Electronics Engineering Technology	Electronics Engineering Technology	68
Electronics Engineering Technology	Engineering Technology	68
Business Administration	Business Administration	64
Business Administration	Business General	64
Criminal Justice Technology	Criminal Justice	64
Hospitality and Tourism Management	Hospitality Administration and Management <sup>2</sup>	64
Construction Technology	Technology Teacher Education	63
Graphics Communication Technology		
Drafting and Design Technology		
Nursing	Nursing	56-60
Regionally-Accredited AS Degree Program (63 agreements) <sup>3</sup>	Applied Science	42

<sup>1</sup> OPPAGA analysis excludes the Transportation Technology AS to Technology Teacher Education BS pathway because FDOE was unable to identify this associate in science degree in its inventory.

<sup>2</sup> Only for programs not accredited by the Association to Advance Collegiate Schools of Business

<sup>3</sup> For the list of the 63 regionally-accredited AS degree program titles, see Appendix A, Exhibit A-1.

Source: OPPAGA analysis of FDOE data.

The authority to include AS degree programs in a statewide articulation agreement is provided in s. 1007.23(6), *Florida Statutes*, and is initiated by FDOE in consultation with state universities. New AS degree program agreements are not added regularly, and the Office of Articulation is currently reviewing the process for adding new programs.<sup>6</sup> AS degree articulation agreements must be approved by the ACC, the State Board of Education, and the Board of Governors.

## Career Pathways Articulation Agreements (Career Certificate to AS/AAS Degree)

As of June 2023, 29 statewide articulation agreements allow individuals completing specified career pathway certificates to obtain credit hours toward certain AS or AAS degree programs at state colleges. A career pathway certificate, formerly known as the postsecondary adult vocational certificate, is a course of study consisting of clock hours designed to prepare students for employment. For example, under these agreements students with an Accounting Operations Certificate can receive six credit hours toward an AS degree in Office Administration. (See Exhibit 10.)

<sup>6</sup> The last update to the AS to BS articulation agreement was in May 2011. The Office of Articulation reported that the AS to BS articulation agreement had been managed by the Florida College System and that the Office of Articulation now manages the AS to BS articulation agreement.

**Exhibit 10****Twenty-Nine Statewide Articulation Agreements Between Career Pathway Certificates and Associate in Science Degree Programs**

Career Certificate Program	Associate Degree Program	Number of Credit Hours Awarded
Automotive Service Technology	Automotive Service Management Technology (AAS)	19
Administrative Office Specialist	Office Administration (AS)	18
Legal Administrative Specialist	Office Administration (AS)	18
Medical Administrative Specialist	Office Administration (AS)	18
Business Computer Programming	Computer Programming and Analysis (AS)	15
Electronic Technology	Electronics Engineering Technology (AS)	15
Florida Law Enforcement Academy	Criminal Justice Technology (AS)	15
Practical Nursing	Nursing, Registered Nurse (AS)	10
Digital Design	Graphics Technology (AS)	9
Early Childhood Education	Early Childhood Education (AS)	9
Network Support Services	Computer Engineering Technology (AS)	9
Network Support Services	Network Systems Technology (AS)	9
Network Systems Administration	Computer Engineering Technology (AS)	9
Network Systems Administration	Network Systems Technology (AS)	9
Accounting Operations	Office Administration (AS)	6
Correctional Officer	Criminal Justice Technology (AS)	6
Digital Printing Technology	Graphics Technology (AS)	6
Landscape and Turf Management	Landscape and Horticulture Technology (AS)	6
Landscape and Turf Management	Golf Course Operations (AS)	6
Nursery Management	Landscape and Horticulture Technology (AS)	6
Nursery Management	Golf Course Operations (AS)	6
Web Development	Graphics Technology (AS)	6
Web Development	Internet Services Technology (AS)	6
Brick and Block Masonry	Building Construction Technology (AS)	3
Building Construction Technologies	Building Construction Technology (AS)	3
Carpentry	Building Construction Technology (AS)	3
Electrician	Building Construction Technology (AS)	3
Firefighter	Fire Science Technology (AS)	3
Heating, Ventilation, Air-Conditioning/ Refrigeration	Building Construction Technology (AS)	3

Source: OPPAGA analysis of FDOE data.

The authority for adding a new career certificate program to a career pathways agreement is specified in s. 1007.23(5), *Florida Statutes*, and is similar to the industry certification process but can be initiated in several ways. A school district or state college can request recognition of a local career certificate program agreement at the state level, or an FDOE review of new career certificate programs or changes to state policies can support the creation of an agreement at the state level. The remainder of the approval process follows the same steps outlined above for industry certifications except proposed additions of new career certificate programs to the statewide agreements are not submitted to the State Board of Education. Instead, the ACC determines final approval of these agreements.

## Applied Technology Diploma Articulation Agreements (ATD to AS/AAS Degree)

As of June 2023, seven statewide articulation agreements allow individuals holding specified applied technology diplomas (ATD) to obtain a certain number of credit hours toward certain AS or AAS degree programs.<sup>7</sup> The ATDs in the agreements are all healthcare related. For example, under these agreements students with an ATD in Dental Assisting Technology and Management can receive 50 credit hours toward an AS degree in Dental Assisting Technology and Management. (See Exhibit 11.)

### Exhibit 11

#### Seven Statewide Articulation Agreements Between Applied Technology Diploma and Associate in Science Degree Programs

Applied Technology Diploma Program	Associate in Science Degree Program	Number of Credit Hours Awarded
Dental Assisting Technology and Management	Dental Assisting Technology and Management	50
Paramedic	Emergency Medical Services	42
Medical Clinical Laboratory Technician	Medical Laboratory Technology	40
Pharmacy Technician	Pharmacy Management	40
Medical Coder/Biller	Health Information Technology	37
Medical Records Transcribing/Healthcare Documentation	Health Information Technology	33
Emergency Medical Technician	Emergency Medical Services	12

Source: OPPAGA analysis of FDOE data.

The process for adding a new ATD to the statewide articulation agreement is initiated and conducted by FDOE in consultation with school districts and state colleges. Rule 6A-10.024(7)(d), *Florida Administrative Code*, requires applied technology diploma agreements to include the total number of clock hours within the diploma, the AS/AAS degrees into which the diploma is guaranteed to transfer, and the number of credit hours the diploma will articulate. Final approval of applied technology diploma agreements is FDOE’s responsibility, and approved agreements are presented to the ACC for informational purposes.

## Early Childhood Education Articulation Agreements (Child Care Credentials to AS Degree)

As of June 2023, 10 statewide articulation agreements allow individuals holding specified credentials in early childhood education to obtain credit hours toward an AS degree in Early Childhood Education at state colleges. For example, under these agreements students with a Child Development Associate credential can receive nine credit hours toward an AS degree in Early Childhood Education. (See Exhibit 12.)

<sup>7</sup> An ATD consists of a course of study that is part of an AS or AAS degree, is less than 60 credit hours, is approximately 50% of the technical component (non-general education), and leads to employment in a specific occupation.

## Exhibit 12

### Ten Statewide Articulation Agreements Between Early Childhood Education Credentials and Associate in Science Degree Programs<sup>1</sup>

Early Childhood Credential <sup>2</sup>	Associate in Science Degree Program	Number of Credit Hours Awarded
Florida Department of Children and Families Birth through Five Florida Child Care Professional Credential	Early Childhood Education	9
Florida Department of Education Child Care Apprenticeship Certificate		
Florida Department of Education Early Childhood Professional Certificate		
Council for Professional Recognition National Child Development Associate		
Introductory Child Care Training		
Early Childhood Development Specialization		
Early Childhood Inclusion Specialization		
Child Care Center Management Specialization		
Infant/Toddler Specialization		
Preschool Specialization		

<sup>1</sup> The Early Childhood Education career certificate program, listed in Exhibit 10, also articulates credits to the Early Childhood Education AS degree.

<sup>2</sup> Early childhood credential types are apprenticeship, college credit certificate, and industry certification.

Source: OPPAGA analysis of FDOE data.

The process for adding a new early childhood education pathway to the statewide articulation agreement is initiated and conducted by FDOE. Section 1007.23(7), *Florida Statutes*, requires early childhood education agreements to guarantee the articulation of nine credit hours. Final approval of early childhood education agreements is FDOE’s responsibility, and approved agreements are presented to the ACC for informational purposes.

## How many career programs and degree programs have career statewide articulation agreements?

Overall, about 18% (113 of 631) of all career programs and degree programs offered by career centers and state colleges in Academic Year 2021-22 had an associated statewide articulation agreement that allows students to use an initial credential for credit hours toward a degree. The percentage of career programs or degrees with statewide articulation agreements varies considerably depending on the type, ranging from 88% of applied technology diplomas having an associated statewide articulation agreement to 2% of college credit certificate programs having such an agreement. (See Exhibit 13.) (See Appendix C for a list of the career programs or degrees with statewide articulation agreements.)

### Exhibit 13

#### Number of Career Programs or Degrees Offered by Career Centers or State Colleges Compared to the Number Included in a Statewide Articulation Agreement in Academic Year 2021-22

Career Program or Degree Type <sup>1</sup>	Number of Programs Offered Statewide (2021-22)	Number (Percentage) of Programs With a Statewide Articulation Agreement Offered By At Least One Institution in 2021-22
Applied Technology Diploma	8	7 (87.5%)
Associate in Science Degree	116	69 <sup>2</sup> (59.5%)
Associate in Applied Science	6	1 (16.7%)
Career Certificate Program	190	23 (12.1%)
Bachelor of Science Degree	60	7 (11.7%)
Apprenticeship <sup>3</sup>	35	1 (2.9%)
College Credit Certificate Program <sup>3</sup>	216	5 (2.3%)
<b>Total</b>	<b>631</b>	<b>113 (18%)</b>

<sup>1</sup> Excludes state university programs and degrees.

<sup>2</sup> Of the 69 AS degrees with a statewide articulation agreement offered by at least one institution in academic year 2021-22, 58 are part of the regionally-accredited AS degrees that are linked to the same second program: Bachelor of Applied Science degree at USF.

<sup>3</sup> An apprenticeship program and five college credit certificate programs are first credentials that are included as part of the statewide articulation agreement for early childhood education.

Source: OPPAGA analysis of FDOE data.

## How many career and professional education industry certifications have statewide articulation agreements?

OPPAGA identified the number of career and professional education (CAPE) funded industry certifications on the Master Credentials List, established pursuant to s. 445.004, *Florida Statutes*, and included in a statewide articulation agreement. The CAPE Industry Certification Funding List, pursuant to the requirements in ss. 1003.4203 and 1008.44, *Florida Statutes*, is a list of certifications identified by business and education leaders as key to achieving Florida’s goal of sustaining a strong, knowledge-based economy. To be considered for a CAPE designation, an industry certification must be on the Master Credentials List, which includes both degree and non-degree credentials that the state has prioritized to prepare students for in-demand occupations with middle- to high-level wages.

The Master Credentials List was created in academic year 2021-22. (See Exhibit 14.) For academic years 2022-23 and 2023-24, roughly one-fifth (22% and 20%, respectively) of the industry certifications on the CAPE funding list were included in a statewide articulation agreement. (See Appendix B for a list of CAPE funded industry certifications included on the 2023-24 Master Credential List that are part of a statewide articulation agreement for academic year 2023-24.)

### Exhibit 14

#### Number of CAPE Funded Industry Certifications on the Master Credentials List With a Statewide Articulation Agreement From Academic Year 2021-22 to Academic Year 2023-24

Academic Year	Number of CAPE Funded Industry Certifications on the Master Credentials List <sup>2</sup>	Number (Percentage) of CAPE Funded Industry Certifications on the Master Credentials List With a Statewide Articulation Agreement
2021-22	515	105 (20%)
2022-23	525	116 (22%)
2023-24 <sup>1</sup>	530	108 (20%)

<sup>1</sup> The 2023-24 Master Credential List was published on September 6, 2023, and the 2023-24 CAPE Industry Certifications Funding List was published on August 2, 2023.

<sup>2</sup> The 2023-24 CAPE list has 535 industry certifications and the 2023-24 Master Credentials List has 560 industry certifications. There are 530 industry certifications on the 2023-24 CAPE list that are also on the 2023-24 Master Credential List. The CAPE List and Master Credentials List include the same list of certifications for academic years 2021-22 and 2022-23.

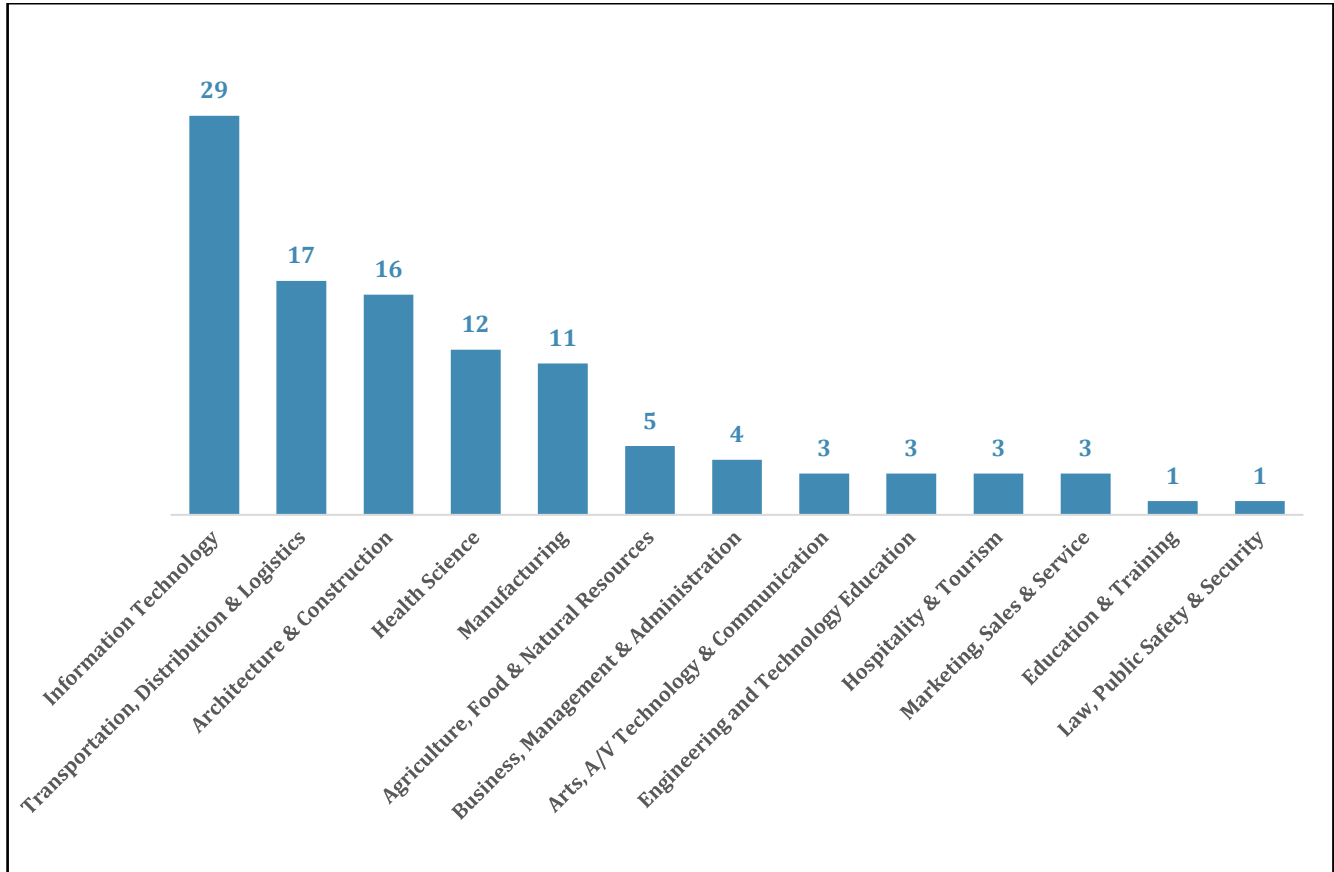
Source: OPPAGA analysis of FDOE Data.



The industry certifications on the CAPE funding list included in a statewide articulation agreement vary considerably by primary career cluster.<sup>8</sup> For example, in academic year 2023-24, the most common industry certifications on the CAPE funding list included in statewide agreements related to information technology (29), transportation, distribution and logistics (17), architecture and construction (16), and health science (12). (See Exhibit 15)

**Exhibit 15**

**Number of Industry Certifications on the CAPE Funding List With an Active Statewide Articulation Agreement by Career Cluster in Academic Year 2023-24**



Source: OPPAGA analysis of FDOE data.

## UTILIZATION

### To what extent are programs included in statewide articulation agreements offered in each region of the state?

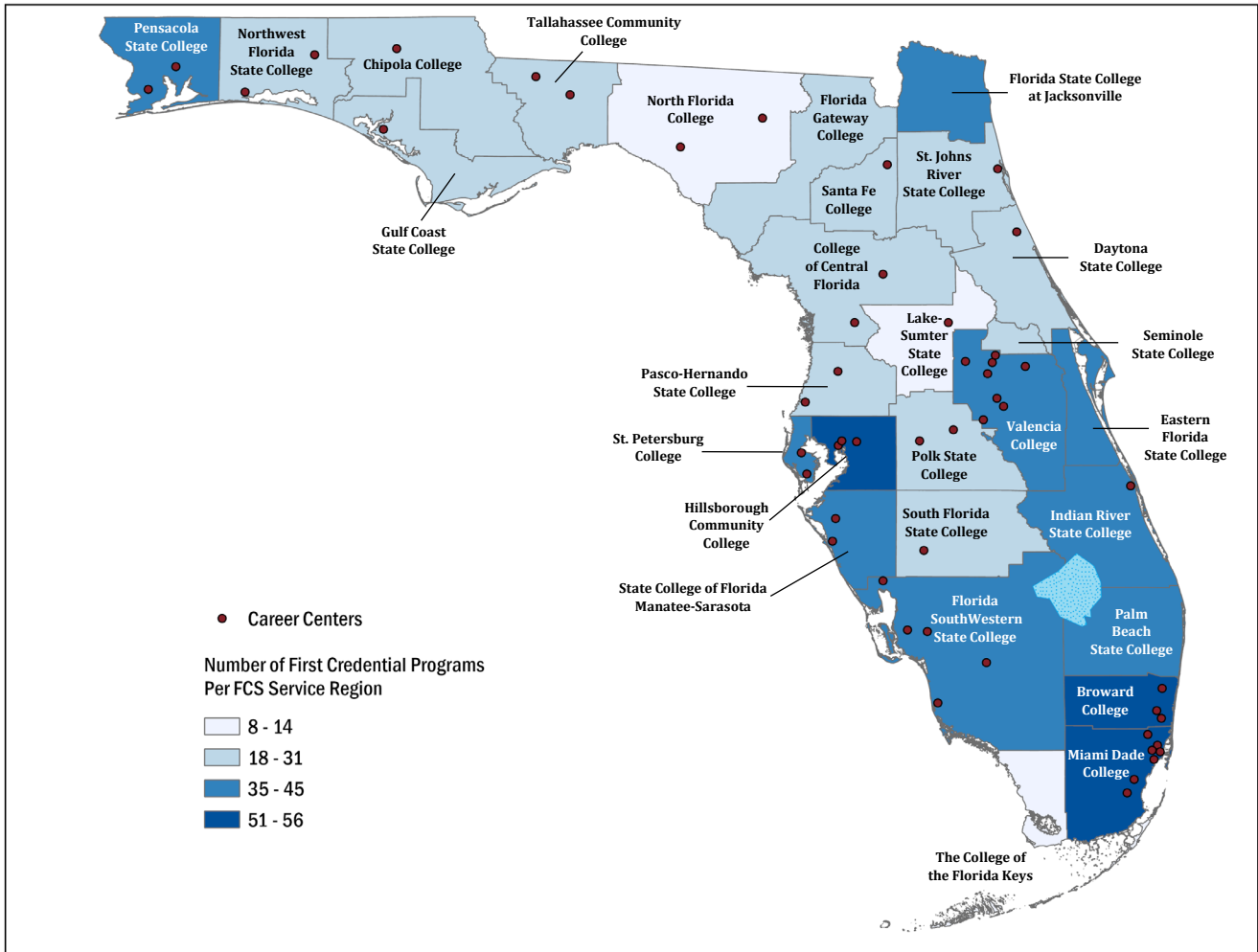
Students’ ability to complete the credentials identified in statewide articulation agreements varies substantially by region due to limited program offerings. In academic year 2021-22, there were 120 unique pairings of first and second credentials in statewide articulation agreements that could be offered by either a career center or a state college within a given Florida College System service

<sup>8</sup> Career clusters are broad occupational categories specified on the CAPE List for each industry certification. On the 2023-24 CAPE List, there are 14 career clusters.

region.<sup>9,10</sup> OPPAGA’s analysis found that during academic year 2021-22, institutions in South Florida and the Tampa Bay area offered the greatest number of **first credential programs** included in the statewide articulation agreements. Institutions in the Broward College and Miami Dade College service regions offered the most first credential programs (56 and 55, respectively) followed by institutions in the Hillsborough Community College (51) and St. Petersburg College (45) service regions. Institutions in the North Florida College (9) and College of the Florida Keys (8) service regions offered the fewest number of first credentials. (See Exhibit 16.)

**Exhibit 16**

**Availability of First Credential Programs in a Statewide Articulation Agreement in Academic Year 2021-22 by Florida College System Service Region**



Source: OPPAGA analysis of FDOE data.

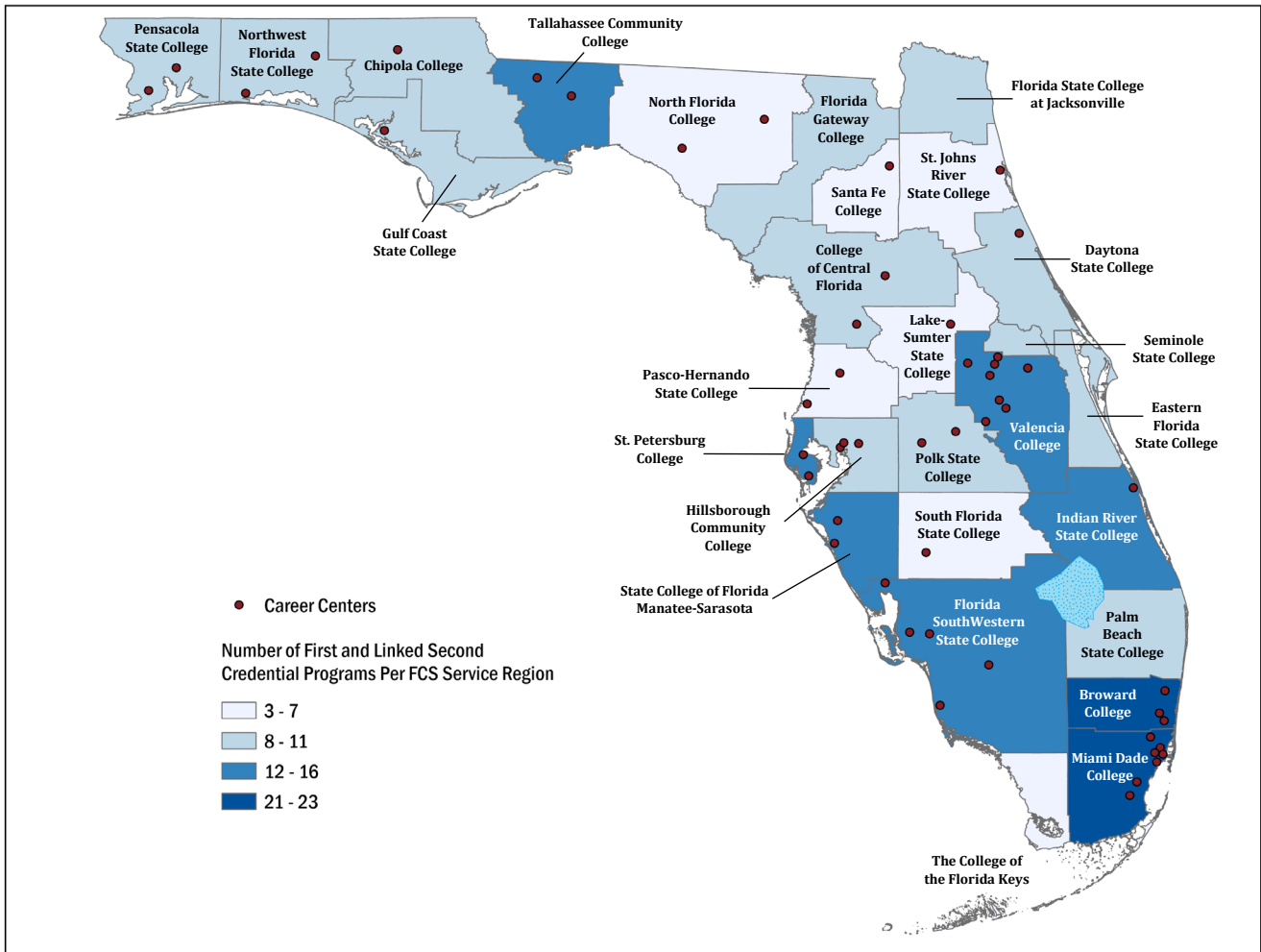
<sup>9</sup> These 120 unique program pairings are greater than the 113 programs with statewide agreements (listed above in Exhibit 13) because there are some cases where first credentials may link to more than one distinct AS degree program. In addition, Florida statute permits contiguous district school boards to establish agreements for operating a career center, with FDOE approval. In the four cases where a career center serves more than one county, all but one is within counties that are in the same Florida College System service region.

<sup>10</sup> Each state college has a service region defined in Florida statute. Each of these 28 service regions contains one state college and may also include career centers. For example, the service region that includes Tallahassee Community College includes three counties (Gadsden, Leon, and Wakulla) and three institutions (Tallahassee Community College, Lively Technical College, and Gadsden Technical College). One career center, North Florida Technical College, serves students in counties that cross Florida College System service regions; the college serves both Bradford County (in the Santa Fe College service region) and Union County (in the Florida Gateway College service region). For this report, programs available at North Florida Technical College were included with the Santa Fe College service region.

During the same period, students in the Broward College (23), Miami Dade College (21), and Valencia College (16) service regions had the greatest opportunity to enroll in both the **first and second credential programs** identified in statewide articulation agreements. Students in other areas of the state, such as those served by North Florida College (3), College of the Florida Keys (4), and Lake-Sumter State College (5), had the potential to enroll in fewer program sequences in statewide agreements due to limited program offerings. (See Exhibit 17.) (See Appendix D for a list of first and second credential programs available in each Florida College System service region in academic year 2021-22.)

**Exhibit 17**

**Availability of Both the First and Second Credential Programs in a Statewide Articulation Agreement in Academic Year 2021-22 by Florida College System Service Region**



Source: OPPAGA analysis of FDOE data.

# How many students enroll in programs included in statewide articulation agreements?

Fifty-seven percent of the 301 career articulation pathways (unique pairings of first and second credentials) identified in statewide articulation agreements in effect from academic years 2010-11 through 2018-19 had no students enrolled.<sup>11</sup> (See Exhibit 18.) For this analysis, OPPAGA identified the number of articulation agreement pathways in which at least one student completed the first credential and enrolled in the second credential program within the timeframe specified in the articulation agreements. The Early Childhood Education Credential to AS degree agreement had the highest percentage of pathways with student enrollments, and the AS to BS degree had the lowest.

OPPAGA’s analysis also identified an additional 1,602 students in career programs to AS degree and 1,057 in industry certification to AS/AAS degree pathways who, during the review period, enrolled in the second credential program before attaining the first credential within the three-year timeframe specified in the articulation agreements. OPPAGA excluded these students from further analysis because statewide articulation agreements require students to show evidence that they have completed the first credential prior to enrolling in the second credential program in order to receive credit for prior work.

## Exhibit 18

### Pathways Identified in Statewide Articulation Agreements in Place From 2010-11 to 2018-19 With at Least One Student Enrolled Within the Timeframe Specified in the Articulation Agreements

Statewide Agreement Type	Number of Statewide Articulation Agreement Pathways (Active at Any time From 2010-11 to 2018-19)	Number (Percentage) of Agreement Pathways With at Least One Student Enrollment (2010-11 to 2018-19) <sup>1</sup>
Early Childhood Certification to AS Degree <sup>2</sup>	6	5 (83%)
Career Certificate to AS Degree	22	13 (59%)
Applied Technology Diploma to AS Degree	14	7 (50%)
Industry Certification to AS/AAS Degree	184	77 (42%)
AS Degree to BS Degree <sup>3</sup>	75	28 (37%)
<b>Total</b>	<b>301</b>	<b>130 (43%)</b>

<sup>1</sup> An agreement pathway is counted when a student completes the first program and enrolls in the second program within three years (five years for Early Childhood Education to AS degree agreement) while the pathway in a statewide articulation agreement is active.

<sup>2</sup> The Early Childhood Education Credentials to AS degree agreement type has the lowest number of pathways active during the review period: six. Please note that small changes in the number of pathways with at least one student enrolled for this type of agreement could lead to large changes in the percentage of active pathways.

<sup>3</sup> Of the 75 pathways included in the AS to BS degree articulation agreement, 63 pathways are considered regionally accredited AS degrees linked to the same second program: Bachelor of applied science degree, which is only offered by USF. This high number of pathways to a unique second linked program contributed to the low percentage of pathways with at least one student enrolled.

Source: OPPAGA analysis of FDOE data.

OPPAGA further analyzed enrollment data and found that, in general, the percentage of students enrolling in a second credential program after completing the first credential within the timeframe specified in the articulation agreements was 8.1%. (See Exhibit 19.) The enrollment rate varied by statewide agreement type, ranging from 2.5% for industry certifications to AS degree to 24% for AS degree to BS degree pathways.

<sup>11</sup> The last year of student data used in OPPAGA’s analysis was academic year 2021-22. OPPAGA allowed three years for students to complete a credential; thus, academic year 2018-19 was the last year for students in OPPAGA’s cohort to enroll in the second credential program.

## Exhibit 19

### Number and Percentage of Students With the First Credential Who Enrolled in a Second Credential Within the Timeframe Specified in the Articulation Agreements

Statewide Agreement Type	Number of Students With First Credential (2010-11 to 2015-16) <sup>1</sup>	Number (Percentage) of Students Enrolled in Second Credential Program Within the Specified Timeframe up to 2018-19 <sup>2</sup>
AS Degree to BS Degree	52,668	12,669 (24%)
Early Childhood Education to AS Degree	1,805	180 (10%)
Applied Technology Diploma to AS/AAS Degree	1,218	85 (7%)
Career Certificate to AS Degree	27,025	1,386 (5.1%)
Industry Certification to AS/AAS Degree	134,978	3,356 (2.5%)
<b>Total</b>	<b>217,694</b>	<b>17,636 (8.1%)</b>

<sup>1</sup> Counts of students who completed the first program from 2010-11 to 2015-16 while the pathway was active in an articulation agreement.

<sup>2</sup> Counts of students who, after completing the first program from 2010-11 to 2015-16, enrolled within the timeframe specified while the pathway was active in an articulation agreement up to 2018-19. The Early Childhood Education to AS degree agreement allows five years to enroll in the second program, while the other agreements only allow a three-year gap between the completion of the first program and enrollment in the second. OPPAGA applied a gap of three years for the AS to BS agreement, since this agreement does not have a specified time to articulate. Of the students who have completed the first AS program and have enrolled in the second program, 83% enrolled within three years and 94% enrolled within five years.

Source: OPPAGA analysis of FDOE data.

The K-12 system had the greatest number of students (113,088) who completed the first credential of a pathway identified in a statewide articulation agreement. (See Exhibit 20.) However, state colleges had the highest percentage of students who completed the first credential and then enrolled in the second credential program within three years (25.5% versus 6.1% for career centers and 0.6% for the K-12 system). Some of this disparity may be because both K-12 students and school districts have incentives to complete certain industry certifications. K-12 students do not pay tuition for this coursework and K-12 school districts receive additional funding for the number of students who complete industry certifications on the CAPE funding list.

## Exhibit 20

### Pathway Enrollment for Industry Certifications by System, 2010-11 to 2018-19

System	Number of Students Completing the First Credential Program of a Statewide Articulation Agreement <sup>1,2</sup>	Number (Percentage) of Students Enrolled in the Second Credential Program Within Three Years <sup>3</sup>
K-12	113,088	691 (0.6%)
Career Centers	15,638	959 (6.1%)
State Colleges <sup>4</sup>	6,770	1,725 (25.5%)

<sup>1</sup> Counts are of students who earned industry certifications from 2010-11 to 2015-16 while the pathway was active in an articulation agreement.

<sup>2</sup> Students were de-duplicated by institution type, but a student may earn different certifications in more than one type of institution. Among students in the industry certification to AS/AAS degree pathway, only 0.4% of student counts are duplicated across different types of institutions.

<sup>3</sup> Counts of students who enrolled in the second program from 2010-11 to 2018-19 and within three years of earning the industry certification.

<sup>4</sup> Counts of students in state colleges that earned industry certifications are from 2012-13 to 2015-2016, with enrollment in the second program up to 2018-19, because industry certifications reporting to FDOE from state colleges started in 2012-13.

Source: OPPAGA analysis of FDOE data.

During OPPAGA's nine-year enrollment review period (from 2010-11 to 2018-19), the most frequently used pathway was for nursing students, with 10,759 nursing students enrolled in the AS to BS degree pathway. However, statewide agreements varied in how long the agreements were in effect during OPPAGA's nine-year enrollment review period.<sup>12</sup> To address this issue, OPPAGA computed the average number of students per cohort with the first credential who then enrolled in the second credential

<sup>12</sup> Statewide agreements had different adopted and expiration dates and therefore were in effect during different numbers of academic years over the analysis period. As a result, the number of cohorts/academic years that OPPAGA could track ranged from one to six. For example, OPPAGA was able to track six student cohorts for the Nursing AS to BS degree pathway and four cohorts for the Dental Assisting Technology and Management ATD to Dental Assisting Technology and Management AS degree.

program within the timeframe specified in the articulation agreements for the years each statewide agreement was in effect. (See Exhibit 21.) Based on this analysis, the AS to BS degree for nursing pathway had the highest average of students enrolled in the second program, at 1,793 students enrolled per cohort. The Florida Law Enforcement Career Certificate program to Criminal Justice Technology AS pathway had the second highest average of 178 students enrolled per cohort over the same period.

**Exhibit 21**

**Most Frequently Used Pathways by Students for Each Type of Statewide Agreement, 2010-11 to 2018-19**

Statewide Agreement Type	Top Pathway First Credential/Program	Top Pathway Second Program	Average Number of Students per Cohort Who Obtained the First Credential and Enrolled in the Second Credential Program Within the Specified Timeframe <sup>1</sup>
AS Degree to BS Degree	Nursing AS	Nursing BS	1,793
Career Certificate to AS/AAS	Florida Law Enforcement Academy Career Certificate Program	Criminal Justice Technology AS	178
Industry Certification to AS/AAS Degrees	Emergency Medical Technician	AS in Emergency Medical Services	136
Early Childhood Education to AS Degree	Preschool Specialization College Credit Certificate Program	Early Childhood AS	27
Applied Technology Diploma to AS/AAS Degree	Dental Assisting Technology and Management ATD	Dental Assisting Technology and Management AS	13

<sup>1</sup> Statewide agreements had different adopted and expiration dates and therefore were in effect during different numbers of academic years over the analysis period. As a result, the number of cohorts/academic years that OPPAGA could track for a specific pathway in an articulation agreement ranged from one to six overall. The Early Childhood Certification to AS Degree agreement allows five years to enroll in the second program, while the other agreements only allow a three-year gap between the completion of the first program and enrollment in the second. OPPAGA applied a gap of three years for the AS to BS agreement, since this agreement does not have a specified time to articulate.

Source: OPPAGA analysis of FDOE data.

Because the greatest number of statewide articulation agreements related to industry certifications to AS/AAS degrees, OPPAGA further analyzed students’ use of this type of agreement. During the nine-year review period, the most widely used industry certification to associate degree pathways (based on the number of students enrolled) were in the health career fields, including EMT to AS degree in Emergency Medical Services and Licensed Practical Nurse to AS degree in Nursing.

## How many students complete the second programs included in statewide articulation agreements?

Few students complete the program sequences specified in statewide articulation agreements. OPPAGA’s analysis found that only 5.0% of students in cohorts 2010-11 to 2015-16 who obtained the first credential identified in a statewide articulation agreement went on to complete the second credential program within three years after enrolling. The percentage varied by statewide agreement type, ranging from 16.9% for AS to BS degree to 0.1% for industry certification to AS/AAS degree (for students who earned industry certifications at K-12 system institutions). Of the 16.9% of completers (8,875 students) for AS to BS, 7,963 were students in the BS in Nursing. (See Exhibit 22.)

## Exhibit 22

### Number and Percentage of Students With a First Credential, Who Enrolled in a Second Credential Program, and Completed Within Three Years

Statewide Agreement Type	Number of Students With First Credential (2010-11 to 2015-16) <sup>1</sup>	Number (Percentage) of Students Completing Second Credential Program Within Three Years up to 2021-22 <sup>2</sup>
AS Degree to BS Degree	52,668	8,875 (16.9%)
Industry Certification to AS/AAS Degree (earned in state colleges) <sup>3</sup>	6,770	862 (12.7%)
Applied Technology Diploma to AS/AAS Degree	1,218	58 (4.8%)
Industry Certification to AS/AAS Degree (earned in career centers) <sup>3</sup>	15,638	667 (4.3%)
Early Childhood Education to AS Degree	1,805	33 (1.8%)
Career Certificate to AS Degree	27,025	230 (0.9%)
Industry Certification to AS/AAS Degree (earned in K-12) <sup>3</sup>	113,088	163 (0.1%)
<b>Total</b>	<b>217,709<sup>4</sup></b>	<b>10,875 (5%)<sup>4</sup></b>

<sup>1</sup> Counts of students who completed the first program from 2010-11 to 2015-16, while the pathway was active in an articulation agreement.

<sup>2</sup> Counts of students who after completing the first program from 2010-11 to 2015-16, enrolled within the timeframe specified while the pathway was active in an articulation agreement up to 2018-19, and completed the second program within three years up to 2021-22. The Early Childhood Education to AS degree agreement allows five years to enroll in the second program, while the other agreements only allow a three-year gap between the completion of the first program and enrollment in the second. OPPAGA applied a gap of three years for the AS to BS agreement, since this agreement does not have a specified time to articulate.

<sup>3</sup> Students were de-duplicated by institution type, but a student may earn different certifications in more than one type of institution. Among students in the industry certification to AS/AAS degree pathway, only 0.4% of student counts are duplicated across different types of institutions.

<sup>4</sup> A small number of students may also be counted in different types of agreements.

Source: OPPAGA analysis of FDOE data.

## What are the potential reasons for the low usage rates of statewide articulation agreements?

OPPAGA interviewed representatives from the Florida Department of Education, the Reimagining Education and Career Help (REACH) Office, CareerSource Florida, three state colleges, and members or staff support of the Articulation Coordinating Committee. Based on these interviews, OPPAGA identified several potential reasons for low use of career statewide articulation agreements.

- **The criteria used to determine if a statewide agreement is needed do not consider students' potential to use the agreement or state-level industry input.** FDOE administrators reported that the process to determine the need for a new statewide articulation agreement is initiated when a new credential is added to the Master Credentials List or when a new career program is established. However, the process does not include a review of enrollments or completions for first credential programs to gauge student demand for the statewide articulation agreement. Furthermore, the process does not require input from industry representatives to ensure that skills being taught and articulation agreements being developed align with employer needs.
- **The three-year enrollment timeframe for program sequences in statewide articulation agreements might be too short.** Most statewide articulation agreements require students to enroll in second programs within three years after completing the first credential. This requirement may be particularly difficult for students who earn industry certifications in the K-12 system. Compared to career centers and state colleges, the K-12 system had the greatest number of students who completed the first credential of a pathway identified in a statewide

articulation agreement but the lowest percentage of students who enrolled in the second program within three years. FDOE officials reported that the three-year time limit presents a potential barrier for students who earn an industry certification in grade 8 or grade 9 and exceed the three-year limit by the time they graduate from high school and pursue an AS/AAS degree. FDOE officials reported that to address this issue, the department is considering extending the time limit to five years.

- **The low number of credit hours transferred might not provide an adequate incentive for students.** Most statewide articulation agreements award from three to six credit hours for earning an industry certification, which might not be enough to induce students to enroll in the second program. According to one FDOE official, local agreements may award a greater number of credit hours to students. One state college representative stated that this may be because local institutions' faculty committees are better able to closely align credentials and student learning outcomes.
- **Students may be unaware of articulation agreements due to limited marketing and advertising.** State college representatives reported that their registrar's offices are responsible for identifying, using student transcripts, students who are eligible to receive credit for prior work under statewide articulation agreements. However, not all first credentials—particularly industry certifications—are listed on student transcripts. In some cases, students' eligibility may be revealed during student meetings with advisors, but the onus is on the student to be aware of statewide agreements and to request the award of credits. Some ACC members and FDOE officials noted the need for better marketing and advertising to ensure that students, faculty members, and advisors are aware of articulation agreements so that students can better advocate for receiving credit for prior work.
- **Some students demonstrate competency in other ways.** To increase workplace marketability and demonstrate skill levels, some students in Florida and other states earn credentials while enrolled in degree programs. For example, Florida International University administrators reported that the university's micro-credentialing program enables students to document achievement in competencies needed for post-graduate success, re-skilling, or up-skilling. The university awards micro-credentials for achieving individual competencies or micro-certificates can be awarded for achieving collections of related micro-credentials. In Texas, students can earn industry certifications as part of their undergraduate degree coursework. These industry certifications, referred to as credentials of value, are affordable credentials intended to make students more marketable.



# RECOMMENDATIONS

As required by Ch. 2023-81, *Laws of Florida*, OPPAGA offers several recommendations for strengthening the statewide articulation agreement development process and enhancing the role of such agreements in a Florida stackable credential framework.

- The Florida Department of Education should consider providing additional information to the Office of Articulation and to the Articulation Coordinating Committee to evaluate the effect of articulation agreements. This information, such as student enrollment and completion data for the first and second credential identified in each articulation agreement, could be considered during annual reviews to identify any changes that might help increase the use of the agreements.
- FDOE should consider increasing the allowable number of years between when a student completes the first credential and enrolls in the second credential program.
- FDOE should consider working with state colleges, career centers, and school districts to provide better marketing and information campaigns to increase student awareness of existing career statewide articulation agreements and the credits for prior work that students may use for a second credential program. FDOE also should continue to catalog local agreements. In addition, the FDOE should post the catalog on its website to help students identify programs of study that match their interests and award greater credit for prior work.
- FDOE should consider assisting state colleges and career centers in revising entrance applications to request information on students' attained credentials to ensure that students receive the credits identified in career statewide articulation agreements.
- Officials from FDOE, the REACH Office, and CareerSource Florida reported that the department has begun developing criteria for high quality stackable credentials, including built-in mechanisms for statewide articulation agreements. FDOE officials stated that this work is not complete. FDOE should continue developing a definition of stackable credentials, a framework for stackable credentials that includes identifying high quality credentials, and ways that statewide articulation agreements may support high quality stackable credentials. These improvements would help ensure that students receive credit for prior work as they move through a sequence of stackable credentials.

## AGENCY RESPONSE

In accordance with the provisions of s. 11.51(2), *Florida Statutes*, a draft of OPPAGA's report was submitted to the Commissioner of the Florida Department of Education and the Chancellor of the Florida Board of Governors. The Department of Education and Board of Governors provided informal comments but did not submit written responses.

# APPENDIX A

## Methodology Notes

OPPAGA used Florida Department of Education (FDOE) data from 2010-11 to 2021-22 to examine the use of current and past Career and Technical Statewide Articulation Agreements that were in place at any point from 2010-11 to 2018-19. To be included in OPPAGA's analysis, agreements needed a duration of at least three academic years, which gives students enough time to enroll in the second credential program as required after completing the first credential.

To investigate the extent to which programs in statewide articulation agreements in place in 2021-22 are offered in Florida, OPPAGA relied on aggregated information on the number of students enrolled in each program of the five relevant types in career centers or state colleges in the 2021-22 academic year. Results aggregated by Florida College System service region include students enrolled in state colleges or career centers within the service region.

To investigate the number and percentage of students who, after completing the first credential, enrolled and completed the second credential in a statewide articulation agreement, OPPAGA used data for students who enrolled or completed a relevant industry certification or program in K-12 schools, career centers, state colleges, or state universities from academic year 2010-11 to academic year 2021-22. The base population for this analysis consists of all students who completed the first program from 2010-11 to 2015-16 and could have taken advantage of a statewide articulation agreement.<sup>13,14</sup> After completion of the first credential, students were given up to three years to enroll in the second program, as required in most agreements. Students who enrolled after three years were not counted as enrolled in the second program.

While OPPAGA observed (in some cases) a large number of students who enrolled in the second program first and then completed the first credential, the analysis excluded from the base population students who enrolled in the second program before completion of the first credential; the rationale for the exclusion is that statewide articulation agreements assume a specific program sequence from a credential to a degree. Because of known data reporting inconsistencies among institutions, students who completed the first credential at the same term/academic year of enrollment in the second credential program are included in the analysis.<sup>15</sup> OPPAGA assessed program completion within three years of enrollment in the second program up to academic year 2021-22. Students who completed the second program after three years are not included in program completion counts.

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<sup>13</sup> OPPAGA considered that a student could have taken advantage of a statewide articulation agreement if a student who completed the first program had enough time to enroll in the second program (according to the window allowed in each agreement: three or five years) while the agreement was in place and three years to complete the second credential. The AS degree to BS degree statewide articulation agreement does not specify a timeframe from the completion of the first program to enrollment in the second program in which the transfer of articulated credits is guaranteed. OPPAGA applied the most often used gap of three years for enrollment in the second program from the completion of the first program to articulate credits. Of the students who have completed the first AS program and have enrolled in the second program, 83% enrolled within three years and 94% enrolled within five years.

<sup>14</sup> The base population cohort is 2010-11 to 2013-14 for students who completed the first credential in the Early Childhood Education Credentials to AS/AAS degree agreement, since this agreement allows five years to enroll in the second program after completion of the first program.

<sup>15</sup> For agreement pathways that articulate credits to an AS, AAS, or BS degree offered in state colleges, the enrollment date for the second credential was considered as the first reported period (term and year) in which the student was found enrolled in the program, since the Florida State College System student level data does not include a date of first admission to a program. Regarding industry certification reporting: K-12 institutions report yearly, career centers report by term, and state colleges report the date a certification was earned by term and yearly. After 2018, all institutions started to report the date a certification was earned.

The number of cohorts included in the analysis affects total student counts. The number of cohorts may differ for each statewide articulation agreement pathway; therefore, only comparisons of average number of students per cohort or percentage of enrollments and completions are appropriate within the review period.<sup>16</sup> Not all of the pathways in the agreements analyzed are still in place in academic year 2023-24. While OPPAGA's analysis shows counts of students who have followed career pathways in statewide articulation agreements, there is no reliable data element within the student data systems to indicate whether a student was able to take advantage of a statewide articulation agreement (i.e., received the articulated credits toward the completion of the second credential). To protect student confidentiality, OPPAGA masked results when student headcounts were below 10 within a data cell.

**Student-level Analysis of Gold Standard Career Pathways Articulation Agreements of Industry Certification to an AS/AAS Degree.** The base population consists of students who have earned any industry certifications in K-12 schools, career centers, or state colleges and could have taken advantage of an articulation agreement. Student enrollment and completion counts in the second credential program were assessed in associate in science or associate in applied science degrees in Florida state colleges. Only K-12 students in grades 10, 11, or 12 were included in the analysis.<sup>17</sup> Academic years were reconciled among the three types of institutions that report industry certifications to FDOE. State colleges began reporting industry certifications to FDOE in 2012-13.

**Student-level Analysis of Career and Technical Education Programs to an AS/AAS Degree.** The base population consists of students who have completed any career certificates, applied technology diplomas, college credit certificates, or apprenticeships in career centers or state colleges and could have taken advantage of an articulation agreement. Student enrollment and completion counts in the second credential program were assessed in associate in science or associate in applied science degrees at state colleges.

**Student-level Analysis of AS to Baccalaureate Degree Articulation Agreements.** The base population consists of students who have completed any associate in science degree in a state college and could have taken advantage of an articulation agreement. Student enrollment and completion counts in the second credential program were assessed in baccalaureate degrees at state colleges or universities. OPPAGA analyses exclude the pathway Transportation Technology AS to Technology Teacher Education BS because FDOE was unable to identify this AS degree in its inventory. The regionally-accredited AS degree to bachelor of applied science (BAS) at the University of South Florida agreement includes 59 AS degrees that articulate credits to one program. (See Exhibit A-1 for the complete list of all 63 AS degrees that articulate credits to the BAS at the University of South Florida.)

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<sup>16</sup> The number of cohorts included in each articulation agreement pathway is affected by the number of academic years in which an agreement was in place, window of years in which a student can enroll in the second program to articulate credits to the second credential, and number of years in which the first credential has been offered. The most affected agreements may be Early Childhood Education Credentials to AS/AAS degree (due to the five-year window to articulate credits) and agreements including industry certifications that often change yearly.

<sup>17</sup> Since the Early Childhood Credentials to AS statewide articulation agreement allows for five years to enroll in the second credential to articulate credits, there are a small number of K-12 students who completed the Child Development Associate certification while in grade 8 or grade 9 and are included in OPPAGA's base population.

**Exhibit A-1****Regionally-Accredited AS Degrees That Articulate to Bachelor's Degree in Applied Science at the University of South Florida**

First Credential Title (AS Degree)	
Agribusiness Management	Golf Course Operations
Agricultural Production Technology	Health Information Technology
Aquaculture Management	Health Navigator
Architectural Design & Construction Technology	Health Services Management
Biotechnology Laboratory Technology	Histologic Technology
Building Construction Technology	Internet Services Technology
Business Analysis Specialist	IT Security
Business Intelligence Specialist	Landscape & Horticulture Technology
Cardiovascular Technology	Marine Environmental Technology
Chemical Technology	Medical Assisting Advanced
Clinical Research Professional	Medical Laboratory Technology
Computer Engineering Technology	Network Systems Technology
Computer Information Technology	Nuclear Medicine Technology
Computer Programming And Analysis	Nursing RN
Computer Related Crime Investigations	Occupational Therapy Assistant
Crime Scene Technology	Ophthalmic Technician
Criminal Justice Technology	Optical Management
Cybersecurity	Opticianry
Cybersecurity Operations	Orthotics & Prosthetics Technology
Data Science Technology	Pharmacy Management
Database Technology	Physical Therapist Assistant
Dental Assisting Technology And Management	Radiation Therapy
Dental Hygiene	Radiography
Diagnostic Medical Sonography Technology	Respiratory Care
Dietetic Technician	Security Management And Administration
Emergency Administration And Management	Simulation Technology
Emergency Medical Services	Social And Human Services
Energy Management And Controls Technology	Surgical First Assisting
Environmental Science Technology	Surgical Services
Equine Studies	Technology Project Management
Fire Science Technology	Zoo Animal Technology
Game Development Design	

Source: OPPAGA analysis of FDOE data.

**Exhibit A-2**

**Number of Postsecondary and Secondary Industry Certifications on the Career and Professional Education (CAPE) List That Are Also on the Master Credentials List With a Statewide Articulation Agreement From Academic Years 2021-22 Through 2023-24**

Academic Year	Number of CAPE Funded Industry Certifications on the Master Credentials List <sup>1,2</sup>	Number (Percentage) of CAPE Funded Industry Certifications on the Master Credentials List With a Statewide Articulation Agreement
<b>2021-22</b>	<b>515</b>	<b>105 (20%)</b>
Postsecondary CAPE	322	48 (15%)
Secondary CAPE	279	100 (36%)
• CAPE Acceleration Industry Certification	3	3 (100%)
• CAPE Digital Tool Certificate	33	0 (0%)
• CAPE Industry Certification	243	97 (40%)
<b>2022-23</b>	<b>525</b>	<b>116 (22%)</b>
Postsecondary CAPE	326	53 (16%)
Secondary CAPE	289	111 (38%)
• CAPE Acceleration Industry Certification	3	3 (100%)
• CAPE Digital Tool Certificate	33	0 (0%)
• CAPE Industry Certification	253	108 (43%)
<b>2023-24</b>	<b>530</b>	<b>108 (20%)</b>
Postsecondary CAPE	320	56 (18%)
Secondary CAPE	326	106 (33%)
• CAPE Acceleration Industry Certification	3	3 (100%)
• CAPE Digital Tool Certificate	32	0 (0%)
• CAPE Industry Certification	291	103 (35%)

<sup>1</sup>The number of certifications on the CAPE list does not sum to the total row for each academic year because CAPE Industry Certifications may be eligible for both CAPE secondary and CAPE postsecondary funding: those are 86 certifications in 2021-22, 90 in 2022-23, and 116 in 2023-24. Also, all CAPE Acceleration Industry Certifications are eligible for CAPE secondary and CAPE postsecondary funding.

<sup>2</sup>The 2023-24 CAPE list has 535 industry certifications and the 2023-24 Master Credentials List has 560 industry certifications and CAPE Digital Tool Certificates. There are 530 industry certifications on the 2023-24 CAPE list that are also on the 2023-24 Master Credential List. The CAPE list and Master Credentials List include the same list of certifications for the academic years 2021-22 and 2022-23.

Source: OPPAGA analysis of FDOE data.

# APPENDIX B

## Active Statewide Articulation Agreements Between Industry Certifications and Associate Degree Programs (Spring 2023)

Exhibit B-1 provides a list of the 171 active statewide articulation agreements between industry certifications and associate degree programs as of May 23, 2023. The number of credits awarded ranges from 1 credit hour to 36 credit hours. Overall, 108 of these industry certifications are career and professional education (CAPE) funded and included on the 2023-24 Master Credential List as part of the 145 statewide agreements noted with “\*” in the table below.

### Exhibit B-1

#### Industry Certifications and Second Credential Programs With an Active Statewide Articulation Agreement as of May 23, 2023

First Credential Title (Certification)	Second Credential Program Title (AS/AAS Degree)	Number of Credit Hours Articulated
Marine Electrical Certification*	Marine Engineering, Management & Seamanship	3
Certified Culinarian	Restaurant Management	6
Certified Culinarian	Culinary Management	3
Certified Fundamentals Cook*	Hospitality & Tourism Management	3
Certified Survey Technician	Civil Engineering Technology	3
Autodesk Certified User – AutoCAD*	Architectural Design & Construction Technology	3
Autodesk Certified User – AutoCAD*	Computer-Aided Drafting and Design	3
Autodesk Certified User-Revit Architecture*	Architectural Design & Construction Technology	3
Autodesk Certified User-Revit Architecture*	Building Construction Technology	3
Autodesk Certified User-Revit Architecture*	Computer-Aided Drafting and Design	3
Autodesk Certified User – Inventor*	Engineering Technology	3
Autodesk Certified Professional – AutoCAD*	Computer-Aided Drafting and Design	3
Autodesk Certified Professional-AutoCAD Civil 3D*	Civil Engineering Technology	3
Autodesk Certified Professional – Inventor*	Engineering Technology	3
Autodesk Certified Professional-Revit Architecture*	Architectural Design & Construction Technology	3
Autodesk Certified User – Maya*	Game Development Design	9
Autodesk Certified User-Fusion 360*	Engineering Technology	3
Autodesk Certified Associate in CAD for Mechanical Design*	Engineering Technology	3
Adobe Certified Professional in Video Design (Requires Premiere Pro and After Effects or Photoshop)*	Film Production Technology	3
Adobe Certified Professional in Video Design (Requires Premiere Pro and After Effects or Photoshop)*	Radio and Television Broadcasting	4
Adobe Certified Professional in Visual Design (Requires Photoshop and Illustrator or InDesign)*	Graphics Technology	3
Adobe Certified Professional in Web Design*	Internet Services Technology	3
Certified Bookkeeper	Accounting Technology	3
Certified Medical Assistant*	Health Services Management	3
Certified Apprentice Drafter – Architectural*	Architectural Design & Construction Technology	3
Registered Medical Assistant*	Health Services Management	3

First Credential Title (Certification)	Second Credential Program Title (AS/AAS Degree)	Number of Credit Hours Articulated
Registered Medical Assistant*	Medical Office Administration	3
Registered Phlebotomy Technician*	Medical Laboratory Technology	3
Certified Phlebotomy Technician*	Medical Laboratory Technology	1
Apple Certified Technical Coordinator	Network Systems Technology	2
Apple Certified Support Professional	Network Systems Technology	2
Apple Certified Pro-Final Cut Pro X	Digital Television and Media Production	3
Apple Certified Pro-Final Cut Pro X	Radio and Television Broadcasting	8
Apple App Development with Swift Certification Level 1*	Computer Programming and Analysis	3
Chief Architect Certified Apprentice	Architectural Design & Construction Technology	3
Biotechnician Assistant*	Biotechnology Laboratory Technology	3
Cisco Certified Network Professional	Computer Engineering Technology	12
Cisco Certified Network Professional	Telecommunications Engineering Technology	12
Cisco Certified Network Associate*	Network Systems Technology	6
Cisco Certified Network Associate*	IT Security	3
CompTIA A*	Computer Engineering Technology	6
CompTIA Linux*	Computer Programming and Analysis	3
CompTIA Network*	Computer Engineering Technology	3
CompTIA Project*	Technology Project Management	3
CompTIA Security*	E-Business Technology	3
CompTIA Server*	Computer Information Technology	3
CompTIA Server*	Network Systems Technology	3
CompTIA IT Fundamentals*	Computer Information Technology	3
CompTIA IT Fundamentals*	Computer Programming and Analysis	3
CompTIA IT Fundamentals*	Network Systems Technology	3
CompTIA IT Fundamentals*	Data Science Technology	3
Child Development Associate*	Early Childhood Education	9
Certified Dental Assistant*	Dental Assisting Technology and Management	5
Associate Certified Electronics Technician*	Electronics Engineering Technology	3
Associate Certified Electronics Technician*	Engineering Technology	3
911 Public Safety Telecommunicator*	Criminal Justice Technology	3
FAA Aviation Mechanic Technician – Airframe*	Aviation Maintenance Management	36
FAA Aviation Mechanic Technician – Airframe* and FAA Aviation Maintenance Technician – Powerplant*	Aviation Maintenance Administration	24
FAA Aviation Maintenance Technician – Powerplant*	Aviation Maintenance Management	24
FAA Private Pilot*	Professional Pilot Technology	3
FAA Ground School*	Unmanned Vehicle Systems Operations	3
Animal Science Specialist Certification*	Agribusiness Management	3
Certified Veterinary Assistant*	Veterinary Technology	3
Precision Sheetmetal Operator-Level I	Manufacturing Technology	3
Florida Nursey, Growers and Landscape Association Certified Horticulture Professional*	Landscape & Horticulture Technology	6
Florida Nursey, Growers and Landscape Association Certified Landscape Maintenance Technician*	Landscape & Horticulture Technology	3
Florida Nursey, Growers and Landscape Association Certified Landscape Technician*	Landscape & Horticulture Technology	3

First Credential Title (Certification)	Second Credential Program Title (AS/AAS Degree)	Number of Credit Hours Articulated
LEED Green Associate*	Building Construction Technology	2
LEED Green Associate*	Civil Engineering Technology	3
LEED Green Associate*	Construction Management Technology	3
LEED Green Associate*	Computer-Aided Drafting and Design	3
HVAC Excellence Employment Ready-Heat Pump*	Air Conditioning, Refrigeration and Heating Systems Technology	4
HVAC Excellence Employment Ready-Air Conditioning*	Air Conditioning, Refrigeration and Heating Systems Technology	4
HVAC Excellence Employment Ready – Electrical*	Air Conditioning, Refrigeration and Heating Systems Technology	4
EC-Council Cyber Forensics Associate	Cybersecurity	3
EC-Council Ethical Hacker Associate	Cybersecurity	3
EC-Council Ethical Hacker Associate	IT Security	3
EC-Council Ethical Hacker Associate	Network Systems Technology	3
Electronics Technician for Industrial Engineering	Manufacturing Technology	3
Mechatronics Fitter	Manufacturing Technology	3
Quickbooks Certified User*	Accounting Technology	3
Quickbooks Certified User*	Business Administration	3
Quickbooks Certified User*	Business Entrepreneurship	3
Entrepreneurship & Small Business*	Business Administration	3
Entrepreneurship & Small Business*	Business Entrepreneurship	3
Master Entrepreneurship Certification*	Business Administration	3
Master Entrepreneurship Certification*	Business Entrepreneurship	3
Python Coding Specialist*	Computer Programming and Analysis	3
Linux Essentials 010*	Computer Information Technology	3
Linux Essentials 010*	Cybersecurity	3
Linux Essentials 010*	Data Science Technology	3
Linux Essentials 010*	Network Systems Technology	3
Microsoft Office Specialist Master*	Office Administration	3
Microsoft Technology Associate-Database Administration Fundamentals/Information Technology Specialist – Databases*	Computer Information Technology	3
Microsoft Technology Associate-Database Administration Fundamentals/Information Technology Specialist – Databases*	Computer Programming and Analysis	3
Microsoft Technology Associate – HTML5 Application Developer Fundamentals/Information Technology Specialist-HTML5 Application Development*	Internet Services Technology	3
Microsoft Technology Associate-Mobility and Devices Fundamentals/Information Technology Specialist-Device Configuration and Management*	Computer Information Technology	3
Microsoft Technology Associate-Mobility and Devices Fundamentals/Information Technology Specialist-Device Configuration and Management*	Database Technology	3
Microsoft Technology Associate-Introduction to Programming Using JavaScript/Information Technology Specialist – JavaScript*	Computer Programming and Analysis	3



First Credential Title (Certification)	Second Credential Program Title (AS/AAS Degree)	Number of Credit Hours Articulated
Microsoft Technology Associate-Introduction to Programming Using Python/Information Technology Specialist – Python*	Computer Programming and Analysis	3
Microsoft Technology Associate-Introduction to Programming Using Python/Information Technology Specialist – Python*	Cybersecurity	3
Microsoft Technology Associate-Introduction to Programming Using Java/Information Technology Specialist – Java*	Computer Programming and Analysis	3
Microsoft Technology Associate-Windows Server Administration Fundamentals/Information Technology Specialist-Cloud Computing*	Computer Information Technology	3
Microsoft Technology Associate-Windows Server Administration Fundamentals/Information Technology Specialist-Cloud Computing*	Network Systems Technology	3
Manufacturing Skill Standards Council Certified Production Technician*	Electronics Engineering Technology	6
Manufacturing Skill Standards Council Certified Production Technician*	Engineering Technology	15
Manufacturing Skill Standards Council Certified Production Technician*	Manufacturing Technology	9
Air Conditioning Service Technician*	Air Conditioning, Refrigeration and Heating Systems Technology	3
Air Conditioning Installation Specialization*	Air Conditioning, Refrigeration and Heating Systems Technology	4
Air to Air Heat Pump Installation Technician*	Air Conditioning, Refrigeration and Heating Systems Technology	4
Certified Phlebotomy Technician*	Medical Laboratory Technology	1
Certified Clinical Medical Assistant*	Health Services Management	3
Certified Clinical Medical Assistant*	Medical Office Administration	3
Certified Pharmacy Technician*	Pharmacy Management	9
Aerospace/Aircraft Assembly*	Aerospace Technology	9
National Center for Construction Education & Research Construction Technology (Secondary)*	Architectural Design & Construction Technology	3
National Center for Construction Education & Research HVAC-Level 1 (Secondary)*	Air Conditioning, Refrigeration and Heating Systems Technology	3
National Center for Construction Education & Research Welding-Level 1 (Secondary)*	Marine Engineering, Management & Seamanship	3
National Center for Construction Education & Research Manufactured Construction Technology-Level 1 (Secondary)	Building Construction Technology	3
National Center for Construction Education & Research Manufactured Construction Technology-Level 2 (Secondary)	Building Construction Technology	3
National Certified Medical Office Assistant*	Medical Office Administration	6
National Certified Patient Care Technician*	Health Services Management	3
National Licensed Practical Nurse*	Nursing R.N.	10
Automotive Service Excellence Automobile/Light Truck Technician: Automatic Transmission/Transaxle (A2)*	Automotive Service Management Technology	3
Automotive Service Excellence Automobile/Light Truck Technician: Brakes (A5)*	Automotive Service Management Technology	3

First Credential Title (Certification)	Second Credential Program Title (AS/AAS Degree)	Number of Credit Hours Articulated
Automotive Service Excellence Automobile/ Light Truck Technician: Electrical/ Electronic Systems (A6)*	Automotive Service Management Technology	3
Automotive Service Excellence Automobile/ Light Truck Technician: Engine Performance (A8)*	Automotive Service Management Technology	3
Automotive Service Excellence Automobile/ Light Truck Technician: Engine Repair (A1)*	Automotive Service Management Technology	3
ASE Automobile/Light Truck Technician: Heating and Air Conditioning (A7)*	Automotive Service Management Technology	3
Automotive Service Excellence Automobile/ Light Truck Technician: Manual Drive Train and Axles (A3)*	Automotive Service Management Technology	3
Automotive Service Excellence Automobile/ Light Truck Technician: Suspension and Steering (A4)*	Automotive Service Management Technology	3
Automotive Service Excellence Auto Maintenance and Light Repair (G1)*	Automotive Service Management Technology	3
National Institute for Metalworking Skills Machining Level I-CNC Milling: Programming Setup & Operations*	Engineering Technology	1
National Institute for Metalworking Skills Machining Level I-CNC Milling: Programming Setup & Operations*	Manufacturing Technology	3
National Institute for Metalworking Skills Machining Level I-CNC Turning: Programming Setup & Operations*	Engineering Technology	1
National Institute for Metalworking Skills Machining Level I-CNC Turning: Programming Setup & Operations*	Manufacturing Technology	3
National Institute for Metalworking Skills Machining Level II-Manual Milling Skills II*	Manufacturing Technology	3
National Institute for Metalworking Skills Machining Level I-Turning Operations: Turning Between Centers*	Manufacturing Technology	3
National Institute for Metalworking Skills Machining Level I-Turning Operations: Turning Chucking Skills*	Manufacturing Technology	3
National Institute for Metalworking Skills Machining Level II-Grinding Skills II	Engineering Technology	2
National Institute for Metalworking Skills Machining Level II-Grinding Skills II	Manufacturing Technology	3
National Institute for Metalworking SkillsMachining Level I-Drill Press Skills I*	Manufacturing Technology	3
Certified Food Protection Manager (ServSafe®)*	Culinary Management	3
Certified Food Protection Manager (ServSafe®)*	Restaurant Management	3
Emergency Medical Technician*	Emergency Medical Services	9
Certified Food Safety Manager*	Baking & Pastry Management	3
Certified Food Safety Manager*	Culinary Management	2
Certified Food Safety Manager*	Restaurant Management	2
Hazard Analysis Critical Control Point Certification	Baking & Pastry Management	3
Certified Associate in Python Programming*	Computer Programming and Analysis	3
Oracle Certified Associate: Database*	Database Technology	6
Oracle Certified Associate: Java Programmer*	Computer Programming and Analysis	3

First Credential Title (Certification)	Second Credential Program Title (AS/AAS Degree)	Number of Credit Hours Articulated
PMI Project Management Ready*	Technology Project Management	3
Certified Internet Web Database Design Specialist*	Computer Information Technology	3
Certified Internet Web Database Design Specialist*	Computer Programming and Analysis	3
Certified Internet Web JavaScript Specialist*	Computer Programming and Analysis	3
Certified Internet Web Advanced HTML5 & CSS3 Specialist*	Computer Information Technology	3
Certified Internet Web Advanced HTML5 & CSS3 Specialist*	Computer Programming and Analysis	3
Certified Internet Web Data Analyst Specialist*	Business Intelligence Specialist	3
Certified Internet Web User Interface Designer*	Computer Programming and Analysis	3
Pharmacy Technician*	Pharmacy Management	9
Salesforce Certified Administrator*	Marketing Management	3
Certified Solidworks Associate-Academic*	Engineering Technology	3
Certified Solidworks Associate-Academic*	Manufacturing Technology	3
Certified Solidworks Professional-Academic*	Engineering Technology	3
Certified Solidworks Professional-Academic*	Simulation Technology	3
Accredited Legal Professional*	Office Administration	3
Professional Legal Secretary	Office Administration	9
Unity Certified Associate	Game Development Design	6
Unity Certified User: Programmer*	Game Development Design	6
Small UAS Safety Certification*	Professional Pilot Technology	1

\* CAPE funded industry certifications included on the 2023-24 Master Credential List.

Source: OPPAGA analysis of FDOE data.

# APPENDIX C

## Career and Degree Programs With a Statewide Articulation Agreement (Offered During Academic Year 2021-22)

Exhibit C-1 provides a list of the 113 career and degree programs offered during academic year 2021-22 by at least one state college or school district career center that has an active statewide articulation agreement during the period. All career programs (apprenticeships, college credit certificates, career certificate programs, and applied technology diplomas) in the exhibit are first programs and articulate to an associate in science (AS) or associate in applied science (AAS) degree. The AS degree programs listed may be either the first program (in the case of articulation to a bachelor's degree) or the second program (in the case of a career certificate program articulating to an AS degree). The bachelor's degree programs listed are second programs. For some of the AS degree programs, an asterisk indicates if the AS degree is part of the 59 exclusive AS to bachelor in applied science (BAS) statewide articulation agreement unique to the University of South Florida. The third column identifies the number of Florida College System service regions (including both state colleges and school district career centers) that offered the program in academic year 2021-22.

### Exhibit C-1

#### List of Career and Academic Programs Offered by at Least One Career Center or State College With an Active Statewide Articulation Agreement in Academic Year 2021-22

Career Program or Degree	Program Title (First or Second Program)	Number of Service Regions Offering Program in Academic Year 2021-22
Apprenticeship	Early Childhood Education	5
College Credit Certificate	Early Childhood Development Specialization	16
College Credit Certificate	Preschool Specialization	15
College Credit Certificate	Child Care Center Management Specialization	14
College Credit Certificate	Infant/Toddler Specialization	9
College Credit Certificate	Early Childhood Inclusion Specialization	4
Associate in Applied Science	Automotive Service Management Technology	6
Associate in Science	Business Administration	28
Associate in Science	Criminal Justice Technology	28
Associate in Science	Nursing R.N.	28
Associate in Science	Radiography	22
Associate in Science	Early Childhood Education	19
Associate in Science	Hospitality & Tourism Management	14
Associate in Science	Graphics Technology	13
Associate in Science	Office Administration	13
Associate in Science	Computer Engineering Technology	6
Associate in Science	Electronics Engineering Technology	6
Associate in Science	Construction Management Technology	3
Associate in Science	Emergency Medical Services*	26
Associate in Science	Computer Programming and Analysis*	21
Associate in Science	Network Systems Technology*	21

Career Program or Degree	Program Title (First or Second Program)	Number of Service Regions Offering Program in Academic Year 2021-22
Associate in Science	Computer Information Technology*	18
Associate in Science	Dental Hygiene*	18
Associate in Science	Respiratory Care*	17
Associate in Science	Health Information Technology*	16
Associate in Science	Physical Therapist Assistant*	16
Associate in Science	Fire Science Technology*	14
Associate in Science	Health Services Management*	13
Associate in Science	Diagnostic Medical Sonography Technology*	10
Associate in Science	Surgical Services*	10
Associate in Science	Architectural Design & Construction Technology*	9
Associate in Science	Social and Human Services*	9
Associate in Science	Biotechnology Laboratory Technology*	8
Associate in Science	Building Construction Technology*	8
Associate in Science	Crime Scene Technology*	7
Associate in Science	Environmental Science Technology*	7
Associate in Science	Internet Services Technology*	7
Associate in Science	Medical Laboratory Technology*	7
Associate in Science	Cardiovascular Technology*	6
Associate in Science	Cybersecurity*	6
Associate in Science	Landscape & Horticulture Technology*	6
Associate in Science	IT Security*	5
Associate in Science	Chemical Technology*	4
Associate in Science	Computer Related Crime Investigations*	4
Associate in Science	Dental Assisting Technology and Management*	4
Associate in Science	Emergency Administration and Management*	4
Associate in Science	Health Navigator*	4
Associate in Science	Medical Assisting Advanced*	4
Associate in Science	Nuclear Medicine Technology*	4
Associate in Science	Occupational Therapy Assistant*	4
Associate in Science	Opticianry*	4
Associate in Science	Data Science Technology*	3
Associate in Science	Database Technology*	3
Associate in Science	Pharmacy Management*	3
Associate in Science	Radiation Therapy*	3
Associate in Science	Technology Project Management*	3
Associate in Science	Agribusiness Management*	2
Associate in Science	Aquaculture Management*	2
Associate in Science	Business Intelligence Specialist*	2
Associate in Science	Clinical Research Professional*	2
Associate in Science	Histologic Technology*	2
Associate in Science	Ophthalmic Technician*	2
Associate in Science	Security Management and Administration*	2
Associate in Science	Agricultural Production Technology*	1
Associate in Science	Business Analysis Specialist*	1
Associate in Science	Cybersecurity Operations*	1

Career Program or Degree	Program Title (First or Second Program)	Number of Service Regions Offering Program in Academic Year 2021-22
Associate in Science	Energy Management and Controls Technology*	1
Associate in Science	Equine Studies*	1
Associate in Science	Game Development Design*	1
Associate in Science	Golf Course Operations*	1
Associate in Science	Marine Environmental Technology*	1
Associate in Science	Optical Management*	1
Associate in Science	Orthotics & Prosthetics Technology*	1
Associate in Science	Simulation Technology*	1
Associate in Science	Surgical First Assisting*	1
Associate in Science	Zoo Animal Technology*	1
<b>Separator</b>		
Career Certificate Program	Florida Law Enforcement Academy	28
Career Certificate Program	Practical Nursing	26
Career Certificate Program	Correctional Officer (Traditional Correctional Basic Recruit Training Program)	25
Career Certificate Program	Firefighter	24
Career Certificate Program	Automotive Service Technology	13
Career Certificate Program	Medical Administrative Specialist	13
Career Certificate Program	Administrative Office Specialist	11
Career Certificate Program	Early Childhood Education	10
Career Certificate Program	Accounting Operations	9
Career Certificate Program	Carpentry	9
Career Certificate Program	Network Support Services	9
Career Certificate Program	Legal Administrative Specialist	8
Career Certificate Program	Building Construction Technologies	5
Career Certificate Program	Electrician	5
Career Certificate Program	Network Systems Administration	5
Career Certificate Program	Web Development	5
Career Certificate Program	Air Conditioning, Refrigeration and Heating Technology	4
Career Certificate Program	Digital Design	3
Career Certificate Program	Electronic Technology	3
Career Certificate Program	Brick and Block Masonry	1
Career Certificate Program	Digital Printing Technology	1
Career Certificate Program	Landscape & Turf Management	1
Career Certificate Program	Nursery Management	1
<b>Separator</b>		
Applied Technology Diploma	Emergency Medical Technician	19
Applied Technology Diploma	Dental Assisting Technology and Management	9
Applied Technology Diploma	Medical Coder/Biller	6
Applied Technology Diploma	Paramedic	5
Applied Technology Diploma	Pharmacy Technician	3
Applied Technology Diploma	Medical Clinical Laboratory Technician	2
Applied Technology Diploma	Medical Record Transcribing/Healthcare Documentation	1
<b>Separator</b>		
Bachelor's Degree	Nursing	27

Career Program or Degree	Program Title (First or Second Program)	Number of Service Regions Offering Program in Academic Year 2021-22
Bachelor's Degree	Information Technology and Security Management	7
Bachelor's Degree	Business Administration	5
Bachelor's Degree	Supervision and Management	4
Bachelor's Degree	Criminal Justice	2
Bachelor's Degree	Electronics Engineering Technology	2
Bachelor's Degree	Engineering Technology	1

\*Regionally-Accredited AS Degree to USF BAS exclusive (58 of 59).

Source: OPPAGA analysis of FDOE data.

# APPENDIX D

## List of Career and Degree Programs Available by Florida College System Service Region

Exhibit D-1 presents a list of the first and second credential programs available by Florida College System service region, including programs offered by the state college in the region as well as any school district career centers in the service region, during academic year 2021-22. For each service region, listed first are those programs where both the first credential and the second credential were available in the service region sorted by enrollment numbers for the second credential. Those programs are followed by a list of the first credential programs that were offered in the region without the second credential program available to students in the service region sorted by enrollment numbers in the first credential program. In the exhibit below, OPPAGA identified credential programs as being Career Certificate Programs (CAR), College Credit Certificate Programs (CCC), Applied Technology Diplomas (ATD), Associate in Science (AS), Associate in Applied Science (AAS), or Bachelor of Science (BS). In cases where program enrollment values for this period were less than 10 students, enrollment numbers are masked and shown with an asterisk (\*).

### Exhibit D-1

#### List of Career and Academic Programs With an Active Statewide Articulation Agreement Per Service Region in Academic Year 2021-22

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Broward College	Practical Nursing-CAR	516	Nursing RN-AS	1409
Broward College	Nursing R.N.-AS	1409	Nursing – BS	307
Broward College	Florida Law Enforcement Academy-CAR	175	Criminal Justice Technology-AS	304
Broward College	Correctional Officer (Traditional Correctional Basic Recruit Training Program)-CAR	25	Criminal Justice Technology-AS	304
Broward College	Child Care Center Management Specialization-CCC	65	Early Childhood Education-AS	236
Broward College	Preschool Specialization-CCC	55	Early Childhood Education-AS	236
Broward College	Infant/Toddler Specialization-CCC	53	Early Childhood Education-AS	236
Broward College	Early Childhood Education-CAR	53	Early Childhood Education-AS	236
Broward College	Early Childhood Development Specialization-CCC	48	Early Childhood Education-AS	236
Broward College	Automotive Service Technology-CAR	221	Automotive Service Management Technology – AAS	233
Broward College	Network Support Services-CAR	163	Network Systems Technology-AS	187
Broward College	Network Systems Administration-CAR	78	Network Systems Technology-AS	187
Broward College	Web Development-CAR	183	Graphics Technology-AS	158
Broward College	Digital Printing Technology-CAR	18	Graphics Technology-AS	158
Broward College	Air Conditioning, Refrigeration and Heating Technology-CAR	260	Building Construction Technology-AS	100
Broward College	Carpentry-CAR	39	Building Construction Technology-AS	100



Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Broward College	Emergency Medical Technician-ATD	314	Emergency Medical Services – AS	85
Broward College	Accounting Operations-CAR	134	Office Administration-AS	76
Broward College	Medical Administrative Specialist-CAR	93	Office Administration-AS	76
Broward College	Legal Administrative Specialist-CAR	72	Office Administration-AS	76
Broward College	Administrative Office Specialist-CAR	64	Office Administration-AS	76
Broward College	Medical Coder/Biller-ATD	104	Health Information Technology-AS	51
Broward College	Dental Assisting Technology and Management-ATD	103	Dental Assisting Technology and Management-AS	*
Broward College	Health Navigator-AS	981	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Business Administration-AS	628	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Criminal Justice Technology-AS	304	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Computer Information Technology-AS	250	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Computer Programming and Analysis-AS	220	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Network Systems Technology-AS	187	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	FireFighter I/II-CAR	179	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Graphics Technology-AS	158	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Health Services Management-AS	142	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Social and Human Services-AS	113	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Radiography-AS	112	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Crime Scene Technology-AS	111	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Building Construction Technology-AS	100	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Hospitality & Tourism Management-AS	95	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Emergency Medical Services-AS	85	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Radiation Therapy-AS	68	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	IT Security-AS	63	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Environmental Science Technology-AS	61	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Health Information Technology-AS	51	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Nuclear Medicine Technology-AS	50	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Physical Therapist Assistant-AS	45	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Respiratory Care-AS	42	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Diagnostic Medical Sonography Technology-AS	41	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Business Analysis Specialist-AS	38	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Broward College	Dental Hygiene-AS	35	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Opticianry-AS	34	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Technology Project Management-AS	20	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Medical Laboratory Technology-AS	12	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Medical Assisting Advanced-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Dental Assisting Technology and Management-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Broward College	Internet Services Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Practical Nursing-CAR	74	Nursing RN-AS	119
Chipola College	Business Administration-AS	25	Business Administration & Management-BS	81
Chipola College	Nursing R.N.-AS	119	Nursing – BS	58
Chipola College	Child Care Center Management Specialization-CCC	*	Early Childhood Education-AS	20
Chipola College	Network Support Services-CAR	*	Network Systems Technology-AS	*
Chipola College	Correctional Officer (Traditional Correctional BRTP)-CAR	89	Criminal Justice Technology-AS	*
Chipola College	Florida Law Enforcement Academy-CAR	65	Criminal Justice Technology-AS	*
Chipola College	Emergency Medical Technician-ATD	21	Emergency Medical Services – AS	*
Chipola College	Automotive Service Technology-CAR	45	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Electrician-CAR	24	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Computer Information Technology-AS	16	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Building Construction Technologies-CAR	13	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Carpentry-CAR	13	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	FireFighter I/II-CAR	13	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Network Systems Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Criminal Justice Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Medical Administrative Specialist-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Chipola College	Emergency Medical Services-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Practical Nursing-CAR	89	Nursing RN-AS	307
College of Central Florida	Early Childhood Development Specialization-CCC	*	Early Childhood Education-AS	130
College of Central Florida	Child Care Center Management Specialization-CCC	*	Early Childhood Education-AS	130
College of Central Florida	Emergency Medical Technician-ATD	32	Emergency Medical Services – AS	123
College of Central Florida	Nursing R.N.-AS	307	Nursing – BS	113
College of Central Florida	Florida Law Enforcement Academy-CAR	182	Criminal Justice Technology-AS	66

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
		Enrolled in Second Program		
College of Central Florida	Correctional Officer (Traditional Correctional BRTP)-CAR	35	Criminal Justice Technology-AS	66
College of Central Florida	Medical Coder/Biller-ATD	15	Health Information Technology-AS	48
College of Central Florida	Dental Assisting Technology and Management-ATD	19	Dental Assisting Technology and Management-AS	38
College of Central Florida	Medical Administrative Specialist-CAR	10	Office Administration-AS	37
College of Central Florida	Business Administration-AS	231	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Computer Information Technology-AS	162	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Equine Studies-AS	127	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Emergency Medical Services-AS	123	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Agribusiness Management-AS	68	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Criminal Justice Technology-AS	66	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	FireFighter I/II-CAR	56	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Health Information Technology-AS	48	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Dental Assisting Technology and Management-AS	38	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Physical Therapist Assistant-AS	38	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	35	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Automotive Service Technology-CAR	35	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Radiography-AS	30	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Network Systems Administration-CAR	24	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Surgical Services-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
College of Central Florida	Medical Clinical Laboratory Technician-ATD	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Practical Nursing-CAR	50	Nursing RN-AS	627
Daytona State College	Nursing R.N.-AS	627	Nursing – BS	315
Daytona State College	Electronics Engineering Technology-AS	23	Engineering Technology – BS	251
Daytona State College	Computer Engineering Technology-AS	70	Information Systems Technology-BS	211
Daytona State College	Emergency Medical Technician-ATD	57	Emergency Medical Services – AS	196
Daytona State College	Early Childhood Education-APPR	45	Early Childhood Education-AS	163
Daytona State College	Early Childhood Education-CAR	*	Early Childhood Education-AS	163
Daytona State College	Florida Law Enforcement Academy-CAR	135	Criminal Justice Technology-AS	97
Daytona State College	Correctional Officer (Traditional Correctional BRTP)-CAR	28	Criminal Justice Technology-AS	97

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
		Enrolled in Second Program		
Daytona State College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	55	Building Construction Technology-AS	32
Daytona State College	Business Administration-AS	374	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Emergency Medical Services-AS	196	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Computer Information Technology-AS	156	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Computer Programming and Analysis-AS	129	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	FireFighter I/II-CAR	100	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Criminal Justice Technology-AS	97	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Environmental Science Technology-AS	54	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Hospitality & Tourism Management-AS	52	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Occupational Therapy Assistant-AS	51	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Automotive Service Technology-CAR	48	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Physical Therapist Assistant-AS	45	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Network Systems Technology-AS	42	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Respiratory Care-AS	40	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Dental Hygiene-AS	39	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Building Construction Technology-AS	32	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Surgical Services-AS	31	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Radiography-AS	29	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Opticianry-AS	19	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Database Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Simulation Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Daytona State College	Health Information Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Practical Nursing-CAR	89	Nursing RN-AS	445
Eastern Florida State College	Nursing R.N.-AS	445	Nursing – BS	215
Eastern Florida State College	Early Childhood Development Specialization-CCC	31	Early Childhood Education-AS	141
Eastern Florida State College	Preschool Specialization-CCC	18	Early Childhood Education-AS	141
Eastern Florida State College	Child Care Center Management Specialization-CCC	*	Early Childhood Education-AS	141
Eastern Florida State College	Infant/Toddler Specialization-CCC	*	Early Childhood Education-AS	141
Eastern Florida State College	Florida Law Enforcement Academy-CAR	160	Criminal Justice Technology-AS	108
Eastern Florida State College	Correctional Officer (Traditional Correctional BRTP)-CAR	19	Criminal Justice Technology-AS	108

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
		Enrolled in Second Program		
Eastern Florida State College	Emergency Medical Technician-ATD	130	Emergency Medical Services – AS	37
Eastern Florida State College	FireFighter I/II-CAR	120	Fire Science Technology – AS	37
Eastern Florida State College	Dental Assisting Technology and Management-ATD	29	Dental Assisting Technology and Management-AS	*
Eastern Florida State College	Business Administration-AS	453	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Chemical Technology-AS	271	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Computer Programming and Analysis-AS	231	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Health Navigator-AS	209	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Computer Information Technology-AS	130	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Social and Human Services-AS	113	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Criminal Justice Technology-AS	108	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Crime Scene Technology-AS	101	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Graphics Technology-AS	96	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Network Systems Technology-AS	70	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Diagnostic Medical Sonography Technology-AS	45	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Radiography-AS	38	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Emergency Medical Services-AS	37	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Fire Science Technology-AS	37	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Dental Hygiene-AS	36	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Medical Laboratory Technology-AS	34	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Physical Therapist Assistant-AS	31	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Landscape & Horticulture Technology-AS	29	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Surgical Services-AS	27	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	21	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Respiratory Care-AS	18	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Medical Assisting Advanced-AS	10	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Dental Assisting Technology and Management-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Eastern Florida State College	Pharmacy Technician-ATD	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Practical Nursing-CAR	57	Nursing RN-AS	161
Florida Gateway College	Florida Law Enforcement Academy-CAR	43	Criminal Justice Technology-AS	65
Florida Gateway College	Correctional Officer (Traditional Correctional BRTP)-CAR	29	Criminal Justice Technology-AS	65

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Florida Gateway College	Nursing R.N.-AS	161	Nursing – BS	61
Florida Gateway College	Child Care Center Management Specialization-CCC	18	Early Childhood Education-AS	52
Florida Gateway College	Preschool Specialization-CCC	15	Early Childhood Education-AS	52
Florida Gateway College	Infant/Toddler Specialization-CCC	12	Early Childhood Education-AS	52
Florida Gateway College	Early Childhood Development Specialization-CCC	10	Early Childhood Education-AS	52
Florida Gateway College	Early Childhood Inclusion Specialization-CCC	*	Early Childhood Education-AS	52
Florida Gateway College	Medical Coder/Biller-ATD	38	Health Information Technology-AS	33
Florida Gateway College	Business Administration-AS	96	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Agribusiness Management-AS	78	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Criminal Justice Technology-AS	65	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Emergency Medical Services-AS	64	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Physical Therapist Assistant-AS	34	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Health Information Technology-AS	33	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Computer Information Technology-AS	31	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	FireFighter I/II-CAR	30	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Environmental Science Technology-AS	28	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	25	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida Gateway College	Computer Programming and Analysis-AS	21	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Practical Nursing-CAR	436	Nursing RN-AS	727
Florida SouthWestern State College	Nursing R.N.-AS	727	Nursing – BS	377
Florida SouthWestern State College	Emergency Medical Technician-ATD	69	Emergency Medical Services – AS	261
Florida SouthWestern State College	Paramedic-ATD	16	Emergency Medical Services – AS	261
Florida SouthWestern State College	Florida Law Enforcement Academy-CAR	167	Criminal Justice Technology-AS	256
Florida SouthWestern State College	Correctional Officer (Traditional Correctional BRTP)-CAR	89	Criminal Justice Technology-AS	256
Florida SouthWestern State College	Early Childhood Education-CAR	70	Early Childhood Education-AS	158
Florida SouthWestern State College	Preschool Specialization-CCC	*	Early Childhood Education-AS	158

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Florida SouthWestern State College	Early Childhood Development Specialization-CCC	*	Early Childhood Education-AS	158
Florida SouthWestern State College	Early Childhood Inclusion Specialization-CCC	*	Early Childhood Education-AS	158
Florida SouthWestern State College	Network Support Services-CAR	31	Network Systems Technology-AS	130
Florida SouthWestern State College	Network Systems Administration-CAR	13	Network Systems Technology-AS	130
Florida SouthWestern State College	FireFighter I/II-CAR	131	Fire Science Technology – AS	69
Florida SouthWestern State College	Business Administration-AS	660	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Chemical Technology-AS	500	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Emergency Medical Services-AS	261	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Criminal Justice Technology-AS	256	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Computer Programming and Analysis-AS	239	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Crime Scene Technology-AS	167	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Social and Human Services-AS	156	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Automotive Service Technology-CAR	147	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Architectural Design & Construction Technology-AS	130	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Network Systems Technology-AS	130	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Air Conditioning, Refrigeration and Heating Technology-CAR	125	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Health Information Technology-AS	124	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Fire Science Technology-AS	69	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Radiography-AS	68	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Respiratory Care-AS	62	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Florida SouthWestern State College	Building Construction Technologies-CAR	49	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Cardiovascular Technology-AS	44	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Accounting Operations-CAR	41	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Electronic Technology-CAR	40	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Digital Design-CAR	37	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Dental Hygiene-AS	32	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Medical Administrative Specialist-CAR	31	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Dental Assisting Technology and Management-ATD	28	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Carpentry-CAR	23	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Legal Administrative Specialist-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida SouthWestern State College	Internet Services Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida State College at Jacksonville	Business Administration-AS	747	Business Administration & Management-BS	861
Florida State College at Jacksonville	Business Administration-AS	747	Business, General-BS	771
Florida State College at Jacksonville	Practical Nursing-CAR	90	Nursing RN-AS	674
Florida State College at Jacksonville	Nursing R.N.-AS	674	Nursing – BS	452
Florida State College at Jacksonville	Florida Law Enforcement Academy-CAR	275	Criminal Justice Technology-AS	245
Florida State College at Jacksonville	Correctional Officer (Traditional Correctional BRTP)-CAR	72	Criminal Justice Technology-AS	245
Florida State College at Jacksonville	FireFighter I/II-CAR	243	Fire Science Technology – AS	87
Florida State College at Jacksonville	Air Conditioning, Refrigeration and Heating Technology-CAR	86	Building Construction Technology-AS	69
Florida State College at Jacksonville	Computer Information Technology-AS	597	<i>Second Program Not Offered</i>	<i>N/A</i>



Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
		Enrolled in Second Program		
Florida State College at Jacksonville	IT Security-AS	295	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Criminal Justice Technology-AS	245	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Network Systems Technology-AS	127	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Architectural Design & Construction Technology-AS	116	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Radiography-AS	109	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Biotechnology Laboratory Technology-AS	99	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Fire Science Technology-AS	87	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Environmental Science Technology-AS	85	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Surgical Services-AS	81	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Physical Therapist Assistant-AS	73	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Building Construction Technology-AS	69	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Data Science Technology-AS	68	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Hospitality & Tourism Management-AS	57	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Health Navigator-AS	55	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Clinical Research Professional-AS	52	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Emergency Medical Services-AS	48	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Cardiovascular Technology-AS	44	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Dental Hygiene-AS	41	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Respiratory Care-AS	41	<i>Second Program Not Offered</i>	N/A
Florida State College at Jacksonville	Emergency Administration and Management-AS	38	<i>Second Program Not Offered</i>	N/A

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Florida State College at Jacksonville	Histologic Technology-AS	37	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida State College at Jacksonville	Occupational Therapy Assistant-AS	36	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida State College at Jacksonville	Medical Laboratory Technology- AS	34	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida State College at Jacksonville	Computer Related Crime Investigations-AS	23	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida State College at Jacksonville	Health Information Technology-AS	19	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida State College at Jacksonville	Ophthalmic Technician-AS	15	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida State College at Jacksonville	Medical Assisting Advanced-AS	13	<i>Second Program Not Offered</i>	<i>N/A</i>
Florida State College at Jacksonville	Radiation Therapy-AS	10	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Practical Nursing-CAR	167	Nursing RN-AS	274
Gulf Coast State College	Nursing R.N.-AS	274	Nursing – BS	147
Gulf Coast State College	Business Administration-AS	137	Business Administration & Management-BS	106
Gulf Coast State College	Early Childhood Development Specialization-CCC	*	Early Childhood Education-AS	57
Gulf Coast State College	Florida Law Enforcement Academy-CAR	86	Criminal Justice Technology-AS	43
Gulf Coast State College	Correctional Officer (Traditional Correctional BRTP)-CAR	*	Criminal Justice Technology-AS	43
Gulf Coast State College	Emergency Medical Technician-ATD	49	Emergency Medical Services – AS	38
Gulf Coast State College	FireFighter I/II-CAR	45	Fire Science Technology – AS	11
Gulf Coast State College	Cybersecurity-AS	90	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Surgical First Assisting-AS	63	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Criminal Justice Technology-AS	43	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Radiography-AS	41	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Diagnostic Medical Sonography Technology-AS	39	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Emergency Medical Services-AS	38	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Architectural Design & Construction Technology-AS	33	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Dental Hygiene-AS	32	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Computer Programming and Analysis-AS	30	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Physical Therapist Assistant-AS	30	<i>Second Program Not Offered</i>	<i>N/A</i>
Gulf Coast State College	Respiratory Care-AS	30	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
			Number of Students Enrolled in Second Program	
Gulf Coast State College	Medical Administrative Specialist-CAR	22	<i>Second Program Not Offered</i>	N/A
Gulf Coast State College	Surgical Services-AS	20	<i>Second Program Not Offered</i>	N/A
Gulf Coast State College	Network Systems Technology-AS	19	<i>Second Program Not Offered</i>	N/A
Gulf Coast State College	Fire Science Technology-AS	11	<i>Second Program Not Offered</i>	N/A
Gulf Coast State College	Hospitality & Tourism Management-AS	*	<i>Second Program Not Offered</i>	N/A
Gulf Coast State College	Administrative Office Specialist-CAR	*	<i>Second Program Not Offered</i>	N/A
Hillsborough Community College	Practical Nursing-CAR	161	Nursing RN-AS	637
Hillsborough Community College	Florida Law Enforcement Academy-CAR	144	Criminal Justice Technology-AS	629
Hillsborough Community College	Correctional Officer (Traditional Correctional BRTP)-CAR	64	Criminal Justice Technology-AS	629
Hillsborough Community College	Early Childhood Education-CAR	441	Early Childhood Education-AS	145
Hillsborough Community College	Preschool Specialization-CCC	52	Early Childhood Education-AS	145
Hillsborough Community College	Child Care Center Management Specialization-CCC	20	Early Childhood Education-AS	145
Hillsborough Community College	FireFighter I/II-CAR	281	Fire Science Technology – AS	129
Hillsborough Community College	Web Development-CAR	237	Internet Services Technology-AS	81
Hillsborough Community College	Accounting Operations-CAR	25	Office Administration-AS	61
Hillsborough Community College	Emergency Medical Technician-ATD	135	Emergency Medical Services – AS	21
Hillsborough Community College	Medical Clinical Laboratory Technician-ATD	31	Medical Laboratory Technology-AS	*
Hillsborough Community College	Business Administration-AS	1121	<i>Second Program Not Offered</i>	N/A
Hillsborough Community College	Nursing R.N.-AS	637	<i>Second Program Not Offered</i>	N/A
Hillsborough Community College	Criminal Justice Technology-AS	629	<i>Second Program Not Offered</i>	N/A
Hillsborough Community College	Social and Human Services-AS	320	<i>Second Program Not Offered</i>	N/A
Hillsborough Community College	Cybersecurity-AS	295	<i>Second Program Not Offered</i>	N/A

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Hillsborough Community College	Computer Programming and Analysis-AS	284	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Opticianry-AS	270	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Computer Information Technology-AS	245	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Biotechnology Laboratory Technology-AS	209	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Fire Science Technology-AS	129	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Automotive Service Technology-CAR	122	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Network Systems Technology-AS	117	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Architectural Design & Construction Technology-AS	114	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Computer Engineering Technology-AS	109	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Environmental Science Technology-AS	88	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Internet Services Technology-AS	81	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Electronics Engineering Technology-AS	74	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Health Navigator-AS	68	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Respiratory Care-AS	65	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Radiography-AS	63	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	61	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Diagnostic Medical Sonography Technology-AS	58	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Hospitality & Tourism Management-AS	57	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Dental Assisting Technology and Management-ATD	53	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Radiation Therapy-AS	50	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Hillsborough Community College	Cardiovascular Technology-AS	43	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Cybersecurity Operations-AS	37	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Aquaculture Management-AS	33	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Carpentry-CAR	32	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Database Technology-AS	30	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Clinical Research Professional-AS	29	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Technology Project Management-AS	29	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Dental Hygiene-AS	28	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Nuclear Medicine Technology-AS	28	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Business Intelligence Specialist-AS	26	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Medical Coder/Biller-ATD	25	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Surgical Services-AS	25	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Emergency Medical Services-AS	21	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Medical Laboratory Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Hillsborough Community College	Optical Management-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Business Administration-AS	262	Business Administration & Management-BS	463
Indian River State College	Practical Nursing-CAR	95	Nursing RN-AS	421
Indian River State College	Nursing R.N.-AS	421	Nursing-BS	358
Indian River State College	Criminal Justice Technology-AS	164	Criminal Justice-BS	311
Indian River State College	FireFighter I/II-CAR	143	Fire Science Technology-AS	185
Indian River State College	Florida Law Enforcement Academy-CAR	201	Criminal Justice Technology-AS	164
Indian River State College	Correctional Officer (Traditional Correctional BRTP)-CAR	22	Criminal Justice Technology-AS	164
Indian River State College	Preschool Specialization-CCC	25	Early Childhood Education-AS	116

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
		Enrolled in Second Program		
Indian River State College	Child Care Center Management Specialization-CCC	23	Early Childhood Education-AS	116
Indian River State College	Early Childhood Development Specialization-CCC	23	Early Childhood Education-AS	116
Indian River State College	Early Childhood Education-CAR	*	Early Childhood Education-AS	116
Indian River State College	Emergency Medical Technician-ATD	*	Emergency Medical Services – AS	81
Indian River State College	Dental Assisting Technology and Management-ATD	21	Dental Assisting Technology and Management-AS	19
Indian River State College	Computer Information Technology-AS	271	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Fire Science Technology-AS	185	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Social and Human Services-AS	148	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Emergency Medical Services-AS	81	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Building Construction Technology-AS	60	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Graphics Technology-AS	48	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Administrative Office Specialist-CAR	36	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Medical Laboratory Technology-AS	36	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Electronics Engineering Technology-AS	35	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Health Information Technology-AS	33	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Physical Therapist Assistant-AS	31	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Radiography-AS	30	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Landscape & Horticulture Technology-AS	26	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Respiratory Care-AS	20	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Medical Administrative Specialist-CAR	19	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Dental Assisting Technology and Management-AS	19	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Dental Hygiene-AS	19	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Hospitality & Tourism Management-AS	19	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Health Services Management-AS	18	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Aquaculture Management-AS	10	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Emergency Administration and Management-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Agricultural Production Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Legal Administrative Specialist-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Architectural Design & Construction Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Indian River State College	Golf Course Operations-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
		Enrolled in Second Program		
Lake-Sumter State College	Practical Nursing-CAR	89	Nursing RN-AS	205
Lake-Sumter State College	Nursing R.N.-AS	205	Nursing – BS	127
Lake-Sumter State College	Florida Law Enforcement Academy-CAR	95	Criminal Justice Technology-AS	58
Lake-Sumter State College	Correctional Officer (Traditional Correctional BRTP)-CAR	24	Criminal Justice Technology-AS	58
Lake-Sumter State College	Medical Coder/Biller-ATD	10	Health Information Technology-AS	*
Lake-Sumter State College	Business Administration-AS	133	Second Program Not Offered	N/A
Lake-Sumter State College	Computer Information Technology-AS	103	Second Program Not Offered	N/A
Lake-Sumter State College	Paramedic-ATD	75	Second Program Not Offered	N/A
Lake-Sumter State College	Criminal Justice Technology-AS	58	Second Program Not Offered	N/A
Lake-Sumter State College	Emergency Medical Technician-ATD	38	Second Program Not Offered	N/A
Lake-Sumter State College	Health Services Management-AS	32	Second Program Not Offered	N/A
Lake-Sumter State College	Administrative Office Specialist-CAR	15	Second Program Not Offered	N/A
Lake-Sumter State College	Accounting Operations-CAR	13	Second Program Not Offered	N/A
Lake-Sumter State College	Health Information Technology-AS	*	Second Program Not Offered	N/A
Miami Dade College	Practical Nursing-CAR	440	Nursing RN-AS	5722
Miami Dade College	Nursing R.N.-AS	5722	Nursing – BS	605
Miami Dade College	Early Childhood Education-CAR	112	Early Childhood Education-AS	376
Miami Dade College	Preschool Specialization-CCC	60	Early Childhood Education-AS	376
Miami Dade College	Early Childhood Inclusion Specialization-CCC	46	Early Childhood Education-AS	376
Miami Dade College	Child Care Center Management Specialization-CCC	26	Early Childhood Education-AS	376
Miami Dade College	Early Childhood Development Specialization-CCC	21	Early Childhood Education-AS	376
Miami Dade College	Infant/Toddler Specialization-CCC	17	Early Childhood Education-AS	376
Miami Dade College	Computer Engineering Technology-AS	214	Information Systems Technology-BS	228
Miami Dade College	Network Systems Administration-CAR	20	Computer Engineering Technology-AS	214
Miami Dade College	Network Support Services-CAR	16	Computer Engineering Technology-AS	214
Miami Dade College	Florida Law Enforcement Academy-CAR	170	Criminal Justice Technology-AS	207
Miami Dade College	Correctional Officer (Traditional Correctional BRTP)-CAR	50	Criminal Justice Technology-AS	207
Miami Dade College	FireFighter I/II-CAR	247	Fire Science Technology – AS	184
Miami Dade College	Electronic Technology-CAR	17	Electronics Engineering Technology-AS	150
Miami Dade College	Network Systems Administration-CAR	20	Network Systems Technology-AS	113
Miami Dade College	Network Support Services-CAR	16	Network Systems Technology-AS	113

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
			Number of Students Enrolled in Second Program	
Miami Dade College	Air Conditioning, Refrigeration and Heating Technology-CAR	51	Building Construction Technology-AS	86
Miami Dade College	Building Construction Technologies-CAR	11	Building Construction Technology-AS	86
Miami Dade College	Carpentry-CAR	*	Building Construction Technology-AS	86
Miami Dade College	Electronics Engineering Technology-AS	150	Electronics Engineering Technology-BS	84
Miami Dade College	Dental Hygiene-AS	863	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Business Administration-AS	725	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Diagnostic Medical Sonography Technology-AS	695	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Physical Therapist Assistant-AS	620	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Radiography-AS	557	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Crime Scene Technology-AS	488	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Computer Information Technology-AS	426	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Emergency Medical Services-AS	423	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Cybersecurity-AS	417	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Health Services Management-AS	391	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Automotive Service Technology-CAR	260	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Medical Laboratory Technology-AS	257	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Game Development Design-AS	245	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Graphics Technology-AS	232	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Computer Programming and Analysis-AS	223	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Biotechnology Laboratory Technology-AS	207	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Criminal Justice Technology-AS	207	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Fire Science Technology-AS	184	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Social and Human Services-AS	173	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Respiratory Care-AS	136	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Hospitality & Tourism Management-AS	131	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Network Systems Technology-AS	113	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Architectural Design & Construction Technology-AS	97	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Business Intelligence Specialist-AS	92	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Building Construction Technology-AS	86	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Health Information Technology-AS	74	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Nuclear Medicine Technology-AS	62	<i>Second Program Not Offered</i>	<i>N/A</i>



Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Miami Dade College	Opticianry-AS	62	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Histologic Technology-AS	57	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Landscape & Horticulture Technology-AS	50	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Surgical Services-AS	48	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Accounting Operations-CAR	43	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Computer Related Crime Investigations-AS	21	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Administrative Office Specialist-CAR	16	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Database Technology-AS	11	<i>Second Program Not Offered</i>	<i>N/A</i>
Miami Dade College	Security Management and Administration-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
North Florida College	Practical Nursing-CAR	92	Nursing RN-AS	328
North Florida College	Nursing R.N.-AS	328	Nursing – BS	85
North Florida College	Florida Law Enforcement Academy-CAR	30	Criminal Justice Technology-AS	28
North Florida College	Business Administration-AS	52	<i>Second Program Not Offered</i>	<i>N/A</i>
North Florida College	Emergency Medical Services-AS	35	<i>Second Program Not Offered</i>	<i>N/A</i>
North Florida College	Criminal Justice Technology-AS	28	<i>Second Program Not Offered</i>	<i>N/A</i>
North Florida College	Brick and Block Masonry-CAR	16	<i>Second Program Not Offered</i>	<i>N/A</i>
North Florida College	Medical Administrative Specialist-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
North Florida College	Early Childhood Education-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Practical Nursing-CAR	178	Nursing RN-AS	210
Northwest Florida State College	Nursing R.N.-AS	210	Nursing – BS	141
Northwest Florida State College	Early Childhood Development Specialization-CCC	*	Early Childhood Education-AS	47
Northwest Florida State College	Child Care Center Management Specialization-CCC	*	Early Childhood Education-AS	47
Northwest Florida State College	Preschool Specialization-CCC	*	Early Childhood Education-AS	47
Northwest Florida State College	Emergency Medical Technician-ATD	39	Emergency Medical Services – AS	16
Northwest Florida State College	Florida Law Enforcement Academy-CAR	74	Criminal Justice Technology-AS	*
Northwest Florida State College	Correctional Officer (Traditional Correctional BRTP)-CAR	24	Criminal Justice Technology-AS	*

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Northwest Florida State College	Network Support Services-CAR	15	Computer Engineering Technology-AS	*
Northwest Florida State College	Network Support Services-CAR	15	Network Systems Technology-AS	*
Northwest Florida State College	Business Administration-AS	101	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Cybersecurity-AS	83	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Electrician-CAR	71	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Physical Therapist Assistant-AS	60	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Health Services Management-AS	54	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Radiography-AS	46	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Computer Programming and Analysis-AS	45	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Graphics Technology-AS	42	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Hospitality & Tourism Management-AS	28	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Computer Information Technology-AS	25	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Medical Laboratory Technology-AS	24	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Carpentry-CAR	17	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Emergency Medical Services-AS	16	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	FireFighter I/II-CAR	14	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Criminal Justice Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Architectural Design & Construction Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Computer Engineering Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Northwest Florida State College	Network Systems Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Palm Beach State College	Practical Nursing-CAR	64	Nursing RN-AS	946

Service Region	First Credential Program Title Offered	Number of Students	
		Enrolled in First Program	Second Credential Program Title Offered
			Number of Students Enrolled in Second Program
Palm Beach State College	Nursing R.N.-AS	946	Nursing-BS 429
Palm Beach State College	Early Childhood Education-CAR	280	Early Childhood Education-AS 392
Palm Beach State College	Child Care Center Management Specialization-CCC	88	Early Childhood Education-AS 392
Palm Beach State College	Preschool Specialization-CCC	59	Early Childhood Education-AS 392
Palm Beach State College	Infant/Toddler Specialization-CCC	15	Early Childhood Education-AS 392
Palm Beach State College	Florida Law Enforcement Academy-CAR	149	Criminal Justice Technology-AS 277
Palm Beach State College	Correctional Officer (Traditional Correctional BRTP)-CAR	42	Criminal Justice Technology-AS 277
Palm Beach State College	Medical Record Transcribing-ATD	27	Health Information Technology-AS 161
Palm Beach State College	FireFighter I/II-CAR	113	Fire Science Technology-AS 93
Palm Beach State College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	131	Building Construction Technology-AS 37
Palm Beach State College	Computer Programming and Analysis-AS	589	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Business Administration-AS	543	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Social and Human Services-AS	470	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Emergency Medical Services-AS	312	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Criminal Justice Technology-AS	277	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Crime Scene Technology-AS	259	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Network Systems Technology-AS	211	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Graphics Technology-AS	174	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Health Information Technology-AS	161	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Environmental Science Technology-AS	134	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Hospitality & Tourism Management-AS	121	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Biotechnology Laboratory Technology-AS	115	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Automotive Service Technology-CAR	113	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Radiography-AS	97	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Dental Hygiene-AS	96	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Fire Science Technology-AS	93	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Health Services Management-AS	85	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Medical Assisting Advanced-AS	57	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Diagnostic Medical Sonography Technology-AS	51	<i>Second Program Not Offered</i> N/A
Palm Beach State College	Respiratory Care-AS	51	<i>Second Program Not Offered</i> N/A

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
			Number of Students Enrolled in Second Program	
Palm Beach State College	Landscape & Horticulture Technology-AS	39	<i>Second Program Not Offered</i>	N/A
Palm Beach State College	Building Construction Technology-AS	37	<i>Second Program Not Offered</i>	N/A
Palm Beach State College	Ophthalmic Technician-AS	25	<i>Second Program Not Offered</i>	N/A
Palm Beach State College	Surgical Services-AS	16	<i>Second Program Not Offered</i>	N/A
Palm Beach State College	Emergency Administration and Management-AS	*	<i>Second Program Not Offered</i>	N/A
Palm Beach State College	Internet Services Technology-AS	*	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Practical Nursing-CAR	59	Nursing RN-AS	352
Pasco-Hernando State College	Emergency Medical Technician-ATD	53	Emergency Medical Services-AS	180
Pasco-Hernando State College	Nursing R.N.-AS	352	Nursing-BS	137
Pasco-Hernando State College	Florida Law Enforcement Academy-CAR	98	Criminal Justice Technology-AS	117
Pasco-Hernando State College	Correctional Officer (Traditional Correctional BRTP)-CAR	32	Criminal Justice Technology-AS	117
Pasco-Hernando State College	FireFighter I/II-CAR	34	Fire Science Technology-AS	16
Pasco-Hernando State College	Business Administration-AS	331	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Emergency Medical Services-AS	180	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Social and Human Services-AS	173	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Computer Programming and Analysis-AS	162	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	IT Security-AS	130	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Early Childhood Education-APPR	123	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Criminal Justice Technology-AS	117	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Network Systems Technology-AS	69	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	46	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Radiography-AS	43	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Automotive Service Technology-CAR	30	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Internet Services Technology-AS	30	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Dental Hygiene-AS	24	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Crime Scene Technology-AS	18	<i>Second Program Not Offered</i>	N/A
Pasco-Hernando State College	Fire Science Technology-AS	16	<i>Second Program Not Offered</i>	N/A
Pensacola State College	Practical Nursing-CAR	89	Nursing RN-AS	460
Pensacola State College	Nursing R.N.-AS	460	Nursing-BS	229
Pensacola State College	Florida Law Enforcement Academy-CAR	76	Criminal Justice Technology-AS	60

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
		Enrolled in Second Program		
Pensacola State College	Correctional Officer (Traditional Correctional BRTP)-CAR	70	Criminal Justice Technology-AS	60
Pensacola State College	Early Childhood Development Specialization-CCC	*	Early Childhood Education-AS	57
Pensacola State College	Preschool Specialization-CCC	*	Early Childhood Education-AS	57
Pensacola State College	Infant/Toddler Specialization-CCC	*	Early Childhood Education-AS	57
Pensacola State College	Child Care Center Management Specialization-CCC	*	Early Childhood Education-AS	57
Pensacola State College	Early Childhood Inclusion Specialization-CCC	*	Early Childhood Education-AS	57
Pensacola State College	Emergency Medical Technician-ATD	65	Emergency Medical Services-AS	39
Pensacola State College	Pharmacy Technician-ATD	14	Pharmacy Management-AS	13
Pensacola State College	Health Services Management-AS	1133	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Cybersecurity-AS	279	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Business Administration-AS	205	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Graphics Technology-AS	133	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Medical Administrative Specialist-CAR	122	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	70	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Architectural Design & Construction Technology-AS	70	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Computer Information Technology-AS	69	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Dental Hygiene-AS	68	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Diagnostic Medical Sonography Technology-AS	67	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Criminal Justice Technology-AS	60	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Computer Related Crime Investigations-AS	50	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Electronics Engineering Technology-AS	48	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Computer Programming and Analysis-AS	47	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Emergency Medical Services-AS	39	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Automotive Service Technology-CAR	36	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Radiography-AS	34	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Physical Therapist Assistant-AS	29	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Carpentry-CAR	24	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Network Support Services-CAR	24	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Hospitality & Tourism Management-AS	24	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Health Information Technology-AS	22	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Pensacola State College	Network Systems Administration-CAR	15	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Pharmacy Management-AS	13	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	FireFighter I/II-CAR	11	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Accounting Operations-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Administrative Office Specialist-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Electrician-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Pensacola State College	Legal Administrative Specialist-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Practical Nursing-CAR	51	Nursing RN-AS	378
Polk State College	Nursing R.N.-AS	378	Nursing-BS	305
Polk State College	Criminal Justice Technology-AS	137	Criminal Justice-BS	215
Polk State College	Florida Law Enforcement Academy-CAR	115	Criminal Justice Technology-AS	137
Polk State College	Correctional Officer (Traditional Correctional BRTP)-CAR	66	Criminal Justice Technology-AS	137
Polk State College	Network Support Services-CAR	21	Network Systems Technology-AS	58
Polk State College	Emergency Medical Technician-ATD	54	Emergency Medical Services-AS	43
Polk State College	FireFighter I/II-CAR	59	Fire Science Technology-AS	*
Polk State College	Network Support Services-CAR	21	Computer Engineering Technology-AS	*
Polk State College	Business Administration-AS	222	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Computer Programming and Analysis-AS	72	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Physical Therapist Assistant-AS	64	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Radiography-AS	61	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Network Systems Technology-AS	58	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Occupational Therapy Assistant-AS	53	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Emergency Medical Services-AS	43	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Diagnostic Medical Sonography Technology-AS	35	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Cardiovascular Technology-AS	32	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Administrative Office Specialist-CAR	31	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Child Care Center Management Specialization-CCC	30	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Preschool Specialization-CCC	27	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Respiratory Care-AS	26	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Early Childhood Development Specialization-CCC	22	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Fire Science Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Polk State College	Legal Administrative Specialist-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Polk State College	Computer Engineering Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Practical Nursing-CAR	80	Nursing RN-AS	365
Santa Fe College	Nursing R.N.-AS	365	Nursing-BS	191
Santa Fe College	Florida Law Enforcement Academy-CAR	48	Criminal Justice Technology-AS	78
Santa Fe College	Correctional Officer (Traditional Correctional BRTP)-CAR	20	Criminal Justice Technology-AS	78
Santa Fe College	Automotive Service Technology-CAR	40	Automotive Service Management Technology-AAS	52
Santa Fe College	Early Childhood Development Specialization-CCC	18	Early Childhood Education-AS	37
Santa Fe College	Computer Information Technology-AS	237	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Business Administration-AS	216	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Zoo Animal Technology-AS	181	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Computer Programming and Analysis-AS	170	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	IT Security-AS	160	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Construction Management Technology-AS	105	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Network Systems Technology-AS	83	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Criminal Justice Technology-AS	78	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Emergency Medical Services-AS	70	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Health Services Management-AS	60	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Respiratory Care-AS	57	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Graphics Technology-AS	56	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Cardiovascular Technology-AS	45	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Diagnostic Medical Sonography Technology-AS	44	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Health Information Technology-AS	41	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Dental Hygiene-AS	40	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Radiography-AS	37	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	31	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Chemical Technology-AS	29	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Biotechnology Laboratory Technology-AS	24	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Physical Therapist Assistant-AS	24	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Nuclear Medicine Technology-AS	12	<i>Second Program Not Offered</i>	<i>N/A</i>
Santa Fe College	Electrician-CAR	11	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Seminole State College of Florida	Nursing R.N.-AS	685	Nursing-BS	222
Seminole State College of Florida	Florida Law Enforcement Academy-CAR	122	Criminal Justice Technology-AS	78
Seminole State College of Florida	FireFighter I/II-CAR	138	Fire Science Technology-AS	43
Seminole State College of Florida	Child Care Center Management Specialization-CCC	20	Early Childhood Education-AS	27
Seminole State College of Florida	Preschool Specialization-CCC	14	Early Childhood Education-AS	27
Seminole State College of Florida	Infant/Toddler Specialization-CCC	*	Early Childhood Education-AS	27
Seminole State College of Florida	Early Childhood Development Specialization-CCC	*	Early Childhood Education-AS	27
Seminole State College of Florida	Pharmacy Technician-ATD	56	Pharmacy Management-AS	*
Seminole State College of Florida	Network Systems Technology-AS	245	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Business Administration-AS	223	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Emergency Medical Services-AS	191	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Computer Programming and Analysis-AS	170	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Chemical Technology-AS	154	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Health Information Technology-AS	140	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Construction Management Technology-AS	129	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Graphics Technology-AS	106	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Health Services Management-AS	100	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Criminal Justice Technology-AS	78	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Physical Therapist Assistant-AS	58	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Respiratory Care-AS	56	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Fire Science Technology-AS	43	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Hospitality & Tourism Management-AS	22	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	11	<i>Second Program Not Offered</i>	<i>N/A</i>
Seminole State College of Florida	Pharmacy Management-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Practical Nursing-CAR	58	Nursing RN-AS	162
South Florida State College	Florida Law Enforcement Academy-CAR	29	Criminal Justice Technology-AS	63
South Florida State College	Emergency Medical Technician-ATD	*	Emergency Medical Services-AS	59
South Florida State College	Nursing R.N.-AS	162	Nursing-BS	55
South Florida State College	FireFighter I/II-CAR	15	Fire Science Technology-AS	*
South Florida State College	Medical Administrative Specialist-CAR	18	Office Administration-AS	*



Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
South Florida State College	Administrative Office Specialist-CAR	15	Office Administration-AS	*
South Florida State College	Business Administration-AS	93	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Criminal Justice Technology-AS	63	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Emergency Medical Services-AS	59	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Automotive Service Technology-CAR	43	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Network Systems Technology-AS	35	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Radiography-AS	35	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Health Services Management-AS	32	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	25	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Dental Hygiene-AS	25	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Computer Programming and Analysis-AS	23	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Computer Engineering Technology-AS	12	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Landscape & Horticulture Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Fire Science Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
South Florida State College	Electronic Technology-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Practical Nursing-CAR	173	Nursing RN-AS	334
St. Johns River State College	Nursing R.N.-AS	334	Nursing-BS	191
St. Johns River State College	Paramedic-ATD	61	Emergency Medical Services-AS	94
St. Johns River State College	Emergency Medical Technician-ATD	29	Emergency Medical Services-AS	94
St. Johns River State College	Florida Law Enforcement Academy-CAR	79	Criminal Justice Technology-AS	81
St. Johns River State College	Correctional Officer (Traditional Correctional BRTP)-CAR	22	Criminal Justice Technology-AS	81
St. Johns River State College	Business Administration-AS	254	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Radiography-AS	156	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Emergency Medical Services-AS	94	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Criminal Justice Technology-AS	81	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Network Systems Technology-AS	69	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Graphics Technology-AS	53	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Health Services Management-AS	52	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	FireFighter I/II-CAR	49	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Computer Information Technology-AS	47	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
St. Johns River State College	Computer Programming and Analysis-AS	45	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Respiratory Care-AS	31	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Health Information Technology-AS	13	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Landscape & Turf Management-CAR	10	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Nursery Management-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Internet Services Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Johns River State College	Data Science Technology-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	Practical Nursing-CAR	293	Nursing RN-AS	900
St. Petersburg College	Nursing R.N.-AS	900	Nursing-BS	683
St. Petersburg College	Business Administration-AS	890	Business Administration & Management-BS	506
St. Petersburg College	Early Childhood Education-APPR	203	Early Childhood Education-AS	216
St. Petersburg College	Early Childhood Education-CAR	187	Early Childhood Education-AS	216
St. Petersburg College	Preschool Specialization-CCC	36	Early Childhood Education-AS	216
St. Petersburg College	Early Childhood Development Specialization-CCC	26	Early Childhood Education-AS	216
St. Petersburg College	Infant/Toddler Specialization-CCC	15	Early Childhood Education-AS	216
St. Petersburg College	Emergency Medical Technician-ATD	114	Emergency Medical Services-AS	148
St. Petersburg College	Paramedic-ATD	84	Emergency Medical Services-AS	148
St. Petersburg College	Florida Law Enforcement Academy-CAR	142	Criminal Justice Technology-AS	146
St. Petersburg College	Correctional Officer (Traditional Correctional BRTP)-CAR	30	Criminal Justice Technology-AS	146
St. Petersburg College	Web Development-CAR	41	Internet Services Technology-AS	132
St. Petersburg College	Network Support Services-CAR	155	Network Systems Technology-AS	117
St. Petersburg College	FireFighter I/II-CAR	87	Fire Science Technology-AS	116
St. Petersburg College	Health Services Management-AS	2268	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	IT Security-AS	618	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	Computer Programming and Analysis-AS	331	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	Social and Human Services-AS	301	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	Computer Information Technology-AS	264	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	Crime Scene Technology-AS	175	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	Emergency Medical Services-AS	148	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	Criminal Justice Technology-AS	146	<i>Second Program Not Offered</i>	<i>N/A</i>
St. Petersburg College	Internet Services Technology-AS	135	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
St. Petersburg College	Hospitality & Tourism Management-AS	121	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Health Information Technology-AS	119	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Network Systems Technology-AS	117	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Fire Science Technology-AS	116	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Architectural Design & Construction Technology-AS	115	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Environmental Science Technology-AS	89	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Dental Hygiene-AS	85	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Data Science Technology-AS	83	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Biotechnology Laboratory Technology-AS	78	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Computer Related Crime Investigations-AS	72	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Physical Therapist Assistant-AS	70	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Respiratory Care-AS	70	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Radiography-AS	63	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Accounting Operations-CAR	58	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Medical Administrative Specialist-CAR	49	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Emergency Administration and Management-AS	39	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Building Construction Technologies-CAR	25	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Orthotics & Prosthetics Technology-AS	18	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Administrative Office Specialist-CAR	17	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Surgical Services-AS	11	<i>Second Program Not Offered</i>	N/A
St. Petersburg College	Security Management and Administration-AS	*	<i>Second Program Not Offered</i>	N/A
State College of Florida, Manatee-Sarasota	Practical Nursing-CAR	326	Nursing RN-AS	471
State College of Florida, Manatee-Sarasota	Nursing R.N.-AS	471	Nursing-BS	399
State College of Florida, Manatee-Sarasota	Early Childhood Development Specialization-CCC	34	Early Childhood Education-AS	262
State College of Florida, Manatee-Sarasota	Early Childhood Education-APPR	27	Early Childhood Education-AS	262
State College of Florida, Manatee-Sarasota	Child Care Center Management Specialization-CCC	16	Early Childhood Education-AS	262
State College of Florida, Manatee-Sarasota	Preschool Specialization-CCC	13	Early Childhood Education-AS	262

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
State College of Florida, Manatee-Sarasota	Early Childhood Education-CAR	*	Early Childhood Education-AS	262
State College of Florida, Manatee-Sarasota	Business Administration-AS	264	Business Administration & Management-BS	179
State College of Florida, Manatee-Sarasota	Florida Law Enforcement Academy-CAR	93	Criminal Justice Technology-AS	134
State College of Florida, Manatee-Sarasota	Correctional Officer (Traditional Correctional BRTP)-CAR	12	Criminal Justice Technology-AS	134
State College of Florida, Manatee-Sarasota	Digital Design-CAR	45	Graphics Technology-AS	131
State College of Florida, Manatee-Sarasota	Web Development-CAR	15	Graphics Technology-AS	131
State College of Florida, Manatee-Sarasota	Automotive Service Technology-CAR	189	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Criminal Justice Technology-AS	134	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Graphics Technology-AS	131	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Computer Information Technology-AS	127	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Health Services Management-AS	127	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	FireFighter I/II-CAR	116	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Emergency Medical Technician-ATD	113	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Computer Programming and Analysis-AS	98	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Electrician-CAR	97	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Paramedic-ATD	84	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Biotechnology Laboratory Technology-AS	66	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	65	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Construction Management Technology-AS	55	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Network Systems Technology-AS	47	<i>Second Program Not Offered</i>	<i>N/A</i>

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
State College of Florida, Manatee-Sarasota	Physical Therapist Assistant-AS	43	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Accounting Operations-CAR	38	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Dental Assisting Technology and Management-ATD	37	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Occupational Therapy Assistant-AS	36	<i>Second Program Not Offered</i>	<i>N/A</i>
	Medical Administrative Specialist-CAR	34	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Dental Hygiene-AS	34	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Radiography-AS	30	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Carpentry-CAR	23	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Administrative Office Specialist-CAR	20	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Medical Coder/Biller-ATD	20	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Technology Project Management-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
State College of Florida, Manatee-Sarasota	Legal Administrative Specialist-CAR	*	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Practical Nursing-CAR	136	Nursing RN-AS	382
Tallahassee Community College	Early Childhood Development Specialization-CCC	*	Early Childhood Education-AS	234
Tallahassee Community College	Infant/Toddler Specialization-CCC	*	Early Childhood Education-AS	234
Tallahassee Community College	Preschool Specialization-CCC	*	Early Childhood Education-AS	234
Tallahassee Community College	Nursing R.N.-AS	382	Nursing-BS	102
Tallahassee Community College	Florida Law Enforcement Academy-CAR	171	Criminal Justice Technology-AS	64
Tallahassee Community College	Correctional Officer (Traditional Correctional BRTP)-CAR	30	Criminal Justice Technology-AS	64
Tallahassee Community College	Medical Administrative Specialist-CAR	36	Office Administration-AS	58
Tallahassee Community College	Legal Administrative Specialist-CAR	14	Office Administration-AS	58

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Tallahassee Community College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	14	Building Construction Technology-AS	57
Tallahassee Community College	Carpentry-CAR	13	Building Construction Technology-AS	57
Tallahassee Community College	Emergency Medical Technician-ATD	62	Emergency Medical Services-AS	40
Tallahassee Community College	Business Administration-AS	238	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Computer Programming and Analysis-AS	99	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Dental Hygiene-AS	86	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Criminal Justice Technology-AS	64	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Building Construction Technology-AS	57	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Graphics Technology-AS	56	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Network Systems Technology-AS	56	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	FireFighter I/II-CAR	54	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Cybersecurity-AS	47	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Radiography-AS	47	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Emergency Medical Services-AS	40	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Respiratory Care-AS	38	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Dental Assisting Technology and Management-ATD	23	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Surgical Services-AS	22	<i>Second Program Not Offered</i>	<i>N/A</i>
Tallahassee Community College	Pharmacy Management-AS	*	<i>Second Program Not Offered</i>	<i>N/A</i>
The College of the Florida Keys	Business Administration-AS	77	Business Administration & Management-BS	54
The College of the Florida Keys	Nursing R.N.-AS	189	Nursing-BS	30
The College of the Florida Keys	Florida Law Enforcement Academy-CAR	72	Criminal Justice Technology-AS	12
The College of the Florida Keys	Correctional Officer (Traditional Correctional BRTP)-CAR	10	Criminal Justice Technology-AS	12

Service Region	First Credential Program Title Offered	Number of Students		
		Enrolled in First Program	Second Credential Program Title Offered	
		Enrolled in Second Program		
The College of the Florida Keys	Marine Environmental Technology-AS	101	<i>Second Program Not Offered</i>	N/A
The College of the Florida Keys	Hospitality & Tourism Management-AS	32	<i>Second Program Not Offered</i>	N/A
The College of the Florida Keys	Criminal Justice Technology-AS	12	<i>Second Program Not Offered</i>	N/A
The College of the Florida Keys	Emergency Medical Services-AS	*	<i>Second Program Not Offered</i>	N/A
Valencia College	Business Administration-AS	2450	Business Administration & Management-BS	1946
Valencia College	Practical Nursing-CAR	183	Nursing RN-AS	896
Valencia College	Florida Law Enforcement Academy-CAR	280	Criminal Justice Technology-AS	854
Valencia College	Correctional Officer (Traditional Correctional BRTP)-CAR	47	Criminal Justice Technology-AS	854
Valencia College	Digital Design-CAR	38	Graphics Technology-AS	602
Valencia College	Web Development-CAR	24	Graphics Technology-AS	602
Valencia College	Nursing R.N.-AS	896	Nursing-BS	536
Valencia College	Network Support Services-CAR	26	Network Systems Technology-AS	515
Valencia College	FireFighter I/II-CAR	239	Fire Science Technology-AS	351
Valencia College	Building Construction Technologies-CAR	299	Building Construction Technology-AS	298
Valencia College	Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R)1-CAR	48	Building Construction Technology-AS	298
Valencia College	Accounting Operations-CAR	47	Office Administration-AS	159
Valencia College	Medical Administrative Specialist-CAR	26	Office Administration-AS	159
Valencia College	Administrative Office Specialist-CAR	19	Office Administration-AS	159
Valencia College	Legal Administrative Specialist-CAR	*	Office Administration-AS	159
Valencia College	Electronics Engineering Technology-AS	356	Electronics Engineering Technology-BS	148
Valencia College	Criminal Justice Technology-AS	854	<i>Second Program Not Offered</i>	N/A
Valencia College	Computer Programming and Analysis-AS	671	<i>Second Program Not Offered</i>	N/A
Valencia College	Computer Information Technology-AS	642	<i>Second Program Not Offered</i>	N/A
Valencia College	Graphics Technology-AS	602	<i>Second Program Not Offered</i>	N/A
Valencia College	Hospitality & Tourism Management-AS	582	<i>Second Program Not Offered</i>	N/A
Valencia College	Network Systems Technology-AS	515	<i>Second Program Not Offered</i>	N/A
Valencia College	Fire Science Technology-AS	351	<i>Second Program Not Offered</i>	N/A
Valencia College	Biotechnology Laboratory Technology-AS	334	<i>Second Program Not Offered</i>	N/A
Valencia College	Building Construction Technology-AS	298	<i>Second Program Not Offered</i>	N/A
Valencia College	Landscape & Horticulture Technology-AS	200	<i>Second Program Not Offered</i>	N/A
Valencia College	Respiratory Care-AS	80	<i>Second Program Not Offered</i>	N/A
Valencia College	Emergency Medical Services-AS	72	<i>Second Program Not Offered</i>	N/A

Service Region	First Credential Program Title Offered	Number of Students Enrolled in First Program	Second Credential Program Title Offered	Number of Students Enrolled in Second Program
Valencia College	Dental Hygiene-AS	69	<i>Second Program Not Offered</i>	<i>N/A</i>
Valencia College	Energy Management and Controls Technology-AS	59	<i>Second Program Not Offered</i>	<i>N/A</i>
Valencia College	Radiography-AS	48	<i>Second Program Not Offered</i>	<i>N/A</i>
Valencia College	Cardiovascular Technology-AS	47	<i>Second Program Not Offered</i>	<i>N/A</i>
Valencia College	Health Information Technology-AS	43	<i>Second Program Not Offered</i>	<i>N/A</i>
Valencia College	Dental Assisting Technology and Management-ATD	38	<i>Second Program Not Offered</i>	<i>N/A</i>
Valencia College	Diagnostic Medical Sonography Technology-AS	37	<i>Second Program Not Offered</i>	<i>N/A</i>
Valencia College	Early Childhood Education-APPR	21	<i>Second Program Not Offered</i>	<i>N/A</i>

\*To protect student confidentiality, OPPAGA masks results when student headcounts are below 10 within a data cell.

Source: OPPAGA analysis of FDOE data.



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# OPPAGA

Office of Program Policy Analysis and Government Accountability

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