

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2025

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HOUSE BILL 1142

Short Title: Expand Quantum Computing Education. (Public)

Sponsors: Representatives Hawkins and Charles Smith (Primary Sponsors).
For a complete list of sponsors, refer to the North Carolina General Assembly web site.

Referred to: Appropriations, if favorable, Finance, if favorable, Rules, Calendar, and
Operations of the House

May 4, 2026

A BILL TO BE ENTITLED

AN ACT TO EXPAND ACCESS TO QUANTUM COMPUTING CLASSES FOR PUBLIC SCHOOL STUDENTS, TO ESTABLISH THE QUANTUM COMPUTING GRANT PROGRAM AT THE NORTH CAROLINA COLLABORATORY, AND TO CREATE AN INCOME TAX CREDIT FOR CERTAIN BUSINESSES.

Whereas, quantum computing is a critical emerging technology that will have implications for the security of the United States and the State of North Carolina; and

Whereas, military families tend to continue to serve and give back to North Carolina and the United States; and

Whereas, North Carolina has one of the largest military populations in the United States; and

Whereas, North Carolina is one of the leading states in the nation for innovation, technology, and entrepreneurship; and

Whereas, North Carolina's K-12 and higher education system is key to the economic success of North Carolina and the businesses that bring jobs to the State; and

Whereas, it is crucial that North Carolina invest in the educational programs necessary to train the post-quantum workforce, support the innovation economy, and defend our national security; Now, therefore,

The General Assembly of North Carolina enacts:

PART I. EXPAND ACCESS TO GRADE SCHOOL CLASSES THAT PREPARE STUDENTS FOR QUANTUM COMPUTING

SECTION 1.(a) There is appropriated from the General Fund to the Department of Public Instruction (Department) the sum of two million six hundred thousand dollars (\$2,600,000) in nonrecurring funds for the 2026-2027 fiscal year for the development, expansion, or continuation of science, technology, engineering, and math (STEM) education programs that assist students in developing the academic background necessary to later pursue apprenticeships, internships, degree programs, or employment in quantum computing. The funds shall be allocated as follows:

- (1) Two million dollars (\$2,000,000) to be divided equally among all public school units located within the geographical boundaries of any local school administrative unit that contains any portion of a military base or installation.
- (2) Two hundred thousand dollars (\$200,000) to Durham Public Schools.
- (3) Two hundred thousand dollars (\$200,000) to Orange County Schools.



1 (4) Two hundred thousand dollars (\$200,000) to Wake County Schools.
2 **SECTION 1.(b)** The funds allocated pursuant to this section may be used for any of
3 the following:

- 4 (1) Hiring or providing stipends to STEM teachers. Public school units are
5 encouraged to prioritize hiring or providing stipends to teachers at the high
6 school level with interest or background in quantum computing, physics,
7 computing, or cryptography.
8 (2) Develop, expand, or continue collaborative or experiential learning
9 opportunities where students work with businesses, nonprofits, or higher
10 education institutions.
11 (3) Specialized summer STEM programs that include lab research or applied
12 learning.

13 **SECTION 1.(c)** No later than April 1, 2027, the Department shall report to the Joint
14 Legislative Education Oversight Committee the following information:

- 15 (1) A description of the classes or learning opportunities offered with funds
16 allocated pursuant to this section.
17 (2) A detailed description of how funds were spent.
18 (3) The number of students that participated in the classes or learning
19 opportunities offered as a result of the funding provided by this section.
20 (4) Any increases in student performance or outcomes in STEM programs.
21 (5) Any other information the Department deems relevant to evaluating the
22 effectiveness of funding allocated pursuant to this section.

23 **SECTION 1.(d)** This section becomes effective July 1, 2026.
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25 **PART II. QUANTUM COMPUTING GRANT PROGRAM**

26 **SECTION 2.(a)** Program; Purpose. – There is established the Quantum Computing
27 Grant Program (Program) to be administered by the North Carolina Collaboratory for the
28 2026-2027 academic year. The purpose of the Program shall be to provide opportunities for high
29 school students in North Carolina public school units and Department of Defense schools to work
30 with institutions of higher education on current issues in quantum computing and other emerging
31 technologies, including educational programming, interactive and applied learning opportunities,
32 and research.

33 **SECTION 2.(b)** Definitions. – For purposes of this section, the following definitions
34 apply:

- 35 (1) Collaboratory. – The North Carolina Collaboratory.
36 (2) Eligible high school. – A school providing secondary instruction that meets
37 one of the following requirements:
38 a. Is located in a public school unit.
39 b. Is a Department of Defense school located in North Carolina.
40 (3) Eligible institution of higher education. – An institution of higher education
41 that does both of the following:
42 a. Has demonstrated the ability to collaborate with public school units
43 located near the Research Triangle region of the State, including
44 Chapel Hill Carrboro City Schools, Cumberland County Schools,
45 Durham Public Schools, Wake County Schools, and Orange County
46 Schools.
47 b. Has a formal partnership with the United States Department of
48 Defense related to research or workforce development.
49 (4) Institution of higher education. – A constituent institution of The University
50 of North Carolina, a community college located in this State, or an eligible
51 private postsecondary institution as defined in G.S. 116-280(3).

1 **SECTION 2.(c)** Eligibility; Applications. – Any eligible institution of higher
2 education may apply to the Collaboratory for a grant to develop an educational program with an
3 eligible high school in the 2026-2027 academic year to facilitate student engagement with
4 quantum computing and other emerging technologies. Grants may be awarded to eligible
5 institutions of higher education in amounts of up to fifty thousand dollars (\$50,000) per eligible
6 institution of higher education.

7 **SECTION 2.(d)** Use of Funds. – Funds awarded to an eligible institution of higher
8 education pursuant to the Program shall be used to provide opportunities for high school students
9 to gain hands-on experience, mentorship, and exposure to career pathways in science,
10 technology, engineering, and mathematics that are related to current issues in quantum
11 computing and related emerging technologies. Permissible uses of these funds include student
12 stipends, program administration, mentorship, and research participation costs related to any of
13 the following:

- 14 (1) Internships, especially mentored research internships aligned with
15 Department of Defense initiatives.
- 16 (2) Research assistant positions or applied research opportunities, including
17 research connected to workforce development and innovation priorities in the
18 State.
- 19 (3) Laboratory-based research, especially as related to defense technology or
20 cybersecurity.

21 **SECTION 2.(e)** Report. – No later than February 15, 2027, the Collaboratory shall
22 report the following information to the Joint Legislative Education Oversight Committee and the
23 Fiscal Research Division:

- 24 (1) Number and amounts of grants awarded.
- 25 (2) Identities of the institutions of higher education receiving grants.
- 26 (3) Identities of public school units and Department of Defense schools working
27 with institutions of higher education receiving grants.
- 28 (4) Identities of institutions of higher education that applied for grants but did not
29 receive one.
- 30 (5) The impact of the Program on student success.

31 **SECTION 2.(f)** Appropriation. – There is appropriated from the General Fund to the
32 Board of Governors of The University of North Carolina the sum of two hundred thousand dollars
33 (\$200,000) in nonrecurring funds for the 2026-2027 fiscal year to be allocated to the North
34 Carolina Collaboratory to award grants pursuant to the Quantum Computing Grant Program
35 established pursuant to this section.

36 **SECTION 2.(g)** This section becomes effective July 1, 2026.

37 38 **PART III. INCOME TAX CREDIT FOR CERTAIN BUSINESSES**

39 **SECTION 3.(a)** Part 2 of Article 4 of Chapter 105 of the General Statutes is amended
40 by adding a new section to read:

41 **"§ 105-153.12. Tax credit for eligible businesses.**

42 (a) Definitions. – The following definitions apply in this section:

- 43 (1) Eligible business. – A business that (i) is in the defense, technology,
44 computing, cybersecurity, or quantum sector, or that has a service line in
45 quantum computing, (ii) is subject to income tax under this Article, and (iii)
46 has eligible expenses.
- 47 (2) Eligible expenses. – Costs invested by an eligible business into collaborative
48 or experiential learning opportunities with North Carolina high school
49 students, during the school year or through summer programs, that:
 - 50 a. Comply with all relevant State and federal nondiscrimination laws.

1 b. Offer high school students the opportunity to utilize lab space,
2 computing power, or incorporate expertise and resources not typically
3 available to high school students into an applied learning project that
4 will either (i) increase student interest in quantum computing careers
5 or (ii) better prepare students to succeed in a quantum computing
6 program or quantum computing career after graduating high school.

7 (b) Credit. – A taxpayer that is an eligible business is allowed a credit against the tax
8 imposed by this Part in an amount equal to the taxpayer's eligible expenses, not to exceed one
9 hundred thousand dollars (\$100,000).

10 (c) Aggregate Limitation. – The total amount of credits allowed pursuant to this section
11 may not exceed in the aggregate ten million dollars (\$10,000,000) for all taxpayers for any one
12 calendar year.

13 (d) Application. – An eligible business claiming a credit under this section shall submit
14 an application for the credit to the Department for approval no later than December 15 of the
15 taxable year for which the credit is claimed. Applications shall be accepted on a first-come,
16 first-served basis. The Department shall create the application required under this section, which
17 shall require, at a minimum, proof of the applicant business's eligible expenses. The Department
18 shall review and approve applications submitted to it under this section by March 1 of the year
19 following the year in which the application was submitted. If the credit amounts for a taxable
20 year exceed the maximum aggregate limit of credits allowed under this section, the tax credits
21 must be allocated among the eligible businesses who filed a timely application on a first-come,
22 first-served basis upon the amounts otherwise allowed by this section.

23 (e) Report. – By June 30 of each year, the Department shall report (i) the number of
24 applications it received during the previous calendar year, (ii) the number of applications it
25 approved during the previous calendar year, and (iii) the total dollar amount of tax credits allowed
26 to eligible businesses during the previous calendar year to the Joint Legislative Committee on
27 Governmental Operations and the Fiscal Research Division."

28 **SECTION 3.(b)** This section is effective for taxable years beginning on or after
29 January 1, 2027.

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31 **PART IV. EFFECTIVE DATE**

32 **SECTION 4.** Except as otherwise provided, this act is effective when it becomes
33 law.