HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 887 Computer Coding Instruction
SPONSOR(S): Adkins
TIED BILLS: **IDEN./SIM. BILLS:** CS/SB 468

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) K-12 Subcommittee		Brink	Fudge
2) Education Appropriations Subcommittee			
3) Education Committee			

SUMMARY ANALYSIS

The bill allows high school students to demonstrate foreign language competency by completing qualifying computer coding courses along with a related industry certification.

Under the bill, high schools must provide opportunities for students to substitute two credits in computer coding courses of sufficient rigor, as identified by the Commissioner of Education, and a related industry certification for two credits in sequential foreign language instruction. The computer coding courses, including the courses taken to earn the related industry certification, must be identified in the Course Code Directory.

In addition, the bill requires each district school board to develop a plan for offering a computer coding curriculum, which must be submitted to the Commissioner, President of the Senate, and Speaker of the House of Representatives by January 1, 2017.

The bill requires Florida College System institutions and state universities to recognize the computer coding course credits as foreign language credits.

The bill does not appear to have a fiscal impact on the state or local governments.

The bill takes effect July 1, 2016.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Present Situation

Computer Science and Technology Instruction

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.[1]
Such opportunities may include:[2]

- 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.

The law allows high schools to provide students opportunities to satisfy certain math and science graduation requirements by taking computer science courses of sufficient rigor and earning a related industry certification.[3] 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.[4]

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.[5]

Currently, courses in computer coding are not approved by the State Board of Education as foreign language courses in the Florida Course Code Directory. Rather, the courses are listed in the Career Technical Education Program and Course Listing section in the Florida Course Code Directory.[6]

Foreign Language Instruction

Each district school board must "provide all courses required for middle grades promotion, high school graduation, and appropriate instruction to ensure that students meet the State Board of Education adopted standards" in reading and other language arts, mathematics, science, social studies, foreign languages, health and physical education, and the arts.[7]

Students are not required to earn credits in foreign language to graduate from high school with a standard high school diploma.[8] However, to earn the Scholar designation on the standard high school diploma, a student must earn two credits in the same foreign language.[9]

The Florida Department of Education is required to identify the competencies that students must demonstrate upon the successful completion of two credits of sequential high school foreign language instruction.[10] Additionally, the law directs the department to identify in rule[11] the correlation between

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[1] Section 1007.2616(1), F.S.
[2] Section 1007.2616(1), F.S.
[3] Section 1007.2616(3), F.S.
[4] *Id*.
[5] *Id*.
[6] Staff of the Florida Department of Education, *Staff Analysis of Senate Bill 468* (2016).
[7] Section 1003.42(1), F.S.
[8] Section 1003.4282(3), F.S.
[9] Section 1003.4285(1)(a)4., F.S.
[10] Section 1007.262, F.S.

high school foreign language competencies and the competencies required of students in the FCS institutions' courses.[12] Based on this correlation, each FCS institution must identify the minimum number of postsecondary credits that students must earn to demonstrate a level of competence in foreign language equivalent to the competence of students who completed two credits of foreign language instruction in high school.[13]

The law authorizes alternative means of demonstrating foreign language competence. The department may specify means by which a student whose native language is not English may demonstrate proficiency in the native language.[14] A student who demonstrates proficiency in a native language other than English is exempt from the requirement to complete foreign language courses at the secondary level or FCS level.[15] The completion of a postsecondary course at the elementary level 2 in one foreign language or American Sign Language (ASL) is also considered to demonstrate the required foreign language competency.[16] Additionally, FCS institutions may determine other means by which students may demonstrate completion of foreign language competencies.[17]

A first-time-in-college student who is admitted to a state university is expected to demonstrate competency in a foreign language or ASL equivalent to the second high school level or higher (Spanish 2, French 2, etc.).[18] Students may also meet the foreign language admission requirement by demonstrating:[19]

- Competency at the elementary 2 level in one foreign language or ASL at an undergraduate institution;
- Equivalent foreign language based on Credit-by-Exam Equivalencies[20] adopted by the State University System (SUS) Board of Governors (BOG); or
- Equivalent foreign language or ASL competence through other means approved by the university.

Pursuant to its constitutional authority outlined under s. 1001.705, F.S., the Board of Governors has adopted regulations establishing baseline admissions requirements for the SUS. In addition, the Articulation Coordinating Committee (ACC) was established to serve as an advisory board to the State Board of Education and the BOG on postsecondary transition issues.

The ACC reports to the Commissioner of Education and is comprised of the following members: two members each representing the SUS, the FCS, public career and technical education, public K-12 education, and non-public education, and one member representing students. Among other things, the ACC monitors the alignment between the exit and admission requirements of education systems and makes recommendations for improving transfer of students from one education system to another education system.

Florida College system institutions and the SUS do not recognize computer coding course credits as foreign language credits.

Effect of Proposed Changes

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[11] Rule 6A-10.02412, F.A.C. This rule adopted by the State Board of Education specifies the competencies that students must demonstrate upon successful completion of two credits of secondary instruction in one foreign language.

[12] *Id.*

[13] *Id.*

[14] Section 1007.262, F.S.

[15] *Id.*

[16] Rule 6A-10.02412, F.A.C.

[17] *Id.*

[18] Board of Governors Regulation 6.002(1)(h).

[19] *Id.*

[20] Florida Department of Education, *Articulation Coordinating Committee Credit-by-Exam Equivalencies*, *available at* http://www.fldoe.org/core/fileparse.php/5421/urlt/0078391-acc-cbe.pdf.

The bill establishes alternative means by which high school students may demonstrate foreign language competency. Under the bill, high schools must provide opportunities for students to substitute two credits in computer coding courses of sufficient rigor, as identified by the commissioner, and a related industry certification for two credits in sequential foreign language instruction. The computer coding courses identified by the commissioner and the courses taken to earn the related industry certification must be identified in the Course Code Directory.

Because potentially qualifying courses are not specifically identified in the Course Code Directory as courses containing computer coding standards, a list identifying those specific courses would need to be developed.

The bill requires FCS institutions and state universities to recognize the computer coding course credits as foreign language credits. Thus, students who earn two computer coding credits and the related industry certification as identified by the commissioner may demonstrate foreign language competency for admissions purposes.

The bill requires each district school board to develop a plan for offering a computer coding curriculum, which must be submitted to the Commissioner, President of the Senate, and Speaker of the House of Representatives by January 1, 2017.

B. SECTION DIRECTORY:

Section 1. Amends s. 1007.2616, F.S.; requiring high schools to offer computer coding courses; requiring the Commissioner of Education to identify the computer coding courses that satisfy two credits of foreign language instruction under certain circumstances; requiring Florida College System institutions and state universities to recognize the credits as foreign language credits; requiring the inclusion of certain computer coding courses in the Course Code Directory.

Section 2. Requires each district school board to submit a plan for a computer coding curriculum to the commissioner and the Legislature by a specified date.

Section 3. Providing an effective date of July 1, 2016.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

    None.

2. Expenditures:

    None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

    None.

2. Expenditures:

    None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

    None.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

None.

2. Other:

The bill requires state universities to "recognize the [computer coding] credits as foreign language credits" for purposes of demonstrating foreign language competency. This provision likely infringes upon the State University System (SUS) Board of Governors' (BOG) constitutional responsibility to govern admissions to SUS institutions, as confirmed by the SUS Governance Agreement and in statute.

In 2007, a group of citizens filed a lawsuit against the Legislature that sought to clarify the scope of the BOG's constitutional authority and identify which entity has the authority to set SUS tuition and fees. Subsequently, the lawsuit was joined by the BOG.

On March 24, 2010, the Chair of the BOG, the Chancellor of the SUS, legislative leaders and the Governor signed a SUS Governance Agreement acknowledging their shared constitutional authority for the state universities as set forth in the Constitution of the State of Florida. The components of the SUS Governance Agreement include master planning and coordination of Florida's higher education systems; strategic planning; university governance; financial aid programs; the Administrative Procedures Act and BOG regulations; tuition; and fees.

As a result of the SUS Governance Agreement, the BOG filed a notice of dismissal, with prejudice, of their claims in the 2007 lawsuit filed against the Legislature. The presiding officers agreed to file legislation in accordance with the framework set forth in the governance agreement and to exercise their best efforts to accomplish the final passage of the legislation.[21,22]

As confirmed in the legislation, the BOG is the constitutionally created body required to "operate, regulate, control, and be fully responsible for the management of the whole university system."[23] The BOG, or the BOG's designee, has responsibility for, among other things, governing admissions to the SUS institutions.[24]

The BOG's oversight of the SUS is subject to the Legislature's power to appropriate funds, as well as the Legislature's responsibility to provide for the establishment, maintenance, and operation of institutions of higher learning and other public education programs that the needs of the people may require.[25] However, the Legislature is without authority to govern admissions requirements for SUS institutions.

B. RULE-MAKING AUTHORITY:

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[21] Florida Legislature, *State University System Governance Agreement* (March 24, 2010); *see also* ch. 2010-78, L.O.F.; staff of the Florida House of Representatives, *Legislative Bill Analysis for HB 7237* (2010).

[22] On January 31, 2013, the Florida Supreme Court issued a ruling in favor of the Legislature, holding that the Florida Constitution does not indicate intent to delegate the Legislature's power to set and appropriate for the expenditure of tuition and fees to the BOG. Thus, the challenged statutes, by which the Legislature exercises control over tuition and fees, are facially constitutional. *See Graham v. Haridopolos*, 108 So. 2d 597, 599 (Fla. 2013).

[23] Art. IX, s. 7(d), Fla. Const.

[24] Section 1001.705(2), F.S.

[25] Art. IX, s. 1(a) and 7(d), Fla. Const.; ss. 1001.705 and 1001.706, F.S.

The bill would require the State Board of Education to update the Course Code Directory through the rulemaking process.

C. DRAFTING ISSUES OR OTHER COMMENTS:

The bill does not define "computer coding curriculum." It is unclear whether the bill requires each school district to develop computer coding curricula, including courses and instructional materials, or to develop strategies for enrolling students in qualifying computer coding courses once identified by the commissioner.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

Not applicable.