









8th Grade to Freshman Pathway



Geometry Bridge

- Counts as the geometry credit required for graduation
- Offered in multiple programs (CC, CT, DL, Trans)
- Incorporates pre-algebra skills required to be successful in Algebra 1
- Course progression: Geometry Bridge \rightarrow Algebra 1 \rightarrow Algebra 2 \rightarrow Elective
- 9th grade class
 - o Cannot drop from Geometry to Geometry Bridge
 - o Cannot drop from Algebra 1 to Geometry Bridge
 - o Cannot repeat the course if failed
 - Enroll into Algebra 1 → Geometry → Algebra 2 sequence
- If a student is new to the district, enroll in Algebra 1

Math Electives

Course	What is it about?	Who should take it?
Finite	Rigorous, application-based course, focused on mathematical analysis in the real world. Topics include matrices, probability, statistics, logic and discrete mathematics.	Students interested in social science, business, and finance
AP Statistics	Equivalent to a one-semester, introductory college course in statistics.	Students interested in management, marketing, health science, and the humanities.
Precalculus & AP Precalculus	Higher level algebra class to prepare students for calculus.	Students interested in science, technology, engineering or mathematics, or majors that require College Algebra.
AP Calculus AB	Equivalent to a first semester college calculus course devoted to topics in differential and integral calculus.	Students interested in science, technology, engineering or mathematics, or majors that require Calculus
AP Calculus BC	Equivalent to both first and second semester college calculus courses.	Students interested in science, technology, engineering or mathematics, or majors that require Calculus
AP Computer Science A	Fundamentals of programming and problem solving using the JAVA language.	Students interested in computer science or STEM fields.



College-Level Math Projected Readiness Criteria

Eleventh Grade Students Projected Ready for College-Level Math

All Illinois high school juniors should be assessed on their college readiness regarding mathematics after the first semester of the junior year.

A high school junior who has successfully <u>completed state math graduation requirements</u> and meets <u>at least two</u> of the following criteria is projected to be ready for college level coursework in mathematics when arriving at a postsecondary institution in Illinois. This determination is conditional based on enrollment in a senior year of math.

- B or better in Algebra 2
- C or better in a course higher than Algebra 2
- GPA ≥ 3.0
- Standardized Assessment: Math SAT or PSAT ≥ 530 or Math ACT > 22

Students who <u>are</u> projected ready should be advised to enroll in the next course of their chosen pathway, preferably an <u>Advanced Placement</u> or <u>dual credit math course</u>, during the senior year.



Grade 12 Dual-Credit Math Electives

Course	What is it about?	Who should take it?	Score
MTH 112* College Algebra	Study of more advanced algebraic theory and techniques required for the study of calculus.	12 th grade students who <u>are</u> college ready, and have an interest in science, technology, engineering, mathematics, or a major that requires College Algebra.	530-659
MTH 114* Trigonometry	The primary objective of this course is to prepare students for calculus and post-calculus courses.	12 th grade students who <u>are</u> college ready, and have an interest in science, technology, engineering, mathematics, or a major that requires College Algebra.	660+
MTH 120* Statistics	An introductory course to provide the student with a working knowledge of statistics in order to follow the statistics in the literature of his/her particular field.	12 th grade students who <u>are</u> college ready, and have an interest in social science or humanities	660+
MTH 126* Business Calculus	An introductory course in differential and integral calculus. A working, rather than a theoretical, knowledge of calculus concepts and applications is emphasized.	12 th grade students who <u>are</u> college ready, and have an interest in business, social science or life science.	660+
MTH 190* Calculus I	This is the first of three courses in the calculus sequence.	 12th grade students who <u>are</u> college ready, and have an interest in science, technology, engineering, mathematics, or a major that requires Calculus. 	
MTH 210* Calculus 2	This is the second of three courses in the calculus sequence.	<u>11th or 12th grade students who completed</u> <u>AP Calculus</u> , and have an interest in science, technology, engineering, mathematics, or a major that requires Calculus.	AP Calc AB 3+
MTH 230* Calculus 3	This is the third of three courses in the calculus sequence.	<u>11th or 12th grade students who completed</u> <u>AP Calculus</u> , and have an interest in science, technology, engineering, mathematics, or a major that requires Calculus.	AP Calc BC 4+



Transitional Math Electives

Eleventh Grade Students Projected NOT Ready for College-Level Math

Transitional math instruction provides students with the mathematical knowledge and skills to meet their individualized college and career goals and to be successful in college-level math courses.

A high school junior who has <u>successfully completed state math graduation requirements</u> but has not met at least two of the college-level math projected readiness criteria will be projected as NOT ready for college-level math and will be given transitional math opportunities in relation to their current math achievement and career interests. A student should consult with a teacher and/or advisor to determine the appropriate transitional math pathway.

Course	Who 12 th grade students who are NOT college ready, and	What is it about?	Minimum Criteria
Transition to STEM*	Interest in science, technology, engineering, or mathematics Or, a major that requires College Algebra.	Develops concepts of procedural algebra and graphical representations	 Completed high school graduation requirements and at least one: B or better in Algebra 1 Math GPA of 2.5 or higher Teacher verification of prerequisite competencies.
Transition to Quantitative Literacy	Interest in social science or humanities A major that does not require College Algebra Or, students who have not selected a career goal	Develops numeracy and basic algebra skills in contextual situations	Completed high school graduation requirements
Transition to Technical Math	Concurrently enrolled in a technical course	Develops numeracy in a variety of technical fields and applied situations	Completed high school graduation requirements

Successful completion with a grade of C or better guarantees placement into credit bearing math courses at any Illinois community college and select 4-year universities.



TRANSITIONAL MATH PATHWAYS