

Frequently Asked Questions

Public Chapter 979 of the Public Acts of 2022

Codified at T.C.A. 49-1-232

Computer Science

Law Overview ¹

[Chapter 979 of the Public Acts of 2022](#), codified at T.C.A. 49-1-232, ensures that all public elementary, middle, and high school students have access to computer science (CS) coursework and resources. It also provides teachers with a no-cost route to earn an additional CS endorsement and offers both teachers and schools incentives to participate in high-quality CS professional development. The following timeline outlines key deliverables in executing T.C.A 49-1-232.

Timeline

Deliverable	Date
Spring 2024 CS Endorsement Pathway (CSEP) Cohort begins	Feb. 2024
Principal/District Leader Nomination form for the Summer Cohort opens	March 4-28
Summer 2024 CSEP Cohort begins	April 2024
Computer Science Accelerator Week	July 2024
Middle and high school educators must have a CS endorsement to teach courses	Fall 2024
Elementary school integration requirement begins	Fall 2024
Middle school course requirement begins	Fall 2024
Incoming freshman cohort high school course graduation requirement begins	Fall 2024
The first cohort of high school students who completed the computer science course graduation requirement will graduate from high school	Class of 2028

Computer Science Courses and Standards

1. **Are new computer science (CS) standards available?**

Yes, [CS standards](#) were developed by Tennessee K-12 educators and approved by the Tennessee State

¹ Please note: Nothing herein shall be construed as legal advice. As always, please consult with your board attorney for specific legal advice around implementation of the computer science law and options for individual students.

Board of Education and are available for district implementation starting in the **2023-24** school year. However, schools are not required to implement the new standards until the **2024-25** school year.

2. ***What materials are available to support the courses and standards implementation?***

The Tennessee Department of Education (department), in partnership with the Tennessee STEM Innovation Network (TSIN), Tennessee educators, and CS experts, created courses with standards, materials, and resources that support CS implementation at the elementary, middle, and high school levels. The department CS courses developed for middle and high school will also include an online course.

3. ***Are there grade-band resources to support instruction?***

[CS materials and resources](#) are available for grades **K-5**, **6-8**, and **9-12**.²

4. ***Will elementary school students have to take a CS course?***

No, elementary students will not be required to take a CS course. However, no later than the **2024-25** school year, elementary school students will have CS content embedded into everyday instruction. Elementary schools may choose to offer CS courses as standalone courses, but this is not required.

5. ***Will middle school students have to take a CS course?***

Yes, beginning with the **2024-25** school year, public middle school students will be required to take one course in CS education that includes instruction for at least one grading period during one school year of their middle school career. HB2242 was passed that **clarifies** as follows: *This bill adds to the present law by clarifying that the above provision only applies to middle school students who enroll in the lowest grade level offered at a middle school in the 2024-2025 school year, or in a subsequent school year.*

6. ***Our middle school starts in 5th grade, and we want our 5th graders to take the Middle School course. What standards and course code should we use?***

Districts whose lowest middle school grade is grade 5 may use the Middle School Computer Science course code (G25X40) when scheduling students. When teaching the Middle School Computer Science course to students in grade 5, districts should also embed the grade 5 standards into the course.

7. ***What CS courses count for the middle school course requirement?***

The middle school academic CS course (**G25X40**) is currently the only course that counts for the middle school requirement.

² To support districts and schools with Computer Science Implementation, the department has worked in partnership with the Tennessee STEM Innovation Network (TSIN) to develop and identify the resources and best practices shared in this toolkit. We hope these resources will be helpful for you to use and adapt for non-commercial educational purposes in your districts and schools. Please note that nothing herein constitutes legal advice or an endorsement of specific vendors/resources, and you should work with your district team and legal counsel to review and implement in alignment with board/school policies and the most current state and federal laws and policies. This is not an exhaustive list of resources and best practices, and we encourage information-sharing among districts.

8. ***What if a middle school wants to offer a CS course that is not on the approved list of CS courses?***

Middle schools interested in offering a CS course that is not on the approved list of courses must submit a special course application for approval by the State Board of Education (SBE).

9. ***Will high school students have to take a CS course?***

Yes, beginning at the start of the **2024-25** school year, every public high school must offer access to CS education that will include one high school credit of CS. Starting with the **freshman** cohort of the **2024-25** school year, each public high school student must take at least one course in CS education as a graduation requirement.

Graduation Requirements

10. ***What CS courses can fulfill the graduation requirement?***

The Tennessee SBE approved the following options to count for the CS graduation requirement:

- International Baccalaureate Computer Science Program
- Cambridge International Computer Science Program
- Dual Enrollment Computer Science Program
- Computer Science
- AP Computer Science Principles
- AP Computer Science A
- Computer Science Foundations
- Coding I
- Coding II
- Coding Practicum
- Cybersecurity I
- Cybersecurity II
- Cybersecurity Practicum
- Mobile App Development

11. ***What if a school wants to offer a CS course that is not on the approved list of CS courses for the graduation requirement?***

High schools interested in offering a CS course that is not on the approved list of courses must submit a special course application for approval by the Tennessee SBE.

12. ***When will incoming freshmen be responsible for the CS graduation requirement?***

Beginning with the incoming **2024-25 freshman** cohort, candidates for regular high school diplomas must receive at least one CS credit in high school.

13. ***Can CS be utilized as a third-lab science or a fourth-credit math in the 2023-24 school year?***

Students pursuing a traditional high school diploma are required to complete four (4) credits of math. Three (3) of the required four (4) credits of mathematics shall include Algebra I, Algebra II, and Geometry, or the equivalent Integrated Math I, II, and III. Students may complete the fourth (4th) credit of math at any point prior to, in between, or following the sequence, as long as they meet the requirements set forth in High School Policy 2.103 and State Board Rule 0520-01-03-.06

and take all three (3) required courses. Students pursuing a traditional high school diploma are required to complete three (3) credits of science. Two (2) of the three (3) credits of science shall include Biology and Chemistry or Physics. The third (3rd) credit of science shall be lab science. Students may complete the third (3rd) lab science credit at any point prior to, in between, or following the required Biology and Chemistry or Physics courses.

14. ***Can students take multiple CS courses and use them to count for the third science and the fourth math?***

No, according to SBE Rule 0520-01-03-.06, students may only use CS as a substitution to fulfill one (1) credit in mathematics, **or** one (1) credit in science, **or** one (1) or more elective focus credits required for a traditional high school diploma.

15. ***What current graduation requirements can be substituted for the CS credit?***

Yes, students can substitute a **third-lab science** or a **fourth-credit math** with CS in the **2023-24** school year, but students are not required to take CS as a graduation requirement until the incoming **2024-25** freshman cohort.

16. ***Does a student have to take a CS course in their junior year for it to substitute for the third-lab science?***

No, students may complete the third (3rd) lab science credit at any point prior to, in between, or following the required Biology and Chemistry or Physics courses.

17. ***Does a student have to take a CS course in their senior year for it to substitute for a fourth credit math?***

No, students may complete the fourth (4th) credit of math at any point prior to, in between, or following the sequence, as long as they meet the requirements set forth in High School Policy 2.103 and SBE Rule 0520-01-03-.06 and take all three (3) required courses.

18. ***Can the CS requirement course be earned before high school or outside the regular school day/year?***

Yes, once students have met middle school CS course requirements, they can enroll in a high school CS course to meet graduation requirements. Scheduling decisions fall under the purview of the individual school/district.

19. ***What are the CS graduation requirements for students who transfer from another state?***

Only students who transfer from another state during their senior year shall be exempt.

Teacher Endorsement

20. ***What teachers will need to receive an endorsement in CS?***

Any middle or high school teacher who teaches a CS course must meet the endorsement requirements and any additional teacher certifications/training required for that course. Teachers utilizing a Computer Science Employment Standard to meet these requirements must have a CS Endorsement starting in the **2024-25** school year. Computer Science Foundations is the only career and technical education (CTE) course that does not have additional required teacher certifications/training for the 2024-25 school year. Please utilize the [online course catalog](#) to

determine eligible endorsements and required additional certifications/training for each of the approved courses.

21. ***Do elementary school teachers need to obtain an endorsement in CS?***

No, CS standards should be embedded into regular classroom instruction. elementary-level stand-alone CS courses do not require the 173 endorsement. However, elementary teachers can opt to take the CSEP course to earn the endorsement.

22. ***Are there multiple options for teachers to receive an endorsement in CS?***

Yes, pre-service teachers will still be required to complete an educator preparatory program and complete CS Praxis (5652). Teachers with a valid professional or practitioner Academic or Occupational License can complete the free CSEP to receive an endorsement in CS.

21. ***I am a teacher with an Academic License, what are my endorsement options?***

Any teacher who has a valid professional or practitioner Academic License and successfully completes the CSEP Course can earn the add-on endorsement 173 (K-12 Computer Science).

22. ***I am a teacher with an Occupational License, what are my endorsement options?***

Teachers with a valid professional or practitioner Occupational License are not eligible for the 173 Endorsement. However, teachers with an Occupational License can apply for an Academic License and the 173 Endorsement simultaneously if they meet the following criteria:

- Hold a bachelor's degree from a regionally accredited college or university.
- Hold an active Tennessee practitioner or professional occupational teacher license with an endorsement covering the secondary grade span.
- Have completed a State Board-approved occupational educator preparation program.
- Submit qualifying scores on all required assessments as defined in the Professional Assessments for Tennessee Educators Policy. *In this instance, the successful completion of the CSEP can serve as the assessment.*
- If a teacher wants to add on an academic license, they will complete this request via TN Compass. Educators should submit an Occupational to Academic type transaction, update the personal affirmation, then once the transaction status says "Pending OELP Review," [Educator Licensure](#) will process the request.

23. ***I am a teacher with an Occupational License, but I do not meet the criteria outlined in the question above. What are my endorsement options?***

Teachers with a valid Occupational License who have completed an occupational Educator Preparation Program and the CSEP, but do not hold a bachelor's degree, can gain the 740 Endorsement.

24. ***What is the CS Endorsement Pathway (CSEP)?***

The CSEP provides licensed teachers with a **no-cost** route to CS **endorsement**. The CSEP is an asynchronous course that contains **six self-paced modules** that allow teachers to demonstrate their knowledge and skills of the CS standards by embedding these practices into their current instruction. The Department will offer the CSEP course every Fall and Spring semester.

25. ***Does every teacher who teaches a CS course need to take the CSEP?***

Teachers and districts should remember that teachers with an occupational license with endorsements 740 and/or 742 do not need to complete the CSEP to teach CTE Computer Science courses. Additionally, teachers who already have the 173 Endorsement do not need to complete the CSEP. Finally, multiple substitution courses meet the CS requirements that teachers do not need more training or certification to teach. Please visit the [Tennessee Course Catalog](#) for additional information.

26. ***How does this affect teachers who have the CS Employment Standard?***

Teachers who obtained an employment standard will be required to complete a modified version of the CS Endorsement Pathway with fewer modules.

27. ***Will these changes affect teachers who currently hold a 173, 740, or 742 Endorsement?***

No, teachers who already hold a 173, 740, or 742 Endorsement will continue to be able to teach CS courses. They will not need to complete the CSEP.

28. ***When do teachers need to have a CS endorsement?***

The CS requirements go into effect in the **2024-25** school year.

Professional Development

29. ***What professional development options will be available to teachers?***

Teachers will have ongoing and free CS training available through the department, the Tennessee STEM Innovation Network, and the STEM Regional Hubs. Statewide training will be provided for the CS standards, online course options, summer self-paced online CS readiness courses, and other CS professional development opportunities.

30. ***How does Code.org training help teachers interested in teaching Computer Science?***

Code.org training prepares new CS teachers to teach CS across grades K-12. Teachers who complete or have completed the yearling Code.org training will complete a modified version of the CSEP with fewer modules.

31. ***What is the CS Momentum Expedition?***

The CS Momentum Expedition conference will spark the creativity of Tennessee teachers by exposing them to numerous ways that CS is integrated into various industries. It is intended to inspire teachers to be innovative in the classroom and explore the interdisciplinary connections that CS has with many career fields and to their classrooms.

Please visit [TN Computer Science](#) for more detailed information on CS in Tennessee.