2022 FL STATUES – POLICIES FOR MATH & SCIENCE COURSE SUBSTITUTIONS

White Paper

Florida Law outlining the policies for substituting a Math and/or Science credit through industry certifications and computer science courses.

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The 2022 Florida Statues

Requirements for a standard high school diploma – s. 1003.4282(4), F.S.

Requirements for a standard high school diploma (24 credits)

Math Substitution

(3) (b) 2.   A student who earns an industry certification for which there is a statewide college credit articulation agreement approved by the State Board of Education may substitute the certification for one mathematics credit. Substitution may occur for up to two mathematics credits, except for Algebra I and Geometry. A student may earn two mathematics credits by successfully completing Algebra I through two full-year courses. A certified school counselor or the principal's designee must advise the student that admission to a state university may require the student to earn 3 additional mathematics credits that are at least as rigorous as Algebra I.

(3) (b) 3.   A student who earns a computer science credit may substitute the credit for up to one credit of the mathematics requirement, with the exception of Algebra I and Geometry, if the commissioner identifies the computer science credit as being equivalent in rigor to the mathematics credit. An identified computer science credit may not be used to substitute for both a mathematics and a science credit. A student who earns an industry certification in 3D rapid prototype printing may satisfy up to two credits of the mathematics requirement, with the exception of Algebra I, if the commissioner identifies the certification as being equivalent in rigor to the mathematics credit or credits.

Science Substitution

(3) (c) 2. A student who earns an industry certification for which there is a statewide college credit articulation agreement approved by the State Board of Education may substitute the certification for one science credit, except for Biology I.

(3) (c) 3. A student who earns a computer science credit may substitute the credit for up to one credit of the science requirement, with the exception of Biology I, if the commissioner identifies the computer science credit as being equivalent in rigor to the science credit. An identified computer science credit may not be used to substitute for both a mathematics and a science credit.

The following certifications appear on the 2021-22 Active Articulation Agreements Summary

Certification Code	Certification Title
ABAYC003	Marine Electrical Certification
ACFED006	Certified Fundamentals Cook
ADESK002	Autodesk Certified User - AutoCAD
ADESK008	Autodesk Certified User - Revit Architecture
ADESK011	Autodesk Certified User - Inventor
ADESK021	Autodesk Certified Professional - AutoCAD
ADESK023	Autodesk Certified Professional - AutoCAD Civil 3D
ADESK024	Autodesk Certified Professional - Inventor
ADESK025	Autodesk Certified Professional - Revit Architecture
ADESK030	Autodesk Certified User - Maya
ADESK032	Autodesk Certified User - Fusion 360
ADESK033	Autodesk Certified Associate in CAD for Mechanical Design
ADOBE023	Adobe Certified Professional in Video Design (Requires Premiere Pro and After Effects or Photoshop)
ADOBE024	Adobe Certified Professional in Visual Design (Requires Photoshop and Illustrator or InDesign)
ADOBE025	Adobe Certified Professional in Web Design
AMAMA001	Certified Medical Assistant (CMA)
AMDDA002	Certified Apprentice Drafter - Architectural
AMEDT004	Registered Medical Assistant (RMA)
AMEDT005	Registered Phlebotomy Technician (RPT)
AMSPT002	Certified Phlebotomy Technician
APPLE021	Apple App Development with Swift Certification Level 1
CARCH002	Chief Architect Certified Apprentice
CERHB001	Biotechnician Assistant
CISCO026	Cisco Certified Network Associate (CCNA)
COMPT001	CompTIA A+

Certification Code	Certification Title
COMPT005	CompTIA Linux+
COMPT006	CompTIA Network+
COMPT007	CompTIA Project+
COMPT008	CompTIA Security+
COMPT009	CompTIA Server+
COMPT018	CompTIA IT Fundamentals+
CPREC001	Child Development Associate (CDA)
ESRIC001	ArcGIS Desktop Entry
ETAIN008	Associate Certified Electronics Technician (CETa)
FEDAA004	FAA Aviation Mechanic Technician - Airframe
FEDAA010	FAA Aviation Maintenance Technician - Powerplant
FEDAA011	FAA Private Pilot
FEDAA013	FAA Ground School
FLFBR001	Agritechnology Specialist Certification
FLFBR005	Animal Science Specialist Certification
FLFBR007	Agriculture Associate Certification
FLVMA002	Certified Veterinary Assistant (CVA)
FNGLA001	Certified Horticulture Professional
FNGLA003	Certified Landscape Maintenance Technician
FNGLA004	Certified Landscape Technician
GRBCI002	LEED Green Associate
HVACE001	HVAC Excellence Employment Ready - Heat Pump
HVACE002	HVAC Excellence Employment Ready - Air Conditioning
HVACE011	HVAC Excellence Employment Ready - Electrical
ICOEC005	EC-Council Cyber Forensics Associate
ICOEC006	EC-Council Ethical Hacker Associate
KNOWL001	Python Coding Specialist
LINPI001	Linux Essentials 010
MICRO017	Microsoft Office Specialist Master

Certification Code	Certification Title
*MICRO070 Replaced by CERTI003	Microsoft Technology Associate (MTA) - Database Administration Fundamentals DP-900: Azure Data Fundamentals
*MICRO080 Replaced by CERTI008	Microsoft Technology Associate (MTA) - HTML5 Application Developer Fundamentals IT Specialist: HTML5 Application Development
*MICRO102 Replaced by CERTI009	Microsoft Technology Associate (MTA) - Mobility and Devices Fundamentals IT Specialist: Device Configuration and Management
*MICRO104 Replaced by CERTI010	Microsoft Technology Associate (MTA) - Introduction to Programming Using JavaScript IT Specialist: JavaScript
*MICRO112 Replaced by CERTI012	Microsoft Technology Associate (MTA) - Introduction to Programming Using Python IT Specialist: Python
*MICRO114 Replaced by CERTI013	Microsoft Technology Associate (MTA) - Introduction to Programming Using Java IT Specialist: Java
*MICRO115 Replaced by CERTI014	Microsoft Technology Associate (MTA) - Windows Server Administration Fundamentals AZ-900: Azure Cloud Fundamentals
MSSCN001	MSSC Certified Production Technician (CPT)
NATEX001	Air Conditioning Service Technician
NATEX002	Air Conditioning Installation Specialization
NATEX003	Air to Air Heat Pump Installation Technician
NATHA007	Certified Phlebotomy Technician (CPT)
NATHA009	Certified Clinical Medical Assistant (CCMA)
NATHA010	Certified Pharmacy Technician (CPhT)
NCATT003	Aerospace / Aircraft Assembly (AAA)
NCCER008	NCCER Construction Technology (Secondary)

Certification Code	Certification Title
NCCER018	NCCER HVAC - Level 1 (Secondary)
NCCER061	NCCER Welding - Level 1 (Secondary)
NCFCT008	National Certified Patient Care Technician (NCPCT)
NCSBN002	National Licensed Practical Nurse (NCLEX-PN)
NIASE005	ASE Automobile/Light Truck Technician: Automatic Transmission/Transaxle (A2)
NIASE007	ASE Automobile/Light Truck Technician: Brakes (A5)
NIASE008	ASE Automobile/Light Truck Technician: Electrical/Electronic Systems (A6)
NIASE009	ASE Automobile/Light Truck Technician: Engine Performance (A8)
NIASE010	ASE Automobile/Light Truck Technician: Engine Repair (A1)
NIASE011	ASE Automobile/Light Truck Technician: Heating and Air Conditioning (A7)
NIASE012	ASE Automobile/Light Truck Technician: Manual Drive Train and Axles (A3)
NIASE014	ASE Automobile/Light Truck Technician: Suspension and Steering (A4)
NIASE076	ASE Auto Maintenance and Light Repair (G1)
NIFMS001	NIMS Machining Level I - CNC Milling: Programming Setup & Operations
NIFMS002	NIMS Machining Level I - CNC Turning: Programming Setup & Operations
NIFMS008	NIMS Machining Level I - Turning Operations: Turning Between Centers
NIFMS010	NIMS Machining Level I - Turning Operations: Turning Chucking Skills
NIFMS013	NIMS Machining Level I - Drill Press Skills I
NRAEF003	Certified Food Protection Manager (ServSafe®)

Certification Code	Certification Title
NREMT001	Emergency Medical Technician (EMT)
NRFSP001	Certified Food Safety Manager
OEDGP001	PCAP – Certified Associate in Python Programming
ORACL004	Oracle Certified Associate (OCA): Java Programmer
PRMIN004	PMI Project Management Ready
PROSO003	Certified Internet Web (CIW) E-Commerce Specialist
PROSO006	Certified Internet Web (CIW) Database Design Specialist
PROSO017	Certified Internet Web (CIW) JavaScript Specialist
PROSO022	Certified Internet Web (CIW) Web Design Specialist
PROSO027	Certified Internet Web (CIW) Advanced HTML5 & CSS3 Specialist
PROSO030	Certified Internet Web (CIW) Data Analyst Specialist
PROSO032	Certified Internet Web (CIW) User Interface Designer
PTCBD001	Pharmacy Technician
SALES001	Salesforce Certified Administrator
SOLID003	Certified Solidworks Associate-Academic (CSWA-Academic)
SOLID004	Certified Solidworks Professional - Academic (CSWP-Academic)
TAFLP001	Accredited Legal Professional (ALP)
UNITY001	Unity Certified Associate
UNITY002	Unity Certified User: Programmer
USINS001	Small UAS Safety Certification

Certifications in RED font do not appear on the 22-23 CAPE Funding List (*awaiting board approval*).

*MTA (MICROXXX) Microsoft Technology Associate certifications are replaced by IT Specialist certifications (CERTI003, CERTI008, CERTI009, CERTI010, CERTI012, CERTI013, & CERTI014).

Secondary Student Progression

Frequently Asked Questions

1. **How many mathematics and science credits may be substituted with industry certifications?**
   • A student who earns an industry certification for which there is a statewide college-credit articulation agreement approved by the State Board of Education may substitute the certification for one mathematics credit. Substitutions may occur for up to two mathematics credits, except for Algebra 1 and Geometry.
   • A student who earns an industry certification for which there is a statewide college-credit articulation agreement approved by the State Board of Education may substitute the certification for up to one science credit, except for Biology 1.

It is important to note that one qualifying industry certification attainment equates to one substitution credit. A student would need to earn three distinct industry certifications to earn the maximum of three substitution credits (two in mathematics and one in science). The school district determines which industry certifications can yield course substitutions for mathematics and science. Credit earned by industry certification does not count for Florida SUS admission.

2. **What are the new course substitution options related to mathematics and science credits?**
The new course substitution options related to mathematics and science include the following:
   • An identified computer science credit may substitute for up to one credit of the mathematics requirement, with the exception of Algebra 1 and Geometry (s. 1003.4282(3)(b)3., F.S.).
   • An identified computer science credit may substitute for up to one credit of the science requirement, with the exception of Biology 1 (s. 1003.4282(3)(c)3., F.S.).
   • An identified industry certification in 3D rapid prototype printing may satisfy up to two credits of the mathematics requirements, with the exception of Algebra 1 (s. 1003.4282(3)(b)3., F.S.).

An identified computer science credit may not be used to substitute for both a mathematics credit and a science credit.

3. Which computer science courses are identified as fulfilling the criteria for course substitution related to mathematics credits?

Computer Science Courses that Fulfill Mathematics Course Credit Substitution

0200305	Computer Science Discoveries	MA – Subject Code
0200315	Computer Science Principles	MA – Subject Code
0200320	AP Computer Science A	MA – Subject Code
0200325	AP Computer Science A Innovations	MA – Subject Code – Daggered 2223/Delete2324
0200335	AP Computer Science Principles MA	MA – Subject Code

4. Which computer science courses are identified as fulfilling the criteria for course substitution related to science credits?

Computer Science Courses that Fulfill Science Course Credit Substitution.

0200800	IB Computer Science 1	EQ – Subject Code
0200810	IB Computer Science 2	EQ – Subject Code
0200820	IB Computer Science 3	EQ – Subject Code

5. Where can one find the industry certifications for which there is a statewide college-credit articulation agreement approved by the State Board of Education that may substitute for mathematics and science credit?

Refer to the Statewide Articulation Agreements web page at http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml (select Active Articulation Agreements Summary).

6. What are the CCD industry certification substitution numbers for student transcript reporting purposes?

The Industry Certification Mathematics Substitution numbers are 1200998 and 1200999 and the Industry Certification Science Substitution number is 20009.