

Mathematics

Major Courses

Note: Math prerequisites vary greatly. Please check with Math faculty advisor to ensure you've met the prerequisites for series Math courses

2026-28 Course Mappings
To be used to show how previously taken quarter courses will count towards the 2026-28 Semester Catalog Requirements
Note: Not all 26-28 degree requirements are reflected on mappings. Check curriculum sheet for all requirements.

QUARTER COURSE	SEMESTER COURSE or MAPPING	NOTES	
MATH 141 Calculus I	➔	MATH 1261 Calculus I	
MATH 142 Calculus II	✗	No semester equivalent	Units applied to overall unit shortage.
MATH 143 Calculus III	➔	MATH 1262 Calculus II	Prereq for MATH 1262 is either MATH 141 & MATH 142 or MATH 141 and MATH 141B.
MATH 202 Orientation to Mathematics Major	➔	MATH 2001 Mathematics Orientation	
MATH 206 Linear Algebra I	➔	MATH 1151 Linear Algebra	
MATH 241 Calculus IV	➔	MATH 2263 Calculus III	
MATH 242 Differential Equations I	➔	MATH 2343 Differential Equations	
MATH 248 Methods of Proof in Mathematics	➔	MATH 2031 Transition to Advanced Mathematics	
MATH 306 Linear Algebra II	➔	MATH 3152 Advanced Linear Algebra	
MATH 334 Combinational Math	➔	MATH 3051 Combinatorics I	GE Upper Div 2/5
MATH 412 Introduction to Analysis I	➔	MATH 4264 Real Analysis I	Note: Students must take MATH 412 & MATH 413 in order to take MATH 4265
MATH 481 Abstract Algebra I	➔	MATH 4201 Abstract Algebra I	Note: Students must take MATH 481 & MATH 482 in order to take MATH 4202
CSC/CPE 101 Fundamentals of Computer Science	➔	CSC 1001 Fundamentals of Computer Science	
PHYS 141 General Physics I	➔	PHYS 1141 General Physics I	
PHYS 142 General Physics II OR PHYS 143 General Physics III	➔	Not required. PHYS 142 units apply to overall unit shortage PHYS 143 maps to PHYS 1143. Units will apply to List A electives	
Select from the following: MATH 459 Senior Project Seminar MATH 460 Senior Project Applied Seminar MATH 461 Senior Project I & MATH 462 Senior Project II	➔	Select from the following: MATH 4463 Senior Project Seminar MATH 4464 Senior Project Applied Seminar MATH 4461 Senior Project I & MATH 4462 Senior Project II	

MAJOR COURSES



Visit the BCSM semester conversion website for more information at csmadvising.calpoly.edu/semester-conversion



Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Math Concentration

General Curriculum

2026-28 Course Mappings
To be used to show how previously taken quarter courses will count towards the 2026-28 Semester Catalog Requirements
No concentration requirement

	QUARTER COURSE	SEMESTER COURSE or MAPPING	NOTES	
CONCENTRATION	STAT 301 Statistics I OR STAT 305 Introduction to Probability & Simulation	➔	STAT 1510 Statistics I OR STAT 2610 Introduction to Probability & Simulation	
	Choose 3 from the following tracks (one from the first 4)		Tracks no longer required. Courses selected from either List A, B, or C. Courses below indicate where mapping credit given	
	MATH 413 Introduction to Analysis II AND MATH 414 Introduction to Analysis III	➔	MATH 413 Units applied to List A MATH 4265 Real Analysis II (List A)	MATH 4265 major required course option (prereqs: MATH 412 & 413 or MATH 4264).
	MATH 482 Abstract Algebra II AND MATH 483 Abstract Algebra III OR MATH 406 Linear Algebra III	➔	MATH 482 Units applied to List A MATH 4202 Abstract Algebra II (List A)	MATH 4202 major required course option (prereqs: MATH 481 and MATH 482, or MATH 4201).
	MATH 406 Linear Algebra III AND MATH 413 Introduction to Analysis II OR MATH 440 Topology I	➔	MATH 406 Units Applied to List A MATH 413 Units Applied to List A OR MATH 4541 Introduction to Topology (List A)	
	MATH 482 Abstract Algebra II AND MATH 413 Introduction to Analysis II OR MATH 440 Topology I	➔	MATH 482 Units applied to List A MATH 413 Units applied to List A MATH 4541 Introduction to Topology (List A)	MATH 4202 major required course option (prereqs: MATH 481 & MATH 482, or MATH 4201)
	MATH 304 Vector Analysis AND MATH 404 Introduction to Differential Geometry	➔	MATH 304 Units applied to List A MATH 4531 Differential Geometry (List A)	
	MATH 335 Graph Theory AND MATH 435 Discrete Mathematics with Applications I	➔	MATH 3055 Graph Theory (List B) MATH 4052 Combinatorics II (List A)	
	MATH 344 Linear Analysis II AND MATH 416 Differential Equations II OR MATH 418 Partial Differential Equations	➔	MATH 3351 Differential Equations & Bound. Value Prob. (List A) MATH 4342 Nonlinear Dynamical Systems (List B) MATH 4352 Partial Differential Equations (List A)	
	MATH 341 Theory of Numbers AND MATH 437 Game Theory	➔	MATH 3111 Number Theory (major choice/List A) MATH 4911 Game Theory (List B)	
	MATH 410 Complex Analysis I AND MATH 411 Complex Analysis II	➔	MATH 3301 Complex Analysis (major choice/List A) MATH 411 Units applied to List A	



Visit the BCSM semester conversion website for more information at cla.calpoly.edu/semester-conversion



CAL POLY
 Student Services
 BAILEY COLLEGE OF
 SCIENCE & MATHEMATICS

Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Mathematics Concentration

General Curriculum

2026-28 Course Mappings
To be used to show how previously taken quarter courses
will count towards the 2026-28 Semester Catalog
Requirements
No concentration requirement

QUARTER COURSE	SEMESTER COURSE or MAPPING	NOTES
MATH 442 Euclidean Geometry AND MATH 443 Modern Geometries	MATH 3511 Euclidean Geometry (major choice/List A)	Units applied to List A
	MATH 4512 Non-Euclidean Geometry (major choice/List A)	
MATH 451 Numerical Analysis I AND MATH 452 Numerical Analysis II OR MATH 453 Numerical Optimization	MATH 3651 Introduction to Numerical Analysis (List A) MATH 4652 Numerical Differential Equations (List A or B) MATH 4653 Numerical Optimization (List A or B)	Units applied to List A or List B
APPROVED ELECTIVES Select from the following: CSC/CPE 202 CSC/CPE 203 CSC 349 CSC 365	APPROVED ELECTIVES Select from the following: CSC/CPE 2001-units applied to major area No semester equivalent-Units applied to List A CSC 3449 CSC 3665	
MATH 304 MATH 335 MATH 341 MATH 344 MATH 350 MATH 404	No semester equivalent-Units applied to List A MATH 3055 MATH 3111 MATH 3351 MATH 3681 MATH 4531	
MATH 406 MATH 410 MATH 411 MATH 413 MATH 414 MATH 416 MATH 418 MATH 419	No semester equivalent -Units applied to List A MATH 3301 No semester equivalent-Units applied to List A NO semester equivalent - Units applied to List A MATH 4265 MATH 4342 MATH 4352 MATH 3011	

GENERAL CURRICULUM CONCENTRATION



Visit the BCSM semester conversion website for more information at csmadvising.calpoly.edu/semester-conversion



CAL POLY
 Student Services
 BAILEY COLLEGE OF
 SCIENCE & MATHEMATICS

Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Mathematics Concentration

General Curriculum

2026-28 Course Mappings
 To be used to show how previously taken quarter courses will count towards the 2026-28 Semester Catalog Requirements

	QUARTER COURSE	SEMESTER COURSE or MAPPING	NOTES
GENERAL CURRICULUM CONCENTRATION	MATH 435	MATH 4052	
	MATH 437	MATH 4911	
	MATH 440	MATH 4541	
	MATH 442	MATH 3511	
	MATH 443	MATH 4512	
	MATH 451	MATH 3651	
	MATH 452	MATH 4652	
	MATH 453	MATH 4653	
	MATH 459	MATH 4463	
	MATH 460	MATH 4464	
	MATH 461	MATH 4461	
	MATH 470	MATH 4470	
	MATH 475	MATH 4981	
	MATH 476	MATH 4982	
	MATH 482	No semester equivalent -Units applied to List A	
	MATH 483	MATH 4202	
	MATH 531	No semester equivalent -Units applied to List A	
	MATH 541	MATH 5542	
	PHYS 142	No semester equivalent - Units applied to List A	
	PHYS 143	PHYS 1143	
	PHYS 211	PHYS 2211	
	PHYS 301	PHYS 3301	
	PHYS 305	PHYS 3305	
	PHYS 323	PHYS 3323	
	PHYS 405	PHYS 4405	
	PHYS 408	PHYS 4408	
	STAT 301	STAT 1510	
	STAT 302	STAT 3520	
STAT 305	STAT 2610		
STAT 425	STAT 4610		
STAT 426	STAT 4620		
STAT 427	No semester equivalent-Units applied to List A		



Visit the BCSM semester conversion website for more information at csmadvising.calpoly.edu/semester-conversion



CAL POLY
 Student Services
 BAILEY COLLEGE OF
 SCIENCE & MATHEMATICS

Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Mathematics Concentration

Mathematics Teaching Concentration

2026-28 Course Mappings
 To be used to show how previously taken quarter courses will count towards the 2026-28 Semester Catalog Requirements

	QUARTER COURSE	SEMESTER COURSE or MAPPING	NOTES
MATHEMATICS TEACHING CONCENTRATION	MATH 300 Technology in Mathematics Education	➔ MATH 3971 Technology in Mathematics Education	
	MATH 341 Theory of Numbers	➔ MATH 3111 Number Theory	
	MATH 419 Introduction to the History of Mathematics	➔ MATH 3011 History of Mathematics	
	MATH 423 Advanced Mathematics for Teaching	➔ MATH 4972 Advanced Mathematics for Teaching	
	MATH 442 Euclidean Geometry	➔ MATH 3511 Euclidean Geometry	
	MATH 443 Modern Geometries	➔ MATH 4512 Non-Euclidean Geometry	
	MATH 482 Abstract Algebra II	✗ No semester equivalent for partial credit of Algebra series	Units applied to List A
	SCM 300 Early Field Experience	➔ SCM 3300 Early Field Experience	
	STAT 301 Statistics I	➔ STAT 1510 Statistics I	
	STAT 302 Statistics II OR STAT 305 Intro to Probability and Simulation	➔ STAT 3520 Statistics II OR STAT 2610 Intro to Probability and Simulation	
	Select from the following: CSC/CPE 202 Data Structures STAT 301 Statistics I MATH 304 Vector Analysis MATH 335 Graph Theory MATH 344 Linear Analysis II MATH 350 Mathematical Software MATH 406 Linear Algebra III MATH 410 Complex Analysis I MATH 413 Intro to Analysis II MATH 416 Differential Equations II MATH 435 Discrete Mathematics with Applications I MATH 437 Game Theory MATH 440 Topology I MATH 451 Numerical Analysis I MATH 459 Senior Project Seminar	➔ Select from the following: CSC/CPE 2001 Data Structures (major area) Units applied to List A No semester equivalent Units applied to List A MATH 3055 Graph Theory MATH 3351 Diff. Equations & Boun. Value Problems MATH 3681 Mathematical Programming No semester equivalent - Units applied to List A MATH 3301 Complex Analysis No semester equivalent - Units applied to List A MATH 4342 Nonlinear Dynamical Systems MATH 4052 Combinatorics II MATH 4911 Game Theory MATH 4541 Intro to Topology MATH 3651 Intro to Numerical Analysis MATH 4463 Senior Project Seminar	



Visit the BCSM semester conversion website for more information at bcsm.calpoly.edu/semester-conversion




Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Mathematics Concentration

Mathematics Teaching Concentration

2022 - 2026 Catalog Requirements

Page 6/10

	QUARTER COURSE	SEMESTER COURSE	NOTES	
MATHEMATICS TEACHING CONCENTRATION	Select from the following: MATH 460 Senior Project Applied Seminar MATH 461 Senior Project I MATH 462 Senior Project II MATH 470 Selected Advanced Topics MATH 483 Abstract Algebra III PHYS 142 General Physics II PHYS 143 General Physics III PHYS 305 Classical Mechanics I STAT 425 Probability Theory		Select from the following: MATH 4464 Senior Project Applied Seminar MATH 4461 Senior Project I MATH 4462 Senior Project II MATH 4470 Special Advanced Topics MATH 4202 Abstract Algebra II PHYS 142 No semester equivalent-Units applied to List A PHYS 1143 General Physics III PHYS 3305 Classical Mechanics I STAT 4610 Probability Theory	



Visit the BCSM semester conversion website for more information at bcm.calpoly.edu/semester-conversion



CAL POLY
 Student Services
 BAILEY COLLEGE OF
 SCIENCE & MATHEMATICS

Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Mathematics Concentration

Pure Mathematics

2026-28 Course Mappings
 To be used to show how previously taken quarter courses will count towards the 2026-28 Semester Catalog Requirements

QUARTER COURSE		SEMESTER COURSE	NOTES
MATH 410 Complex Analysis I	➔	MATH 3301 Complex Analysis	
MATH 413 Introduction to Analysis II	✗	No semester equivalent for partial credit of Analysis series	Units applied to List A
MATH 440 Topology I	➔	MATH 4541 Introduction to Topology	
MATH 482 Abstract Algebra II	✗	No semester equivalent for partial credit of Abstract Algebra series	Units applied to List A
Select from the following: MATH 406 Linear Algebra III MATH 411 Complex Analysis II MATH 414 Introduction to Analysis III MATH 435 Discrete Mathematics with Applications I MATH 483 Abstract Algebra III	➔	Select from the following: No semester equivalent -Units applied to List A No semester equivalent -Units applied to List A MATH 4265 Real Analysis II MATH 4052 Combinatorics II MATH 4202 Abstract Algebra II	
Select from the following: MATH 350 Mathematical Software STAT 301 Statistics I STAT 305 Intro to Probability and Simulation	➔	Select from the following: MATH 3681 Mathematical Programming STAT 1510 Statistics I STAT 2610 Intro to Probability and Simulation	
Select from the following: MATH 304 Vector Analysis MATH 335 Graph Theory MATH 341 Theory of Numbers MATH 344 Linear Analysis II MATH 350 Mathematical Software MATH 404 Intro to Differential Geometry MATH 406 Linear Algebra III MATH 411 Complex Analysis II MATH 414 Introduction to Analysis III MATH 416 Differential Equations II MATH 418 Partial Differential Equations MATH 435 Discrete Mathematics with Applications I MATH 437 Game Theory MATH 451 Numerical Analysis I MATH 452 Numerical Analysis II MATH 453 Numerical Optimization MATH 459/460/461/462 Senior Project MATH 470 Selected Advanced Topics MATH 475 Advanced Topics in Mathematics MATH 483 Abstract Algebra III MATH 531 Discrete Mathematics with Applications II MATH 541 Topology II STAT 425 Probability Theory	➔	Select from the following: No semester equivalent-Units applied to List A MATH 3055 Graph Theory MATH 3111 Number Theory MATH 3351 Diff. Equations & Bound. Value Prob. MATH 3681 Mathematical Programming MATH 4531 Differential Geometry No semester equivalent -Units applied to List A No semester equivalent -Units applied to List A MATH 4265 Real Analysis II MATH 4342 Nonlinear Dynamical Systems MATH 4352 Partial Differential Equations MATH 4052 Combinatorics II MATH 4911 Game Theory MATH 3651 Intro to Numerical Analysis MATH 4652 Numerical Differential Equations MATH 4653 Numerical Optimization MATH 459/460/461/462 Senior Project MATH 4470 Special Advanced Topics MATH 4981 Advanced Topics in Mathematics MATH 4202 Abstract Algebra II No semester equivalent - Units applied to List A MATH 5542 Topology STAT 4610 Probability Theory	

PURE MATHEMATICS CONCENTRATION



Visit the BCSM semester conversion website for more information at bcsm.calpoly.edu/semester-conversion



Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Mathematics Concentration

Applied Mathematics

2026-28 Course Mappings
 To be used to show how previously taken quarter courses will count towards the 2026-28 Semester Catalog Requirements

APPLIED MATHEMATICS CONCENTRATION		QUARTER COURSE	SEMESTER COURSE	NOTES
		MATH 304 Vector Analysis	No semester equivalent	Units applied to List A
		MATH 344 Linear Analysis II	MATH 3351 Differential Equations & Boundary Value Problems	
		MATH 350 Mathematical Software OR CSC/CPE 202 Data Structures	MATH 3681 Mathematical Programming OR CSC/CPE 2001 Data Structures (units applied to major area)	
		MATH 410 Complex Analysis I	MATH 3301 Complex Analysis	
		MATH 413 Introduction to Analysis II	No semester equivalent	Units applied to List A
		MATH 416 Differential Equations II OR MATH 418 Partial Differential Equations	MATH 4342 Nonlinear Dynamical Systems OR MATH 4352 Partial Differential Equations	
		MATH 451 Numerical Analysis I	MATH 3651 Intro to Numerical Analysis	
		STAT 301 Statistics I OR STAT 305 Introduction to Probability and Simulation	STAT 1510 Statistics I OR STAT 2610 Introduction to Probability & Simulation (units applied to major area)	
		Select courses from the following tracks: TRACK A:	Select courses from the following tracks: TRACK A:	
		MATH 335	MATH 3055	
		MATH 341	MATH 3111	
		MATH 406	No semester equivalent-Units applied to List A	
		MATH 411	No semester equivalent-Units applied to List A	
		MATH 414	MATH 4265	
		MATH 416	MATH 4342	
		MATH 418	MATH 4352	
		MATH 435	MATH 4052	
		MATH 437	MATH 4911	
		MATH 452	MATH 4652	
		MATH 453	MATH 4653	
		MATH 460	MATH 4464	
		MATH 461	MATH 4461	
		MATH 462	MATH 4462	
		MATH 476	MATH 4982	
		MATH 482	No semester equivalent-Units applied to List A	
		MATH 483	MATH 4202	



Visit the BCSM semester conversion website for more information at bcsm.calpoly.edu/semester-conversion



Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Mathematics Concentration

Applied Mathematics

2026-28 Course Mappings
 To be used to show how previously taken quarter courses will count towards the 2026-28 Semester Catalog Requirements

	QUARTER COURSE	SEMESTER COURSE	NOTES
APPLIED MATHEMATICS CONCENTRATION	TRACK B: DATA 301 DATA 401 MATH 335 DATA 403 MATH 453 MATH 435	TRACK B: DATA 3301 DATA 4401 MATH 3055 No semester equivalent-Units applied to List A MATH 4653 MATH 4052	
	APPROVED ELECTIVES Choose 3 courses from one of the following categories:	APPROVED ELECTIVES Choose 3 courses from one of the following categories:	
	PHYSICS ASTR 301 ASTR 302 ASTR 326 PHYS 142 PHYS 143 PHYS 211 PHYS 301 PHYS 305 PHYS 306 PHYS 313 PHYS 314 PHYS 318 PHYS 323 PHYS 345 PHYS 405 PHYS 408 PHYS 425 PHYS 428	PHYSICS ASTR 3301 No semester equivalent -Units applied to List A ASTR 3302 No semester equivalent -Units applied to List A PHYS 1143 PHYS 2111 PHYS 3301 PHYS 3305 PHYS 3306 No semester equivalent -Units applied to List A PHYS 3314 No semester equivalent -Units applied to List A PHYS 3323 PHYS 3345 PHYS 4405 PHYS 4408 PHYS 4425 PHYS 4428	
	STATISTICS STAT 302 STAT 305 STAT 323 STAT 330 STAT 331 STAT 334 STAT 416 STAT 417 STAT 418 STAT 419 STAT 421 STAT 423 STAT 425 STAT 426 STAT 427	STATISTICS STAT 3520 STAT 2610 STAT 3540 STAT 3800 STAT 1810 STAT 3530 STAT 4760 STAT 4770 STAT 4780 STAT 4790 No semester equivalent-Units applied to List A No semester equivalent -Units applied to List A STAT 4610 STAT 4620 No semester equivalent - Units applied to List A	



Visit the BCSM semester conversion website for more information at bcsm.calpoly.edu/semester-conversion



CAL POLY
 Student Services
 BAILEY COLLEGE OF
 SCIENCE & MATHEMATICS

Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate

Mathematics Concentration

Applied Mathematics

2026-28 Course Mappings
 To be used to show how previously taken quarter courses will count towards the 2026-28 Semester Catalog Requirements

		QUARTER COURSE	SEMESTER COURSE	NOTES
APPLIED MATHEMATICS CONCENTRATION	APPROVED ELECTIVES	Choose 3 courses from one of the following categories:	Choose 3 courses from one of the following categories:	
	COMPUTER SCIENCE		COMPUTER SCIENCE	
	CSC 202		CSC 2001	
	CSC 203		No semester equivalent-Units applied to List A	
	CSC 225		CSC 2300	
	CPE 345		CPE 3345	
	CSC 349		CSC 3449	
	CSC 357		CSC 2050	
	CSC 365		CSC 3665	
CSC 448		CSC 4448		
MECHANICAL ENGINEERING		MECHANICAL ENGINEERING		
ME 211		ME 2210		
ME 302		No semester equivalent -Units applied to List A		
ME 341		ME 3341		
ME 212		ME 2212		
ME 326		ME 3313		
ECONOMICS		ECONOMICS		
ECON 311		ECON 3030		
ECON 312		ECON 3050		
ECON 313		ECON 3040		
ECON 403		ECON 4031		



Visit the BCSM semester conversion website for more information at bcsm.calpoly.edu/semester-conversion



CAL POLY
 Student Services
 BAILEY COLLEGE OF
 SCIENCE & MATHEMATICS

Make sure to check your Degree Progress Report and Degree Planner to see if you have enough units to graduate