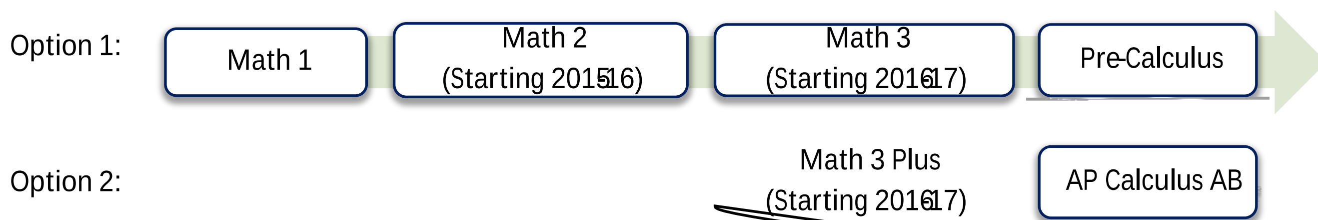
High School Integrated Pathway Courses

SCUSD has elected the integrated pathway of mathematics to implement the CCSS-M at the high school level, which will be phased in over a three-year period: Math 1 in 2014-15; Math 2 in 2015-16; and Math 3 in 2016-17.

The integrated pathway (Math 1, Math 2, and Math 3) is a sequence of courses that build upon the foundation established in elementary and middle school mathematics. These courses develop mathematics across multiple categories, including a blend of Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability concepts throughout all three courses.

High schools will offer two options for mathematics courses (see below). In Option 1, students take Math 1, Math 2, and Math 3, followed by Pre-Calculus (or other 4th course options, e.g. Statistics or EAP Math). In Option 2, students take Math 1, Math 2 Plus, and Math 3 Plus, followed by AP Calculus AB. Math 2 Plus and Math 3 Plus have the Pre-Calculus standards embedded within them, which prepares students to go directly to AP Calculus AB. Both options meet the University of California A tG requirements, and will prepare students for college and career opportunities upon graduation.

d Z ^‰oµ•_ ~=• •š v Œ • Œ itten]š]}v CCSS-M that prepare students for advanced math courses, like AP Calculus. Most of the pre-calculus standards are comprised of the (+) standards and they have been embedded into the Math 2 Plus and Math 3 Plus courses. The regular Math 2 and Math 3 courses also have some (+) standards within them, which all students will learn.



Other possible course options after Math 3:

- Statistics
- AP Statistics
- EAP Math (College Ready Math)

Function Types Addressed in Each Course

Math 1	Math 2	Math 2 Plus	Math 3	Math 3 Plus	Pre-Calculus
Linear Exponential	Linear Exponential Quadratic	Linear Exponential Quadratic	Linear Exponential Quadratic Polynomial Rational Radical Logarithmic Trigonometric	Linear Exponential Quadratic Polynomial Rational Radical Logarithmic Trigonometric Inverse	Linear Exponential Quadratic Polynomial Rational Radical Logarithmic Trigonometric Inverse

	Domains	Math 1	Math 2	Math 2 Plus	Math 3	Math 3 Plus	Pre-Calculus
Number and Quantity	The Complex Number System (*continued*)		Use complex numbers in polynomial identities and equations. *Quadratics with real coefficients* N.CN.7 (+)N.CN.8,9	Use complex numbers in polynomial identities and equations. *Quadratics with real coefficients* N.CN.7 (+)N.CN.8,9	Use complex numbers in polynomial identities and equations. *Polynomials with real coefficients; apply N.CN.9 to higher degree polynomials* (+)N.CN.8,9		

This table shows the domains and clusters in each course in the Integrated Pathway. The standards from each cluster are listed, including commentary on the focus or any limitations of the clusters (shown in italics).

LEGEND
Blue: (+) standards embedded in Math 2 Plus
Red: (+) standards embedded in Math 3 Plus

Domains	Math 1	Math 2	Math 2 Plus	Math 3	Math 3 Plus	Pre-Calculus
Building Functions (F.BF)	Build a function that models a relationship between two quantities. *For F.BF.1,2, linear and exponential (integer inputs)* F.BF.1a,1b,2	Build a function that models a relationship between two quantities. *Quadratic and exponential* F.BF.1a,1b	Build a function that models a relationship between two quantities. *Quadratic and exponential* F.BF.1a,1b	Build a function that models a relationship between two quantities. *Include all types of functions studied* F.BF.1b	Build a function that models a relationship between two quantities. *Include all types of functions studied* F.BF.1b (+)F.BF.1c	Build a function that models a relationship between two quantities. *All function types* (+)F.BF.1c

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LEGEND Blue: (+) standards embedded in Math 2 Plus
Red: (+) standards embedded in Math 3 Plus

Domains	Math 1	Math 2	Math 2 Plus	Math 3	Math 3 Plus	Pre-Calculus
Similarity, Right Triangles, and Trigonometry (G.SRT)		Understand similarity in terms of similarity transformations. G.SRT.1a,1b,2,3	Understand similarity in terms of similarity transformations. G.SRT.1a,1b,2,3			

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LEGEND Blue: (+) standards embedded in Math 2 Plus
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Domains	Math 1	Math 2	Math 2 Plus	Math 3	Math 3 Plus	Pre-Calculus

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LEGEND Blue: (+) standards embedded in Math 2 Plus
Red: (+) standards embedded in Math 3 Plus

	Domains	Math 1	Math 2	Math 2 Plus	Math 3	Math 3 Plus	Pre-Calculus
	Modeling with Geometry (G.MG)				Apply geometric concepts in modeling situations. G.MG.1,2,3	Apply geometric concepts in modeling situations. G.MG.1,2,3	

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LEGEND Blue: (+) standards embedded in Math 2 Plus
Red: (+) standards embedded in Math 3 Plus

	Domains	Math 1	Math 2	Math 2 Plus	Math 3	Math 3 Plus	Pre-Calculus
Statistics and Probability		Summarize, represent, and interpret data on a single count or measurement variable. S.ID.1,2,3					
	Interpreting Categorical and Quantitative Data (S.ID)	Summarize,					

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	Domains	Math 1	Math 2	Math 2 Plus	Math 3	Math 3 Plus	Pre-Calculus
Statistics and Probability	Conditional Probability and the Rules of Probability (S.CP)		Understand independence and conditional probability and use them to interpret data. *Link to data from simulations or experiments* S.CP.1,2,3,4,5 Use the rules of probability to compute probabilities of compound events in a uniform probability model. S.CP.6,7 (+)S.CP.8,9	Understand independence and conditional probability and use them to interpret data. *Link to data from simulations or experiments* S.CP.1,2,3,4,5 Use the rules of probability to compute probabilities of compound events in a uniform probability model. S.CP.6,7 (+)S.CP.8,9			
	Using Probability to Make Decisions (S.MD)		Use probability to evaluate outcomes of decisions. *Introductory; apply counting rules* (+)S.MD.6,7	Use probability to evaluate outcomes of decisions. *Introductory; apply counting rules* (+)S.MD.6,7	Use probability to evaluate outcomes of decisions. *Include more complex situations* (+)S.MD.6,7	Use probability to evaluate outcomes of decisions. *Include more complex situations* (+)S.MD.6,7	

This table shows the domains and clusters in each course in the Integrated Pathway. The standards from each cluster are listed, including commentary on the focus or any limitations of the clusters (shown in italics).

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Red: (+) standards embedded in Math 3 Plus