

# Mathematics Placement Processes and Recommendations for Dual Enrollment Students

## Eligibility to Take Mathematics Courses as a Dual Enrollment Student

Dual Enrollment (DE) students may not enroll in collegiate math courses until they have successfully completed the three Georgia DOE-required high school math courses:

- Coordinate Algebra or Algebra I
- Analytic Geometry or Geometry
- Algebra II

College mathematics courses taken through DE are only allowed to substitute for the 4<sup>th</sup> math unit required by both the Georgia DOE and the University System of Georgia. One of the challenges is that students have to apply for DE relatively early and they may not have completed Algebra II at the time of application. High School (HS) Counselors are supposed to be able to state that the student will have completed the HS math requirement prior to enrolling in a DE math course. However, the ultimate responsibility for ensuring that students have met the HS math requirement falls on the college DE coordinator. College DE Coordinators must ensure that DE students do not take any collegiate math courses until it is verified that these three required high school math courses have been completed.

DE students may not enroll in Corequisite Learning Support math courses or in collegiate mathematics courses for which they do not exempt the Corequisite Learning Support requirement.

The core curriculum mathematics courses available to DE students are listed below. Simply being a DE student does not guarantee that students will be eligible to enroll in all or any of these courses.

### First Collegiate Mathematics Courses (Area A2 in the University System of Georgia Core Curriculum)

- MATH 1001 Quantitative Reasoning
- MATH 1101 Introduction to Mathematical Modeling
- MATH 1401/STAT 1401 Elementary Statistics
- MATH 1111 College Algebra
- MATH 1112 College Trigonometry (equivalent to Precalculus at some institutions)
- MATH 1113 Precalculus
- Calculus (no common number for this one)

### Eligibility to enroll in MATH 1001 Quantitative Reasoning, MATH 1101 Introduction to Mathematical Modeling, or MATH 1401/STAT 1401 Elementary Statistics

The default mathematics placement for DE students is in MATH 1001 Quantitative Reasoning, MATH 1101 Introduction to Mathematical Modeling, or MATH/STAT 1401 Elementary Statistics.

In most cases, the same criteria (SAT math Scores, ACT math scores, Next-Generation Accuplacer Quantitative Reasoning, Algebra, and Statistics test scores) that allow students to

be admitted to DE will also allow students to be placed in one of these entry-level mathematics courses: MATH 1001 Quantitative Reasoning or MATH 1101 Introduction to Mathematical Modeling, or MATH 1401/STAT 1401 Elementary Statistics.

If institutional criteria to enroll in these courses without Corequisite Learning Support are set higher than the Dual Enrollment admission criteria, students will have to be individually evaluated for eligibility to take these courses. Students who do not meet the criteria to exempt Corequisite Learning Support for these courses may not take MATH 1001, 1101, or 1401 and will not be eligible to take any other entry-level (Area A2) college mathematics courses.

While these courses are the “default placement” for DE students, they are not the **best** placement for all students. **DE students should also be evaluated for possible placement in higher level mathematics courses**, especially if they are planning on careers or majors that will require calculus.

### **Eligibility to enroll in MATH 1111 College Algebra**

Students must meet institutional test score requirements for placement in MATH 1111 College Algebra. These are higher than the requirements to enroll in MATH 1001, MATH 1101, or MATH/STAT 1401. DE students whose scores would not exempt them from the Corequisite Learning Support requirement for MATH 1111 College Algebra will not be allowed to enroll in that course. Students whose SAT or ACT scores are not high enough for placement into MATH 1111 may be advised to take the Next-Generation Accuplacer Quantitative Reasoning, Algebra, and Statistics placement test to see if they can make a score high enough to place into MATH 1111.

### **Eligibility to enroll in MATH 1113 Pre-Calculus or Calculus**

Institutions have different test score requirements and procedures for placement in MATH 1112 College Trigonometry (which functions as an equivalent to Precalculus at some institutions), MATH 1113 Precalculus, or Calculus. In most cases, students will have to take a distinct placement test and make a qualifying score in order to enroll in these courses.

## **What is the *best* first college mathematics course for Dual Enrollment students?**

The best **first college mathematics course** for a DE student depends on the major a student plans to pursue.

### **MATH 1001 Quantitative Reasoning, MATH 1101 Introduction to Mathematical Modeling, or MATH 1401/STAT 1401 Elementary Statistics**

These courses are recommended for DE students who are **not** planning to major in science, technology, engineering, or mathematics. MATH 1001 Quantitative Reasoning or MATH 1101 Introduction to Mathematical Modeling are recommended first mathematics courses for students planning to pursue majors in health professions, especially nursing. (Nursing students will subsequently take MATH 1401/STAT 1401 Elementary Statistics, but it is recommended that their first college mathematics course be MATH 1001 or MATH 1101.) MATH/STAT 1401 is an appropriate first college mathematics course for DE students who are planning to pursue majors in social or behavioral sciences.

## **MATH 1111 College Algebra**

College Algebra is designed to prepare students for calculus, and is not the best mathematics course for students who will not subsequently be taking a calculus course. MATH 1111 College Algebra may be an appropriate first mathematics course for students who plan to major in business, as some business programs require calculus. Students planning to major in science, technology, engineering, or mathematics should take MATH 1111 as a first college mathematics course **only** if they do not place directly into a higher mathematics course. MATH 1111 will not count as meeting the first collegiate mathematics course requirement for science, technology, engineering, or mathematics majors.

## **MATH 1112 College Trigonometry or MATH 1113 Precalculus or Calculus**

Students planning to major in science, technology, or mathematics should take MATH 1112 College Trigonometry, MATH 1113 Precalculus, or a higher mathematics course for their first college mathematics course.

### **Calculus**

Students planning to major in engineering or to attend the Georgia Institute of Technology should take Calculus I (or higher) for their first college mathematics course.

DE students whose recommended starting (Area A2) college mathematics courses are at the MATH 1111 level or above must meet specific placement requirements (see above) for their desired mathematics courses. If they do not initially meet those requirements, they should start by enrolling in the highest mathematics course they can place into, and then take more advanced mathematics courses in subsequent semesters.

The diagram on the next page summarizes the entry-level and subsequent mathematics recommendations for students planning on pursuing different majors. Complete recommendations for Area A2 mathematics may be found at:

<http://www.completecollegegeorgia.org/math-recommendations>.

<b>Who?</b>	All majors other than those listed to the right	Majors in social sciences and statistically-based disciplines	Majors that require calculus at some point in the sequence	Science, technology, & mathematics majors	Engineering majors and all Georgia Tech students
	<b>Start With</b>	<b>Start With</b>	<b>Start With</b>	<b>Start With</b>	<b>Start With</b>
<b>Area A2 Math course&gt;&gt;</b>	MATH 1001 - Quantitative Reasoning <b>OR</b> MATH 1101 – Introduction to Mathematical Modeling	MATH 1401/STAT 1401 Elementary Statistics	MATH 1111 - College Algebra	MATH 1113 - Precalculus or MATH 1112 - Trigonometry	Calculus (no common number)
<b>Next Math Course (Area D)</b>	Statistics	Advanced Statistics, Data Science, OR Computer Science	Statistics OR Precalculus>> > Calculus	Statistics OR Calculus	More Calculus

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