

Computer Science Graduation Requirement Waiver Results

School Year 2024-2025

STATE BOARD OF EDUCATION

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§15C-81.90. Computer Science.

(a) Required Instruction. – The State Board of Education shall include instruction in computer science in the standard course of study for middle and high school students. Computer science shall mean the study of computers and algorithmic processes, including their (i) principles, (ii) hardware and software designs, (iii) implementation, and (iv) impact on society.

(b) Introductory Course. – Each public school unit shall offer to middle school students an elective introductory computer science course that surveys the field of computer science. The State Board of Education, in consultation with the Department of Public Instruction, shall adopt a list of approved courses that fulfill this requirement and make it publicly available on the Department's website.

(c) Graduation Requirement. – Each public school unit shall offer to high school students a computer science course which includes instruction in using existing technologies and creating new technologies. The public school unit may offer such a course to middle school students. The State Board of Education, in consultation with the Department of Public Instruction, shall adopt a list of approved courses that fulfill this requirement and make it publicly available on the Department's website. A passing grade in this course, whether taken in middle school or high school, satisfies the graduation requirement established in G.S. 115C-12(9d)a.3.

(d) Instructional Setting. – Public school units shall ensure that computer science courses be conducted in an in-person setting when practicable. When an in-person setting is not practicable, computer science courses may be provided through enrollment in remote courses that meet the requirements of Part 11 of Article 16 of this Chapter."

SECTION 2.(b) The State Board of Education shall adopt the list of approved computer science courses required by G.S. 115C-81.90(c), as enacted by this section, and post it on the Department of Public Instruction's website by November 1, 2023. The State Board of Education shall adopt the list of approved introductory computer science courses required by G.S. 115C-81.90(b), as enacted by this section, and post it on the Department of Public Instruction's website by January 1, 2025.

SECTION 2.(c) For the 2024-2025 and 2025-2026 school years only, by July 1 of each school year, a public school unit may submit a signed notification to the Department of Public Instruction stating that a computer science course fulfilling the requirements of G.S. 115C-81.90(c), as enacted by this section, was not available to students. This submission waives the requirement to offer such a course for the school year in which the submission is made. Submission of a notification that a course fulfilling G.S. 115C-81.90(c) was not available shall waive the graduation requirement established by G.S. 115C-12(9d)a.3., as enacted by this act, for students entering the ninth grade in the school year in which the notification is submitted. The Department shall maintain a list of public school units that submitted a notification under this section.

Waiver Submission Process

§115C-12(9d)a.3 permitted PSUs (districts and charter schools) to waive implementing the computer science graduation requirement for incoming ninth-grade students in school year 2024-2025 by submitting a signed waiver to NCDPI by July 1, 2024. The 2024-2025 PSU Computer Science Graduation Requirement Implementation Notification Form was released to PSU leadership on April 2, 2024, to submit waiver requests and serve as their signed waiver submission. PSU Leadership were requested to submit the form to inform DPI of their intent to implement the computer science graduation requirement and provide feedback on concerns for implementing the requirement by July 1, 2024.

The Office of Career and Technical Education, the Office of Advanced Learning and Gifted Education, the Office of Charter Schools, and the Division of District and School Support Services collaborated to provide technical assistance to PSUs throughout spring 2024 regarding the waiver and the computer science graduation requirement. NCDPI staff followed up with PSUs who had not submitted a waiver or submitted multiple conflicting waiver requests to ensure accurate data on the implementation status for the school year 2024-2025.

2024-2025 Waiver Results

The 2024-2025 PSU Computer Science Graduation Requirement Implementation Notification Form collected 198 submissions from PSUs reporting their plans to implement the computer science graduation requirement. For school year 2024-2025, 29 PSUs will implement the graduation requirement for incoming ninth grade students, 169 PSUs will not implement the graduation requirement, and 35 PSUs did not submit the waiver form or provide notification on their intent to implement the computer science graduation requirement. PSUs that did not submit the waiver form or provide notification on their intent to implement the computer science graduation requirement will be required by §15C-81.90. computer science to implement the computer science graduation for incoming ninth grade students in school year 2024-2025 as they did not provide a signed waiver to NCPDI by July 1, 2024.

The tables below summarize the PSU code and name for each status for implementing the computer science graduation requirement.

Table 1: PSUs Implementing the Graduation Requirement in 2024-2025

PSU Code	PSU Name
250	Craven County Board of Education
422	Weldon City Schools
660	Northampton County Schools
890	Tyrrell County Schools
940	Washington County Schools
970	Wilkes County Schools
01B	River Mill Academy
13A	Carolina International School
13B	Valor Preparatory Academy
23A	Pinnacle Classical Academy
32R	Excelsior Classical Academy
32T	Discovery Charter
35C	Wake Preparatory Academy
39B	Oxford Preparatory
45B	FernLeaf
49E	Pine Lake Preparatory
51C	American Leadership Academy - Johnston
60I	Community School of Davidson
60M	Corvian Community School
60U	Commonwealth High
61L	Stewart Creek High
62M	Bonnie Cone Leadership Academy

PSU Code	PSU Name
64A	Rocky Mount Preparatory
65F	American Leadership Academy-Coastal
68A	Eno River Academy
78B	Southern Academy
80C	Faith Academy Charter School
91B	Henderson Collegiate
96F	Wayne Preparatory Academy

Table 2: PSUs Waiving Implementing the Graduation Requirement in 2024-2025

PSU Code	PSU Name
010	Alamance-Burlington Schools
020	Alexander County Schools
030	Alleghany County Schools
040	Anson County Schools
050	Ashe County Schools
060	Avery County Schools
070	Beaufort County Schools
080	Bertie County Schools
090	Bladen County Schools
100	Brunswick County Schools
110	Buncombe County Schools
111	Asheville City Schools
120	Burke County Schools
130	Cabarrus County Schools
132	Kannapolis City Schools
140	Caldwell County Schools
150	Camden County Schools
160	Carteret County Public Schools
170	Caswell County Schools
180	Catawba County Schools
181	Hickory City Schools
182	Newton Conover City Schools
190	Chatham County Schools
200	Cherokee County Schools
209	Cherokee Central Schools
210	Edenton-Chowan Schools
220	Clay County Schools
230	Cleveland County Schools
240	Columbus County Schools
241	Whiteville City Schools
260	Cumberland County Schools
270	Currituck County Schools
280	Dare County Schools
290	Davidson County Schools

PSU Code	PSU Name
291	Lexington City Schools
292	Thomasville City Schools
300	Davie County Schools
310	Duplin County Schools
320	Durham Public Schools
330	Edgecombe County Public Schools
340	Winston Salem / Forsyth County Schools
350	Franklin County Schools
360	Gaston County Schools
370	Gates County Schools
380	Graham County Schools
390	Granville County Schools
400	Greene County Schools
410	Guilford County Schools
420	Halifax County Schools
421	Roanoke Rapids City Schools
430	Harnett County Schools
440	Haywood County Schools
450	Henderson County Schools
460	Hertford County Schools
470	Hoke County Schools
480	Hyde County Schools
490	Iredell-Statesville Schools
491	Mooresville Graded School District
500	Jackson County Public Schools
510	Johnston County Public Schools
520	Jones County Schools
530	Lee County Schools
540	Lenoir County Public Schools
550	Lincoln County Schools
560	Macon County Schools
570	Madison County Schools
580	Martin County Schools
590	McDowell County Schools
600	Charlotte-Mecklenburg Schools
610	Mitchell County Schools
620	Montgomery County Schools
630	Moore County Schools
640	Nash County Public Schools
650	New Hanover County Schools
670	Onslow County Schools
680	Orange County Schools
681	Chapel Hill-Carrboro City Schools
690	Pamlico County Schools
700	Elizabeth City-Pasquotank Public Schools

PSU Code	PSU Name
710	Pender County Schools
720	Perquimans County Schools
730	Person County Schools
740	Pitt County Schools
750	Polk County Schools
760	Randolph County School System
761	Asheboro City Schools
770	Richmond County Schools
780	Public Schools of Robeson County
790	Rockingham County Schools
800	Rowan-Salisbury Schools
810	Rutherford County Schools
820	Sampson County Schools
821	Clinton City Schools
830	Scotland County Schools
840	Stanly County Schools
850	Stokes County Schools
860	Surry County Schools
861	Elkin City Schools
862	Mount Airy City Schools
870	Swain County Schools
880	Transylvania County Schools
900	Union County Public Schools
910	Vance County Schools
920	Wake County Schools
930	Warren County Schools
950	Watauga County Schools
960	Wayne County Public Schools
980	Wilson County Schools
990	Yadkin County Schools
995	Yancey County Schools
00B	NC Virtual Academy
01C	Clover Garden
01D	The Hawbridge School
06B	Marjorie Williams Academy
09A	Paul R. Brown Leadership Academy
11B	ArtSpace Charter School
11D	The Franklin School of Innovation
19A	Chatham Charter
19B	Woods Charter
26C	The Capitol Encore Academy
32B	Durham Charter School
33A	North East Carolina Preparatory School
33A	North East Carolina Prep
34H	NC Leadership Charter Academy

PSU Code	PSU Name
35B	Youngsville Academy
36B	Piedmont Community Charter School
36C	Mountain Island Charter School
39A	Falls Lake Academy
41D	Phoenix Academy - Primary, Elem, Upper
41G	Cornerstone Charter Academy-CFA
41H	College Prep and Leadership Academy
41Q	Revolution Academy
44A	Shining Rock Classical Academy
49F	Langtree Charter Academy
50A	Summit Charter
51A	Neuse Charter School
55A	Lincoln Charter School
60D	Lake Norman Charter
60J	Socrates Academy
60K	Charlotte Secondary
60S	Bradford Preparatory School
60Y	Pioneer Springs Community School
61M	Charlotte Lab School
61X	Jackson Day School
62L	Telra Institute
66A	KIPP Gaston College Preparatory
70A	Northeast Academy of Aerospace & AdvTech
73B	Roxboro Community School
76A	Uwharrie Charter Academy
78A	CIS Academy
79A	Bethany Community School
81A	Thomas Jefferson Classical Academy
81B	Lake Lure Classical Academy
84B	Gray Stone Day
86T	Millennium Charter Academy
90A	Union Academy
90B	Union Day School
90F	Apprentice Academy High School
91A	Vance Charter School
92F	Franklin Academy
92G	East Wake Academy
92P	Southern Wake Academy
92U	Longleaf School of the Arts
92W	Cardinal Charter Academy
93A	Haliwa-Saponi Tribal School
93L	Central Wake High School
94Z	NERSBA Early College
98A	Sallie B Howard School
98B	Wilson Preparatory Academy

Table 3: PSUs Not Submitting Notification of Implementation for 2024-2025

PSU Code	PSU Name
269	Fort Bragg
298	Deaf and Blind Schools
679	Camp Lejeune
996	DAC Education Services (fka Div Prisons)
997	NC Health and Human Services
998	NCDPS Juvenile Education Services
00A	North Carolina Cyber Academy
07A	Washington Montessori
11C	IC Imagine
24B	Thomas Academy
26B	Alpha Academy
32L	Voyager Academy
32N	Research Triangle High School
34B	Quality Education Academy
34D	Carter G. Woodson School
36G	Community Public Charter
41F	Triad Math and Science Academy
41K	Piedmont Classical High School
42B	Hobgood Charter School
53B	Ascend Leadership Academy: Lee County
53D	Central Carolina Academy
58B	Bear Grass Charter School
60B	Sugar Creek Charter
60G	Queen's Grant Community School
61N	TMSA Charlotte
62N	Aspire Trade High
63B	STARS Charter
65G	Girls Leadership Academy of Wilmington
69A	Arapahoe Charter School
90C	Union Prep Academy at Indian Trail
92E	Sterling Montessori Academy
92K	Raleigh Charter High School
92R	Casa Esperanza Montessori Charter School
92T	Triangle Math and Science Academy
93N	Pine Springs Preparatory Academy

Concerns for Implementing the Graduation Requirement

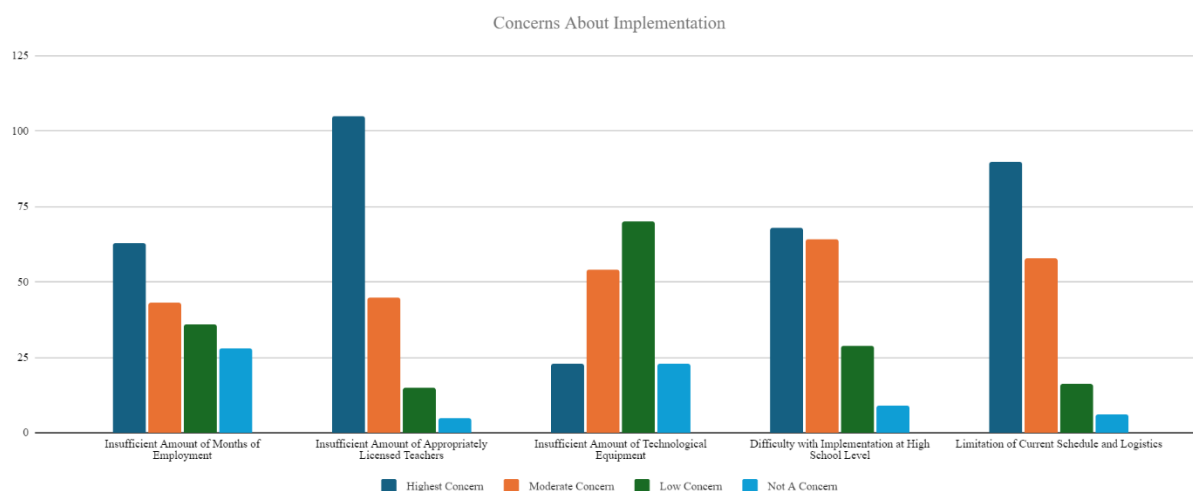
The 2024-2025 PSU Computer Science Graduation Requirement Implementation Notification Form surveyed PSUs on their concerns for implementing the computer science graduation requirement. Respondents rated five implementation concerns as high, moderate, low, or not a concern and were able to provide additional comments. Respondents were allowed to rate multiple concerns at a specific level to represent a more accurate summary of concerns. 169 respondents provided ratings, and 29 did not submit ratings. The highest implementation concerns were insufficient amount of

appropriately licensed teachers and limitation of the current schedule and logistics. The lowest concern was the insufficient amount of technological equipment. Table 4 and Figure 1 summarize the concerns PSUs have with implementing the computer science graduation.

Table 4: Concerns for Implementation the Computer Science Graduation Requirement

Implementation Concern	High Concern	Moderate Concern	Low Concern	Not A Concern
Insufficient Amount of Months of Employment	63	43	36	28
Insufficient Amount of Appropriately Licensed Teachers	105	45	15	5
Insufficient Amount of Technological Equipment	23	54	70	23
Difficulty with Implementation at High School Level	68	64	29	9
Limitation of Current Schedule and Logistics	90	58	16	6

Figure 1: Graph of Concerns for Implementation Computer Science Graduation Requirement



Respondents were able to provide comments about their concerns. Table 5 summarizes the free response comments provided by respondents.

Table 5: Comments Regarding Concern for Implementing the Requirement

Comments
1. Lack of a curriculum in middle school. 2. Who is teaching this? Where is the additional teacher allotment? 3. Another state mandate with no thought of funding. On a positive note, much needed curriculum in our schools.
1. Without the additional months of employment, this requirement may impact other CTE programs that are determined by the CLNA as important for your local community. 2. It could potentially force students into pathways where there is little to no career interest. This could create a barrier for students that are interested in those career pathways. 3. Our capacity to have enough CS courses to meet the graduation requirement. 4. Consider offering a credit by demonstrated mastery option. 5. Teacher retention is a concern because there will be more students in CS courses with little to no interest and teachers will leave education.
Additional graduation requirements with 22 credit option
Adequate time for Professional Learning
All concerns listed above.
Another unfunded mandate
As a Charter School with a smaller population, implementing the required courses places a strain on our ability to schedule in a flexible manner. Also, having students take the high school courses at the Community College leaves us at the mercy of the College as to when they offer the courses.
As we increase required courses, we diminish student choice (and ownership) in course work, especially for EC students.
Attaining new curriculum to meet requirements.
Available funding to staff the elective position.
Currently, hiring teachers properly licensed in this area is our greatest concern. We cannot compete with salaries offered by those in private industry. While we are aware that we can hire a math teacher to fulfill this position, we currently have multiple long term math vacancies in our district. If a math teacher were available we would place them in a math classroom. Additionally, we do not have enough months of employment to reach the needs of a middle school elective for computer science. If we are able to identify a business teacher to teach the computer science graduation requirement, they do not have the requisite experience or background for this particular course. Finally, if we do use our CTE months of employment to meet this requirement we will only be able to offer level I courses and fewer completer courses.
Currently, no teachers licensed for computer science at the high school level
Difficulty hiring a qualified and competent teacher
Elkin City is unique in that we are a K-6, 7-8, & 9-12 school system. CTE shares several teachers with our middle school. We do not have a "true" middle school model where CTE classes are offered throughout the day. CTE/Encore classes are offered 1st and 4th periods and the CTE teachers teach high school students in the middle part of the day. I am concerned with how the Computer Science Graduation implementation will affect limiting the teachers available for middle school courses due to the high school requirement.
Financial obligations of this requirement without receiving additional state funding for teachers, equipment and training
Financial- we do not have additional funds to hire an additional teacher for Comp Sci. Also, finding talent in rural North Carolina with the skill to teach this course.
Finding a truly qualified teacher in a rural community is going to be extremely difficult.
Haliwa-Saponi Tribal School struggle to find adequate staffing that can engage in the implementation of the computer science requirements. We would like to begin implementation at a later time. We are reviewing the recommended courses for implementation. We will begin using the resources provided for classroom instruction in areas teachers can comprehend.

Comments

I am concerned at the limitations this will place on the ability to offer other pathways and the impact on our second level courses.

identified curriculum for the course

In addition to the insufficient number of licensed teachers, the number of teachers available to staff the computer science positions is challenging.

In order to meet this requirement, the Randolph County School System is eliminating several business programs to best meet the requirements of the computer science mandate.

Insufficient funding and licensure staff

Lack of flexibility of approved courses.

Licensed personnel to teach these courses

Many licensed teachers may still require capacity-building to effectively instruct CS courses.

Middle school component

Months of employment are of highest concern regarding the addition of a pathway we were not currently offering.

No concerns. Great Requirement. Have to fit it in.

Offering the classes that meet the requirement will limit other classes that are already in place and in high demand by students.

Our biggest concern is the time requirement for middle grades.

Our district is piloting enrollment and course offerings.

Our plan is to implement the computer science course during the junior and senior years for the Class of 2028. This decision is based on the reduced number of state-required courses offered during these pivotal years, and is documented on the students' 4-year plan.

Potential impact of implementation equates to loss of current programs.

Requiring students to complete a course for graduation they may otherwise have no interest in.

Since I noticed it was not in your grid, funding is a real problem here. This is a solid requirement to prepare future ready citizens, however there is no financial support to achieve this along with all of the other new requirements arriving in middle grades.

staffing trained to teach courses that meet requirement

Sustainability of teachers and training and no additional funding.

The CHCCS middle school schedule also limits implementation

The high school implementation is easier for us to implement than the middle school component. We desperately need qualified teachers to be able to provide this and materials for the class.

The local job market, we are not attracting computer science teachers to our district.

The more requirements at the High School level, limits student choice for electives. These electives include CTE/Arts courses that are of high interest for students.

The number of certified computer science teachers and the requirement to teach all students versus teaching the CTE pathway.

The primary concern for Nash is licensure of staff. Also, scheduling and logistics is a grave concern as the district currently doesn't have an ample number of pathways to support computer science. The district will need to reconfigure the pathway options to meet the new graduation requirement.

The requirement is unclear - meaning does implementation mean with the graduating class of 2024 - 25? If so that is nearly impossible because of schedules etc. We plan to implement with next years middle school (graduating class 2029)

The team analyzed the data and has a full implementation prepared for the 2025-26 school year as the initial law required.

There was a computer skills test years ago that measured specific skills it was removed. What kind of skills do you want students to know? The course list is varied in the skills acquired!

Comments

There will be a change in leadership moving forward in several key areas and we need more time to prepare for the implementation.

This is [superintendent's] and [chief academic officer's] first year Martin County Schools. They need time to place the human infrastructure in place to successfully implement the requirement.

Trying to figure out how to implement this in middle schools without changing course offerings and not increasing our teacher count.

We are a K-8 campus

We are concerned that required seats for computer science courses will result in us limiting or eliminating other pathways without having additional months of employment.

We are concerned with pathway progression and future impact on concentrators. In our business departments we have the capacity to teach it but this means cutting current pathways to do so.

We are currently struggling to hire qualified and certified staff in these areas. We need time to map out a long range plan.

We are fine with high school piece but can't meet the middle school requirement. Not enough teachers or funds for additional staff.

We are still looking for space to house the equipment needed and finding a staff member that is certified to teach.

We are struggling with obtaining qualified teachers in many discipline areas.

We are working to align to our local economic needs- which include Drone and robotic technology. These are not covered under the CS acceptable courses.

We have already completed the registration process for next school year.

We have an insufficient amount of time to restructure MOEs and positions to accommodate this course at this time. We will continue to build our implementation plan.

We have hired computer science teacher and implementing growth plan MS to HS

We have no overall major concerns other than coordination to ensure we can meet requirement for a large district. Our goal is to plan to implement for 25-26 school year.

We need one additional year to ensure we have an appropriately licensed teacher and the resources and PD required for this implementation.

We need the funding to support this mandate,

We offer courses to all students. Most students are not interested. Has the state identified the courses that will satisfy the graduation requirement? Moving this from an elective with 20 - 25 students per year to a requirement (serving at least 100 students per year) with zero additional funding is simply not realistic. This will require additional staffing which means schools need more funding. Selection of courses that are of interest and value to students is also important - with the onset of AI student knowledge and skill needs will shift dramatically.

We would like more time to ensure that we have a plan that will work for future sustainability

Where will we find certified teachers and how will we fund them on our current budget?

Will the Computer Science Teacher have to be a licensed Teacher?

With the current guidance, charter schools are a bit hindered. We would like more guidance so that we can fulfill this within our school's mission and staffing capabilities.

Without an increase in the months of employment allotted for CTE teachers, many districts (including ours) will have to cut specific CTE programs in order to meet the new computer science graduation requirement. This will lead to very difficult decisions to cut programs that are popular and often essential in smaller, rural districts, including Automotive, Construction, Agriculture, Business, etc. The premise of the legislation is good and I appreciate the focus on computer science, but additional MOEs for 013 is a huge need to make this happen without cutting other programs.