

Mathematics Graduation Requirements for Students

Effective for Freshmen Entering High School in 2012-2013 and BEYOND (Policy GCS-N-004 from <http://sbepolicy.dpi.state.nc.us/>)

Four mathematics credits* are required for graduation. A student's post-secondary school plans should help determine the student's mathematics sequence.

Math I (2103)



Math II (2201)



Math III (2301)



a 4th mathematics course taken from one of the three columns to the right



All Four Mathematics Credits for Graduation

** Four math credits do not have to include a fourth level math, but it is highly recommended that all students be given access to the highest levels of math.*



The Policy listed above is the official State Board Education Policy on graduation requirements. The next four columns are intended as guidance and are subject to change based upon revisions to courses or standards at the high school and/or post-high school levels.

Courses accepted as the 4th Level mathematics credit for admission into UNC System institutions

NC Standard Course of Study Courses

- 2400 – Adv Functions and Modeling
- 2401 – Discrete Mathematics
- 2402 – Integrated Math IV
- 2403 – Pre-Calculus
- 2408 – Essentials for College Math (SREB READY)

Community College Courses

- 2722 – CCP-MAT172 – Precalculus Trigonometry
- 2723 – CCP-MAT271 – Calculus I
- 2724 – CCP-MAT171 – Precalculus Algebra
- 2C015 – MAT 143 – Quantitative Literacy
- 2C025 – MAT 152 – Statistical Methods I
- 2C055 – MAT 263 – Brief Calculus
- 2C075 – MAT 272 – Calculus II
- 2C115 – MAT 252 – Statistics II
- 2C125 – MAT 273 – Calculus III
- 2C135 – MAT 280 – Linear Algebra
- 2C145 – MAT 285 – Differential Equations
- 2C155 – MAT 141 – Mathematical Concepts I
- 2C165 – MAT 142 – Mathematical Concepts II
- 2C175 – MAT 167 – Discrete Math

AP and IB Courses

- 2501 – AP CALCULUS AB
- 2502 – AP CALCULUS BC
- 2511 – AP STATISTICS
- 2I008 – IB Computer Science SL
- 2I018 – IB Computer Science HL
- 2I028 – IB Mathematical Studies SL
- 2I038 – IB Mathematics SL
- 2I048 – IB Mathematics HL
- 2I058 – IB Further Math HL

Due to the Curriculum Improvement Project at the NC Community College system, many courses were revised or archived. If not on this list, but on a previous math options chart and taken prior to 2014-15 SY, they are still acceptable. This includes lab component for many of the archived courses. Most math labs were incorporated into the revised courses listed above. Some community colleges may still require a lab before the mandatory Summer 2015 switch. If your community college does, then it must be taken this final year.

Students Planning to Attend Other Colleges, a Community College, or a Technical School**

Any of the courses listed in the Dark Blue UNC System column OR

- 2407 – Probability & Statistics (2014-15 is last year of availability)
- 2406 – AMTEM-Mindset
- Special Topics in Math (2013-14 was last year of availability)

CTE Single Courses that equal 1 full math credit

- AP Computer Science (2521)
- Accounting I (BA10)
- Accounting II (BA20)
- Principles of Business and Finance (BF10)
- Drafting I (IC61)
- Drafting II Engineering (IV22)
- Drafting II Architectural (IC62)
- Carpentry I (IC21)
- Metals Manufacturing Technology I (IM41)
- Metals Manufacturing II (IM42)
- PLTW Biotechnical Engineering (TP24)
- PLTW Aerospace Engineering (TP25)
- PLTW Civil Engineering and Architecture (TP23)
- PLTW Introduction to Engineering Design (TP11)
- PLTW Computer Integrated Manufacturing (TP22)
- PLTW Principles of Engineering (TP12)
- PLTW Digital Electronics (TP21)
- PLTW Engineering Design and Development (TP31)
- Apparel & Textile Production I (FA31)
- Apparel & Textile Production II (FA32)
- Interior Design I (FI51)
- Interior Design II (FI52)
- Culinary Arts and Hospitality II (FH22)
- ProStart II (FH72)
- Principles of Technology I (TE21)
- Principles of Technology II (TE22)
- Computer Programming I (BP10)
- Computer Programming II (BP12)

Pairs of CTE Courses that equal 1 Math CREDIT

- SAS I (BP20) **AND** SAS II (BP22)
- Personal Finance (BF05) **AND** Entrepreneurship I (ME11)
- Electronics I (IM31) **AND** Electronics II (IM32)
- Masonry I (IC11) **AND** Masonry II (IC12)
- Introduction to Culinary Arts & Hospitality (FH20) **AND** Culinary Arts & Hospitality I (FH21)
- Game Art and Design (TS31) **AND** Advanced Game Art and Design (TS32)
- Electrical Trades I (IC 41) **AND** Electrical Trades II (IC42)
- Scientific and Technical Visualization I (TS21) **AND** Scientific and Technical Visualization II (TS22)
- Introduction to Culinary Arts & Hospitality (FH20) **AND** ProStart I (FH71)
- Carpentry II (IC22) **AND** Carpentry III (IC23)

*** Not eligible for Multiple Measures entry with NC Community College System. Students using CTE courses to meet Math credit graduation requirements (Class of 2014 & beyond) will be required to complete math placement testing prior to enrolling in community college math courses.*

Students Exempted by Principal from usual sequence (SUBSTITUTION)

MATH I AND MATH II

Plus two additional courses from choices below:

- 2020 – Introductory Mathematics
- 2050 – Foundations of Math I
- 2051 – Foundations of Math II
- 2052 – Foundations of Math III
- 2040 – Alternate Mathematics I
- 2041 – Alternate Mathematics II
- 2065 – Probability & Statistics
- Special Topics in Math (2013-14 was last year of availability)

OR

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- Accounting I (BA10)
- Accounting II (BA20)
- Principles of Business and Finance (BF10)
- Drafting I (IC61)
- Drafting II Engineering (IV22)
- Drafting II Architectural (IC62)
- Carpentry I (IC21)
- Metals Manufacturing Technology I (IM41)
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- Apparel & Textile Production II (FA32)
- Interior Design I (FI51)
- Interior Design II (FI52)
- Culinary Arts and Hospitality II (FH22)
- ProStart II (FH72)
- Principles of Technology I (TE21)
- Principles of Technology II (TE22)
- Computer Programming I (BP10)
- Computer Programming II (BP12)

Students are NOT required to complete math credits in this option in any particular order. Students may take CTE or other courses prior to or concurrently with Math I and/or Math II. Additionally, students may also complete the Substitution sequence with two core mathematics courses plus one additional math course from above (pink) and one CTE course OR a pair of CTE courses from previous column (yellow) (pairs of CTE courses = 1 math credit).

Students Identified as Learning Disabled in Math

Students included in the category defined by NC General Statute § 115C-81(b) must complete four credits in mathematics. This legislation states that the State Board of Education shall not require Algebra I as a graduation standard for any student with an IEP [Individualized Education Plan] that: i) identifies the student as learning disabled in the area of mathematics and ii) states that this learning disability will prevent the student from mastering Algebra I.

These students should construct a four-course mathematics sequence using any combination of the courses listed in the preceding columns. Each student's course selections should be guided by his or her post-secondary goals, as defined in his/her IEP.

Students Following the Occupational Course of Study

- Introduction to Math I (9220B) **AND** Math I (9221B)

AND ONE of the following courses:

- Financial Management (9222B)
- Alternate Math II (2041)
- Personal Finance (BF05)

Students who complete the sequence above should be classified as Occupational Course of Study (OCS). These students may also complete a CTE concentration.