

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 7055 PCB PKI 19-01 Career Education

SPONSOR(S): PreK-12 Appropriations Subcommittee, PreK-12 Innovation Subcommittee, Massullo and others

TIED BILLS: **IDEN./SIM. BILLS:**

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
Orig. Comm.: PreK-12 Innovation Subcommittee	15 Y, 0 N	Brink	Brink
1) PreK-12 Appropriations Subcommittee	11 Y, 0 N, As CS	Seifert	Potvin
2) Education Committee			

SUMMARY ANALYSIS

Florida's growing labor market will need to fill an additional 1.7 million vacancies by 2030. In order to meet this demand, Florida's PreK-20 education system must have the capacity to produce graduates who are ready to fill high-growth, high-demand careers. Between 2018 and 2025, 64 percent of the jobs created will require a postsecondary degree or certificate. Currently, 48.3 percent of working-age Floridians have a postsecondary degree or certificate, and without growth the state will remain below the number necessary to fully meet the workforce demand. Florida ranks 21st in the nation for the percentage of adults with education and high-quality workforce credentials.

To help meet growing workforce demand and provide students flexibility and options to pursue advanced career pathways, the bill:

- revises the school grades formula to recognize career certificate clock hour dual enrollment and establishes formal career dual enrollment agreements between high schools and career centers;
- allows students with an industry certification to earn two mathematics credits for Algebra I;
- allows a computer science credit to substitute for a mathematics or science credit and requires a biennial review of career education courses for alignment with high school graduation requirements;
- requires the Department of Education to provide assistance in increasing public awareness of apprenticeship and preapprenticeship opportunities;
- requires the elimination of industry certifications that are not aligned to industry needs;
- establishes a "College and Career Decision Day" to recognize high school seniors for their postsecondary education and career plans;
- doubles the cap on career and professional education (CAPE) Digital Tool certificates the State Board of Education may identify for weighted FTE funding; and
- reestablishes a middle grades career planning course requirement.

The bill may have a fiscal impact with respect to career dual enrollment agreements. See Fiscal Analysis & Economic Impact Statement, *infra*.

Except as otherwise specified, the bill takes effect July 1, 2019.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Florida's growing labor market will need to fill an additional 1.7 million vacancies by 2030.¹ In order to meet this demand, Florida's PreK-20 education system must have the capacity to produce graduates who are ready to fill high-growth, high-demand careers. Between 2018 and 2025, 64 percent of the jobs created will require a postsecondary degree or certificate. Currently, 48.3 percent of working-age Floridians have a postsecondary degree or certificate, and without growth the state will remain below the number necessary to fully meet the workforce demand.² Additionally, Florida ranks 21st in the nation for percentage of adults with education and high-quality workforce credentials.³

Career education provides students the opportunity to complete career programs to attain and sustain employment and realize economic self-sufficiency.⁴ Such programs include:

- Career and professional academies
- Career-themed courses
- Industry certifications, including
 - CAPE acceleration,
 - CAPE digital tool certificates, and
 - CAPE innovation courses
- Career clusters.

Student enrollment in K-12 career preparatory programs has steadily increased since the 2013-2014 school year.⁵

School Year	Student Enrollment
2013-2014	388,568
2014-2015	406,366
2015-2016	417,910
2016-2017	422,080
2017-2018	431,730

¹ Florida Department of Education, *K-20 Pathways for Florida Students: hearing before the House Education Committee* (Feb. 5, 2019), available at

<https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=2996&Session=2019&DocumentType=Meeting%20Packets&FileName=edc%202-5-19.pdf>.

² Department of Economic Opportunity. *Florida's Strategic Plan for Economic Development* (August 2018), available at <http://www.floridajobs.org/docs/default-source/division-of-strategic-business-development/fl5yrplan/fl-strategic-plan-booklet-2.pdf?sfvrsn=6>.

³ Lumina Foundation. *Leveraging Statewide Activities to Create a Systematic Approach to Talent Development* (February 7, 2019), available at

<https://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=3016&Session=2019&DocumentType=Meeting%20Packets&FileName=hec%202-7-19.pdf>.

⁴ Section 1004.92(1), F.S.

⁵ Email from Jared Ochs, Director of Government Relations, Florida Department of Education, Industry Certification, (Feb. 26, 2019).

In addition, the number of students graduating from high school with an industry certification has also increased since the 2014-2015 school year.⁶

School Year	Students Graduating from High School with an Industry Certification
2014-2015	36,950
2015-2016	40,370
2016-2017	47,944
2017-2018	55,327

The bill revises requirements related to career education to provide students additional flexibility to pursue career pathways that meet their interests and skills so that the state will be prepared to meet growing workforce demands.

Apprenticeship and Preapprenticeship Programs

Present Situation

An apprenticeship program is an organized course of instruction that is registered and approved by the Department of Education (DOE) and addresses all terms and conditions for the qualification, recruitment, selection, employment, and training of apprentices.⁷ The length of an apprenticeship program varies depending on the occupation's training requirements and whether the program adopts a time-based or competency-based approach.⁸

The DOE is responsible for the development of the apprenticeship and preapprenticeship standards for trades and assisting district school boards and Florida College System (FCS) institution boards of trustees in developing preapprenticeship programs.⁹ Apprenticeship programs are operated by sponsors, which include any person, association, committee, or organization that registers the program with the DOE.¹⁰

An apprenticeship program may be offered only in occupations that:

- are customarily learned in a practical way through a structured, systematic program of on-the-job, supervised training;
- are commonly recognized throughout the industry or recognized with a positive view toward changing technology;
- involve manual, mechanical, or technical skills and knowledge that require a minimum of 2,000 hours of work and training, excluding the time spent in related instruction;
- require related instruction to supplement on-the-job training; and
- involve the development of skills sufficiently broad to be applicable in like occupations throughout an industry, rather than skills that are of restricted application to the products or services of any one company.¹¹

The following categories of occupations may not create an apprenticeship program: selling, retailing, or similar occupations in the distributive field; managerial occupations; and professional and scientific vocations for which entrance requirements customarily require an academic degree.¹²

⁶ *Id.*

⁷ Section 446.021(6), F.S.

⁸ Rule 6A-23.004, F.A.C.

⁹ Sections 446.011(2) and 446.32(1), F.S.

¹⁰ *See* rule 6A-23.002(21), F.A.C.

¹¹ Section 446.092, F.S.

¹² Section 446.092(6), F.S.

To be eligible for an apprenticeship, a person must be at least 16 years of age; however, individuals must usually be 18 to be an apprentice in hazardous occupations. Admission requirements relating to education, physical ability, work experience, and other criteria vary based on the program's training needs.¹³ As of March 2019, there are 215 registered apprenticeship programs and 11,905 registered apprentices in Florida.¹⁴

A preapprenticeship program is an organized course of instruction designed to prepare a person 16 years of age or older to become an apprentice. The program must be registered with the DOE and sponsored by a registered apprenticeship program.¹⁵ The program's purpose is to provide training that will enable students, upon completion, to obtain entrance into a registered apprenticeship program.¹⁶ According to the DOE, there are six one credit preapprenticeship courses, which are counted as electives for graduation purposes.¹⁷ There is a total of 31 preapprenticeship programs for adults and youth located throughout the state, with 690 registered preapprentices.¹⁸

Events such as National Apprenticeship Week¹⁹ and the inaugural, statewide Apprenticeship Summit held in Miami from June 19-20, 2018,²⁰ have been used to promote awareness of apprenticeship and preapprenticeship opportunities. In 2017, Florida's Department of Economic Opportunity (DEO) received a federal ApprenticeshipUSA grant to expand apprenticeships and participation by under-represented populations.²¹

Effect of Proposed Changes

To increase participation in apprenticeship and preapprenticeship programs, the bill requires the DOE to assist district school boards, FCS institution boards of trustees, program sponsors, and local workforce development boards in notifying students, parents, and community members of the availability of apprenticeship and preapprenticeship opportunities, including through the use of data provided in the Economic Security Report.²²

¹³ United States Department of Labor, Employment and Training Administration, *Apprentices*, available at <http://www.doleta.gov/oa/apprentices.cfm> (last visited Sept. 20, 2018).

¹⁴ Email from Jared Ochs, Director of Government Relations, Florida Department of Education, Apprenticeship Data Update, (Feb. 25, 2019).

¹⁵ Section 446.021(5), F.S.

¹⁶ Rule 6A-23.010(1), F.A.C.

¹⁷ Florida Department of Education, Agency Legislative Bill Analysis, HB 525, (March 3, 2017).

¹⁸ See Florida Department of Education, *Adult Preapprenticeship Programs* (Dec. 2018),

<http://www.fldoe.org/core/fileparse.php/5626/urlt/hs-preapprenticeship.pdf>; Florida Department of Education, *Youth Preapprenticeship Programs* (Nov. 2018), <http://www.fldoe.org/core/fileparse.php/5626/urlt/hs-preapprenticeship.pdf>; Email from Jared Ochs, Director of Government Relations, Florida Department of Education, Apprenticeship Data Update, (Feb. 25, 2019).

¹⁹ National Apprenticeship Week offers leaders in business, labor, education, and other employment partners an opportunity to demonstrate support for apprenticeships. Events including career fairs, breakfasts and luncheons, and tours were held in Florida throughout the week of November 12, 2018. See United States Department of Labor, *National Apprenticeship Week*, <https://www.dol.gov/apprenticeship/naw/> (last visited Feb. 25, 2019).

²⁰ See Florida Department of Economic Opportunity, *Florida Summit Aims to Help Shape the Future of Apprenticeships as a Vital Career Pathway*, <http://floridajobs.org/news-center/DEO-Press/deo-press-2018/june-2018/2018/06/18/florida-summit-aims-to-help-shape-the-future-of-apprenticeships-as-a-vital-career-pathway> (last visited Feb. 25, 2019).

²¹ See Florida Department of Economic Opportunity, *Workforce Services: ApprenticeshipUSA* (April 2017), available at http://www.floridajobs.org/docs/default-source/office-of-workforce-services/apprenticeshipusa_one-pager.pdf?sfvrsn=2.

²² The Economic Security Report provides information on economic outcomes for graduates of public postsecondary educational institutions in Florida based on data from state universities, state colleges, and district technical centers. The Florida Department of Economic Opportunity and the DOE are responsible for preparing or contracting to prepare the report each year. Section 445.07, F.S. Florida Department of Economic Opportunity, *Economic Security Report 2018* (Feb. 2019), available at <https://launchmycareerfl.org/assets/esr-report-bf1df1e368522df957bd27cf7eb53e26605d05d67d2b135278fe82cc8f0910f9.pdf>.

Student Signing Days

Present Situation

In 2010, the Legislature established the “Academic Scholarship Signing Day” to encourage school districts to recognize, on the third Tuesday of each April, high school seniors who have been awarded postsecondary academic scholarships.²³ District school boards may authorize assemblies or other events in which students sign actual or ceremonial documents signifying acceptance of a scholarship. These events are modeled after “letter of intent” signing activities conducted by many high schools to celebrate a student athlete’s acceptance of a college athletic scholarship.²⁴

Effect of Proposed Changes

In addition to the “Academic Scholarship Signing Day,” the bill encourages school districts to declare a “College and Career Decision Day” to recognize high school seniors for their postsecondary education plans, i.e., the postsecondary institution he or she has been accepted to enroll; to encourage early preparation for college; and to encourage students to pursue advanced career pathways through the attainment of industry certifications.

The bill also provides districts with flexibility on when to hold “Academic Scholarship Signing Day” by deleting the requirements that it occur on the third day of April.

Career Dual Enrollment

Present Situation

Dual Enrollment Program

The dual enrollment program is an acceleration mechanism that allows an eligible secondary²⁵ or home education student to enroll in a postsecondary course creditable toward high school completion and an associate or baccalaureate degree or career certificate.²⁶ Upon successful completion of a dual enrollment course, the student simultaneously receives high school and college, university, or career certificate credit.²⁷ Career dual enrollment includes courses offered through career certificate clock hour programs and career associate degree (college credit) programs that lead to an industry certification.²⁸ For career certificate dual enrollment courses, the DOE awards a one-half credit in an equivalent high school course for each 75 hours in the career certificate course, rounded down to the nearest one-half credit.²⁹

An eligible student must be enrolled in a Florida public secondary school or a Florida private secondary school conducting a secondary curriculum that satisfies the statutory high school graduation requirements.³⁰ Home education students are also eligible to participate in the dual enrollment

²³ Section 1, ch. 2010-203, L.O.F., *codified at* s. 1001.43(14), F.S.

²⁴ See National Letter of Intent, *NLI Signing Dates*, <http://www.nationalletter.org/signingDates/index.html> (last visited Feb. 25, 2019).

²⁵ For purposes of dual enrollment, “secondary” is defined as a student who is enrolled in grades 6-12 in a Florida public school or Florida private school. Section 1007.271(2), F.S.

²⁶ Section 1007.271(1), F.S.

²⁷ Florida Department of Education, Office of Articulation, *Dual Enrollment Frequently Asked Questions*, available at <http://fldoe.org/core/fileparse.php/5421/urlt/DualEnrollmentFAQ.pdf> (revised Sept. 2018) [hereinafter referred to as *Dual Enrollment FAQ*].

²⁸ Florida Department of Education, *2019-2020 Dual Enrollment Course-High School Subject Area Equivalency List* (Feb. 2019), available at <http://www.fldoe.org/core/fileparse.php/7744/urlt/22719-AgendaPacket-C-Career.pdf>.

²⁹ *Id.*

³⁰ Section 1007.271(2), F.S.; *see also* s. 1002.42(2), F.S. Section 1007.271(2), F.S., references the required curriculum with regard to the courses required for a standard high school diploma under s. 1003.4282, F.S., which applies to students entering grade 9 in the 2013-2014 school year.

program.³¹ Career dual enrollment must be provided as a curricular option for secondary students to earn an industry certification that counts as credit toward a high school diploma and which may articulate toward college credit.³²

Students must demonstrate readiness for college-level or career-level coursework. A student must have a 3.0 unweighted grade point average (GPA) for enrollment in college-level courses and a 2.0 unweighted GPA for enrollment in career certificate courses.³³

School Grades

School grades are used to explain a school's performance in a familiar, easy-to-understand manner for parents and the public.³⁴ School grades are also used to determine whether a school must select or implement a turnaround option³⁵ or whether a school is eligible for school recognition funds as appropriated by the Legislature.³⁶

Elementary schools, middle schools, and high schools each share a basic model for determining school grades, based on the percentage of total points earned by a school for each component in the model. Middle and high school models include additional components beyond the basic model.³⁷

School Grades Models							
Basic/Elementary (700 Points)			Middle School (Basic +200 Points)		High School (Basic+300 Points)		
English Language Arts	Mathematics	Science	Civics EOC Assessment	Acceleration Success	U.S. History EOC Assessment	Graduation Rate	Acceleration Success
Achievement (0% to 100%)	Achievement (0% to 100%)	Achievement (0% to 100%)	Achievement (0% to 100%)	Percentage of students who pass high school EOC assessments & industry certifications (0% to 100%)	Achievement (0% to 100%)	Overall, 4-year graduation rate (0% to 100%)	Percent of students eligible to earn college credit through AP, IB, AICE, dual enrollment, or earn industry certification (0% to 100%)
Learning Gains (0% to 100%)	Learning Gains (0% to 100%)						
Learning Gains of Low 25% (0% to 100%)	Learning Gains of Low 25% (0% to 100%)						

Under the high school model, students who earn college credit by passing certain standardized, college-level assessments or passing a dual enrollment course or who earn an industry certification identified in the Career and Professional Education (CAPE) Industry Certification Funding List are included on the acceleration component for the purpose of calculating a school's grade.³⁸ A student may be included in the acceleration component only once.³⁹

³¹ Section 1007.271(13)(a), F.S.

³² See *Dual Enrollment FAQ*, *supra* n. 27. See also Florida Department of Education, *Industry Certification*, <http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml> (last visited Feb. 26, 2019) (providing a list of industry certifications that are articulable to college credit).

³³ Section 1007.271(3), F.S.

³⁴ Section 1008.34(1), F.S. If there are fewer than 10 eligible students with data for a component, the component is not included in the calculation. Section 1008.34(3)(a), F.S.

³⁵ See s. 1008.33(4), F.S.

³⁶ See s. 1008.26, F.S.

³⁷ See s. 1008.34(3)(b), F.S.; rule 6A-1.09981(4)(a)-(c), F.A.C.

³⁸ Rule 6A-1.09981(4)(c)2., F.A.C.

³⁹ Rule 6A-1.09981(4)(c)3., F.A.C.; rule 6A-6.0573, F.A.C.

Students who complete career certificate clock hour dual enrollment courses are not included in the acceleration component of the school grades calculation. Because students who attain a qualifying industry certification during high school are included in the acceleration component, districts may choose to place students interested in career pathways in shorter industry certification programs instead of other advanced programs that culminate in a career credential after high school graduation at a technical center or state college.

For instance, a career certificate clock hour program in Machining Technologies requires a student to complete a sequence of courses lasting at least 1,500 clock hours.⁴⁰ Because 75 clock hours of instruction equates to one half-credit, completing the program through career dual enrollment would require completion of 10 high school credits. Of the 24 credits required for high school graduation, only eight are reserved for electives. It would be impracticable for a student to complete the program through career dual enrollment and satisfy all other graduation requirements within the required 24 credits. However, a year-long course that culminates in an industry certification would be included in the school grade calculation even though it may not lead to more advanced certifications or opportunities for higher-level employment.

Effect of Proposed Changes

The bill incentivizes school districts to enroll high school students in advanced career pathways through career dual enrollment programs by including career certificate clock hour dual enrollment in the acceleration component of the school grade calculation. By allowing completion of a career certificate clock hour course to count toward the school grades acceleration component, schools can be more responsive to student preferences by enrolling them in a career certificate clock hour dual enrollment education program that culminates in an industry certification after high school graduation or by enrolling them in a program that allows them to earn an industry certification before graduation.

In addition, the bill requires each district school board career center to enter into a career dual enrollment agreement with each high school in any school district it serves. The agreement must be completed annually and submitted by the center to the DOE by August 1. The agreement must include specific terms related to available courses and programs, equivalent high school course credits, student and parent outreach and enrollment, eligibility requirements, cost sharing, and the provision of transportation at no cost to students.

Career Planning

Present Situation

In 2006, the Legislature revised middle grade promotion requirements to include a course in career exploration and planning.⁴¹ The course could be completed in grades 6, 7, or 8 and could be delivered as a stand-alone course or integrated into another course and be taught by any member of the instructional staff. The course was required to:

- be Internet-based, easy to use, and customizable to each student and include research-based assessments to assist students in determining educational and career options and goals;
- emphasize the importance of entrepreneurship skills;
- emphasize technology or the application of technology in career fields;
- include information from the DEO's Economic Security Report; and
- result in a completed personalized academic and career plan for the student, signed by the student and his or her parent.⁴²

⁴⁰ Florida Department of Education, *Curriculum Framework* (for Machining Technologies) (2018), available at <http://www.fldoe.org/core/fileparse.php/18567/urlt/J200100-1819.rtf>.

⁴¹ Section 21, ch. 2006-74, L.O.F.

⁴² See s. 1003.4156(1)(e), F.S. (2016)

The personalized academic and career plan had to inform students of requirements related to standardized assessments, high school graduation and diploma designations, college entrance tests and admissions, and the Florida Bright Futures Scholarship Program, as well as opportunities to earn college credit in high school through academic and career-based options.⁴³ As of the 2017-2018 school year, this is no longer a requirement for middle grades students.⁴⁴

Effect of Proposed Changes

The bill reestablishes the planning course requirement for middle grades students but eliminates the requirement that the student and his or her parent sign the personalized education plan. The bill also requires the personalized plan to be revisable as the student moves through high school, to emphasize the importance of employability skills, and to inform students of preapprenticeship and apprenticeship programs.

Digital Tool Certificates

Present Situation

CAPE digital tool certificates recognize a student's attainment of digital skills. The DOE is required to identify up to 15 digital tool certificates by June 15 each year, which must be made available to all public elementary and middle grades students. The Commissioner of Education may recommend adding digital tool certificates at any time. At least 75 percent of public middle grades students are expected to earn at least one digital tool certificate each year.⁴⁵

The Chancellor of Career and Adult Education may identify certificates and certifications for students with disabilities, which must be included on the CAPE Industry Certification Funding List, i.e., digital tool certifications, workplace industry certification, and occupation safety and health administration industry certifications.⁴⁶ Only the chancellor may update CAPE digital tool certificates on the Industry Certification Funding List as identified by the State Board of Education.⁴⁷

A CAPE digital tool certificate may be included on the CAPE Industry Certification Funding List if it:

- is achievable by elementary school and middle grades students;
- assesses at least one of the following digital skills: word processing; development of spreadsheets; digital arts; cybersecurity; coding; and development of sound, motion, and color presentations that do not articulate for college credit; and
- is part of a career pathway leading to the attainment of a career and professional education industry certification on the career and professional education funding list.⁴⁸

An additional FTE membership value of 0.025 is calculated for each CAPE Digital Tool Certificate earned by an elementary or middle school student; however, FTE membership may not exceed 0.1 for certificates or industry certifications earned within the same fiscal year.⁴⁹

Students earned 40,953 CAPE Digital Tool Certificates during the 2017-2018 school year.⁵⁰

⁴³ Section 1003.4156(1)(e), F.S.

⁴⁴ See s. 60, ch. 2017-116, L.O.F.

⁴⁵ Section 1003.4203(3), F.S.

⁴⁶ Section 1008.44(1)(c), F.S.

⁴⁷ Section 1008.44(1)(b), F.S.

⁴⁸ See s. 1008.44(1)(b), F.S.; rule 6A-6.0573(7)(d), F.A.C.

⁴⁹ Section 1011.62(1)(o), F.S.

⁵⁰ Florida Department of Education, *Industry Certifications Earned by Certification – 2013-14 to 2017-18* (Feb. 2019), available at <http://www.fldoe.org/core/fileparse.php/9904/urlt/ic-earned1314-1718.xls>.

Effect of Proposed Changes

The bill doubles the cap on CAPE Digital Tool Certificates that may be included on the Industry Certification Funding List from 15 to 30, thereby increasing the number of certificates available to students and providing additional opportunities for school districts to earn weighted FTE for elementary and middle school students who earn a certificate.

Graduation Requirements

Present Situation

Credits Required for High School Graduation

A student must successfully complete 24 credits, an International Baccalaureate curriculum, or an Advanced International Certificate of Education curriculum to earn a standard high school diploma.⁵¹ The required credits may be earned through equivalent, applied, or integrated courses or career education courses, including work-related internships approved by the State Board of Education (SBE) and identified in the course code directory. However, any must-pass assessment requirements must be met.⁵²

In order to earn a standard high school diploma, a student must earn the following credits:⁵³

- English Language Arts (ELA) - 4 Credits
 - ELA I, II, III, and IV.
- Mathematics – 4 Credits
 - One credit in Algebra I, one credit in Geometry, and two additional credits.
 - A student who earns an industry certification for which there is a statewide college credit articulation agreement may substitute the certification for one of the two additional credits. Substitution may occur for up to 2 credits, with the exception of Algebra I and Geometry.
- Science – 3 Credits
 - One credit in Biology I and 2 credits in equally rigorous courses.
 - A student who earns an industry certification for which there is a statewide college credit articulation agreement may substitute the certification for one of the two equally rigorous courses.
- Social Studies – 3 Credits
 - One credit in United States History; one credit in World History; one-half credit in U.S. Government, and one-half credit in Economics, which must include Financial Literacy.
- Fine Arts, Performing Arts, Speech and Debate, or Practical Arts – 1 Credit
 - The practical arts course must incorporate artistic content and techniques of creativity, interpretation, and imagination. Eligible courses are identified in the Course Code Directory.⁵⁴
- Physical Education - 1 Credit
 - Must include the integration of health.
- Electives – 8 Credits

⁵¹ Section 1003.4282(1)(a), F.S.

⁵² *Id.* at (1)(b). An equivalent course is one or more courses identified by content-area experts as being a match to the core curricular content of another course, based upon review of the Next Generation Sunshine State Standards for that subject. An applied course aligns with Next Generation Sunshine State Standards and includes real-world applications of a career and technical education standard used in business or industry. An integrated course includes content from several courses within a content area or across content areas.

⁵³ *See* s. 1003.4282(3), F.S.

⁵⁴ The Course Code Directory requires that programs and courses funded through the Florida Education Finance Program (FEFP) and courses or programs for which students may earn elective or required credit toward high school graduation must be listed in the Course Code Directory. Rule 6A-1.0944, F.A.C.

- Must include opportunities for students to earn college credit, including industry-certified career programs or courses that lead to college credit.

Students must also complete at least one online course.⁵⁵

To graduate, a student must complete the listed criteria and earn a cumulative GPA of 2.0 on a 4.0 scale.⁵⁶

Career Education Courses That Satisfy High School Graduation Requirements

By July 1, 2014, the DOE was required to develop, for approval by the SBE, career education courses or a series of courses that satisfy general high school credit requirements.⁵⁷ Students taking these courses can earn credit in both the career education course and the course required for a standard high school diploma. It is the responsibility of the SBE to determine if sufficient academic standards are covered to warrant the award of the academic credit.⁵⁸ The SBE has approved career education courses that satisfy credit requirements for practical arts, economics, and science.⁵⁹

Computer Science Courses

Florida law defines computer science as “the study of computers and algorithmic processes, including their principles, hardware and software designs, applications, and their impact on society.”⁶⁰ Computer science also includes computer coding and computer programming.

Public schools are required to provide students in grades K-12 opportunities for learning computer science including, but not limited to, computer coding and computer programming.⁶¹ Such opportunities may include:⁶²

- instruction regarding computer coding in elementary and middle school;
- instruction to develop computer usage and digital literacy skills in middle school; and
- courses in computer science, computer coding, and computer programming in high school, including opportunities to earn industry certifications related to the courses.

Computer science courses must be offered to students in high school and middle school.⁶³ The Florida Virtual School (FLVS) must offer computer science courses identified in the Course Code Directory. If a school district does not offer an identified course, the district must provide students access to the

⁵⁵ Section 1003.4282(4), F.S. A school district may not require a student to take the online course outside the school day or in addition to a student’s courses for a given semester. A student who completes an online course in grades 6, 7, or 8 satisfies the requirement. This subsection does not apply to a student who has an individual education plan under s. 1003.57, F.S., which indicates that an online course would be inappropriate or to an out-of-state transfer student who is enrolled in a Florida high school and has 1 academic year or less remaining in high school. *Id.*

⁵⁶ Section 1003.4282(6)(a), F.S.

⁵⁷ School districts are required to offer at least two career-themed courses, and each secondary school is encouraged to offer at least one career-themed course. Career-themed courses are courses, or a course in a series of courses, that leads to an industry certification identified in the CAPE Industry Certification Funding List pursuant to rules adopted by the SBE. Career-themed courses have industry-specific curriculum aligned directly to priority workforce needs established by the local workforce development board or the Department of Economic Opportunity. Students completing a career-themed course must be provided opportunities to earn postsecondary credit if the credit for the career-themed course can be articulated to a postsecondary institution approved to operate in the state. Section 1003.493(1)(b), F.S.

⁵⁸ Section 1003.4282(8)(a)1., F.S.

⁵⁹ Florida Department of Education, *CTE Courses that Fulfill the Graduation Designation for Economics, Equally Rigorous Science and Practical Arts 2018-2019*, available at <http://www.fldoe.org/core/fileparse.php/5652/urlt/1819coursesPAEQEC.rtf>.

⁶⁰ Section 1007.2616(1), F.S.

⁶¹ *Id.*

⁶² *Id.*

⁶³ Section 1007.2616(2)(a), F.S.

course through FLVS or through other means.⁶⁴ There are 65 middle and high school computer science courses currently identified in the Course Code Directory.⁶⁵

The law allows high schools to provide students opportunities to satisfy certain mathematics and science graduation requirements by taking computer science courses of sufficient rigor and earning a related industry certification.⁶⁶ To qualify, the course must be in the area of computer science or 3D rapid prototype printing and the Commissioner of Education must identify the course and the related industry certification in the Course Code Directory.⁶⁷

A qualifying computer science course may satisfy up to one mathematics or science course credit, so long as the course is not Algebra I or higher-level mathematics or Biology I or higher-level science. A qualifying 3D rapid prototype printing course may satisfy up to two mathematics course credits, except for Algebra I.⁶⁸

Testing Requirements for High School Graduation

In order to be eligible for high school graduation, students must also pass the statewide, standardized grade 10 ELA assessment or earn a concordant score on the SAT or ACT⁶⁹ and pass the Algebra I EOC assessment or, beginning with students entering grade 9 in the 2018-19 school year, earn a comparative score on the Math section of the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT), the SAT or the ACT.⁷⁰

Requirements for the Scholar High School Diploma Designation

In order to earn a Scholar diploma designation, a student must meet the high school graduation requirements, including earning a credit in Algebra II and a credit in statistics or an equally rigorous mathematics course; passing the statewide, standardized assessments for Geometry, Biology I, and U.S. History; earning two credits in the same foreign language; and earning at least one credit in an Advanced Placement, International Baccalaureate, Advanced International Certificate of Education, or dual enrollment course.⁷¹ Students who accelerate to a higher level math, i.e., College Algebra, without taking Algebra II are not eligible to earn a Scholar designation.

Effect of Proposed Changes

The bill allows a high school student who has earned an industry certification with a statewide college credit articulation agreement to earn up to two mathematics credits by successfully completing two full-year courses in Algebra I. This means that the student would be able to meet all mathematics credit requirements by completing two credits in Algebra I, one credit in Geometry, and earning the industry certification.

The bill specifies that a student may substitute one computer science credit for either one mathematics credit, excluding Algebra I and Geometry, or one science credit, excluding Biology I, without having to earn the associated industry certification for the computer science course. A computer science credit may not be used to substitute for both a mathematics credit and a science credit.

⁶⁴ Section 1007.2616(3), F.S.

⁶⁵ Florida Department of Education, *Florida Course Code Directory Computer Science Courses 2018-2019* (2018), available at <http://www.fldoe.org/core/fileparse.php/7746/urlt/1819CompSci.pdf>.

⁶⁶ Section 1007.2616(3), F.S.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ Section 1003.4282(3)(a) and (8), F.S.; rule 6A-1.09422(8)(a)2., F.A.C.

⁷⁰ Section 1003.4282(3)(b) and (9), F.S.; rule 6A-1.09422(8)(b)2., F.A.C.

⁷¹ Section 1003.4285(1)(a), F.S.

The bill also requires the SBE to determine at least biennially if sufficient academic standards are covered in career education courses to warrant the award of academic credit, including credit for Algebra I. The bill specifies that a student who earns credit for a career education course and course required for high school graduation still must:

- take the statewide, standardized EOC assessment or grade-level assessment associated with the required course;
- pass the statewide, standardized Algebra I EOC assessment; and
- pass the statewide, standardized grade 10 ELA assessment.

The bill revises the mathematics requirements to earn the Scholar high school diploma designation so that students, in lieu of earning a credit in Algebra II, can earn a credit in an equally rigorous course.

B. SECTION DIRECTORY:

Section 1. Amends s. 446.011, F.S., updating terminology.

Section 2. Amends s. 446.032, F.S., requiring the DOE to provide assistance to certain entities relating to notifying specified persons of apprenticeship and preapprenticeship opportunities.

Section 3. Amends s. 446.052, F.S., updating terminology.

Section 4. Amends s. 1001.43, F.S., encouraging district school boards to declare an "Academic Scholarship Signing Day" and "College and Career Decision Day" for specified purposes.

Section 5. Amends s. 1003.4156, F.S., requiring students to take a career education planning course for promotion to high school; providing requirements for such course; requiring each student that takes the course to receive an academic and career plan; providing requirements for such plan.

Section 6. Amends s. 1003.4282, F.S., authorizing a credit in computer science to meet specified graduation requirements under certain circumstances; requiring a student who earns a credit through a career education course to pass specified assessments.

Section 7. Amends s. 1003.4285, F.S., revising the requirements to earn the scholar designation on a standard high school diploma.

Section 8. Amends s. 1003.492, FS., requiring an industry certification and its requisite courses to be removed from a specific list if it fails to meet certain standards.

Section 9. Amends s. 1007.2616, F.S., conforming provisions to changes made by the act.

Section 10. Amends s. 1007.271, F.S., requiring a career center to enter into an agreement with specified high schools to offer certain courses to high school students; providing requirements for such agreement.

Section 11. Amends s. 1008.34, F.S., revising school grade components to specify that dual enrollment courses include career clock-hour enrollment courses.

Section 12. Amends s. 1008.44, F.S., increasing the number of CAPE Digital Tool certificates relating to specified subjects that may be included on the CAPE Industry Certification Funding List.

Section 13. Provides effective dates.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

Section 1011.62(1)(o)1., F.S., authorizes an add-on value of 0.025 per full-time equivalent student membership for each CAPE Digital Tool certificate earned by an elementary and middle school grade student. Currently the law allows the State Board of Education (SBE) to identify up to 15 digital tool certificates eligible for the add-on value and the bill doubles this cap to 30. Depending on the number of certificates identified by the SBE, there may be additional costs of up to \$4.3 million based on the 40,953 CAPE digital tool certificates that were awarded for the 2017-2018 school year and using the 2018-2019 fiscal year Base Student Allocation amount of \$4,204.42. If there are additional elementary and middle school grade students earning an identified CAPE Digital Tool certificate in the 2019-2020 fiscal year, the Florida Education Finance Program would be redistributed to accommodate the additional students.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

The bill requires school district career centers to enter into agreements with high schools for the provision of career dual enrollment. The agreement must, among other things, describe how funding, cost sharing, and transportation will be addressed. The bill may have an indeterminate fiscal impact on school districts that do not already provide transportation for career dual enrollment.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

None.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On March 25, 2019, the PreK-12 Appropriation Subcommittee adopted an amendment that:

- Clarified that students may earn two math credits if they complete Algebra I over two years without also having to earn an industry certification; and
- Updated a cross reference to the federal Elementary and Secondary Education Act as amended in 2015.

The bill was reported favorably as a committee substitute.