US Cultural Pluralism Met

Cal Poly, Higher Ed., and Major GPA at least 2.00

60 Units Upper-Division Met Taken/Remaining

Upper-Division GE Met Taken/Remaining

C- or higher in A1, A2, A3, and B4

Residency Requirements Met

NAME ______STUDENT ID _____CONCENTRATION

MINOR

GWR Met

Free Electives Met

LEARN BY DOING	CAL	POLY

.....

NOTE: This is a snapshot of the curriculum as originally published in the catalog. The Degree Progress Report (DPR) reflects updates to the published catalog. The DPR will be used to award your degree and calculate your EAP.

MAJOR COURSES (105-117)	Units	Grade	Grd Pts	GENERAL EDUCATION (GE)	60
MATH 141 Calculus I (B4) ¹	4			72 units required, 12 of which are specified in Major and/or Supp	ort
MATH 142 Calculus II (B Elective) ¹	4			Minimum of 12 units required at the 300 level.	
MATH 143 Calculus III	4			Area A English Language Comm and Critical Thinking	12
MATH 202 Orientation to Math Major	1			A1 Oral Communication	4
MATH 206 Linear Algebra I	4			A2 Written Communication	4
MATH 241 Calculus IV	4			A3 Critical Thinking	4
MATH 242 Differential Equations I	4			Area B Scientific Inquiry & Quantitative Reasoning	- 1
MATH 248 Methods of Proof in Mathematics	4			B1 Physical Science (4 units in Major) 1	
MATH 306 Linear Algebra II	4			B2 Life Science	4
MATH 336 Combinatorial Math	4			B3 Laboratory Activity (in Major)	
MATH 412 Introduction to Analysis I	4			B4 Math/Quantitative Reasoning (4 units in Major) 1	
Select from the following: ²	4			Upper-Division B	4
MATH 459, 460, or 461&462				Area C Arts and Humanities	10
MATH 481 Abstract Algebra I	4			Lower-division Area C courses must come from 3 different subject prefixes	
CSC/CPE 101 Fund. of Comp. Sci.	4			C1 Arts ⁴	4
PHYS 141 General Physics IA	4			C2 Humanities ⁴	
PHYS 132 or PHYS 133 (B1&B3) ¹	4			Lower-Division C Elective: C1 or C2 ⁴	4
General Curriculum <i>or</i> Concentration ² (see reverse)	44/56/4	18/48 ³		Upper-Division C	4
				Area D Social Sciences	10
				D1 American Instit. (Title 5/40404)	4
				Courses in D2 must come from two different subject prefixes	
				D2 Lower-Division D ⁵	
				D2 Lower-Division D ⁵	
				Upper-Division D	4
				Area E Lifelong Learning and Self-Development	-
				Lower-Division E	4
				GE Electives in Areas C or D	4
				Select a course from Area C or D; may be lower- or upper- division	
				GE Elective (GE Area C or D)	4
				GE Elective (4 units of Area B in Major) 1	
				FREE ELECTIVES 15/3	/11/11

[] YES [] NO

YES [] NO

]YES []NO

[] YES [] NO

[] YES [] NO

[]YES []NO

[]YES []NO

[] YES [] NO

Required in Major; also satisfies General Education (GE) requirement.

² Math 460 is recommended for students in the Applied Concentration.

³ General Curriculum, Applied Concentration, Mathematics Teaching Concentration, or Pure Concentration

⁴ C1, C2 and C elective must come from three different subject prefixes.

⁵ Second D2 must be a different subject prefix from the first D2.

or MATHEMATICS CONCENTRATIONS	APPLIED MATHEMATICS CONCENTRATION MATH 304 Vector Analysis		
GENERAL CURRICULUM			
This is the default curriculum for students who do not	MATH 350 or CSC/CPE 202 4 MATH 408 Complex Analysis I. 4 MATH 413 Introduction to Analysis II 4		
declare a concentration.			
STAT 301 or STAT 305 or STAT 4254			
Tracks ⁴ 24	MATH 416 <i>or</i> MATH 418		
Choose three tracks from the following list, with at	MATH 451 Numerical Analysis I		
least one track chosen from the first four tracks listed.	Tracks ^{7,8}		
A track consists of two paired courses representing			
depth of study with a particular focus.	Select courses from one of the following tracks:		
1. MATH 413 and 414	Track A:		
2. MATH 482 and (483 or 406)	MATH 335, 406, 409, 414, 416, 418, 437, 452, 453,		
3. MATH 406 and (413 or 440)	460, 461&462, 476 Track B ^{7,8} : DATA 301, 401; MATH 335 or 453 Approved Electives ^{5,9}		
4. MATH 482 and (413 <i>or</i> 440)			
5. MATH 304 and 404			
6. MATH 335 and 435			
7. MATH 344 and (416 or 418)	Select 12 units from one of the following five		
8. MATH 350 and (341 or 344)	categories, with at least one course at the 300 or		
9. MATH 408 and 409	400 level. ⁸		
10. MATH 437 and 453	Physics Category:		
11. MATH 442 and 443	ASTR 301, 302, 326;		
12. MATH 451 and 452	PHYS 132 or 133, 211, 301, 302, 303, 318, 322,		
	323, 405, 408, 412, 417		
Approved Electives ⁵	Statistics Category:		
MATH 304, 335, 341, 344, 350, 404, 406, 408,			
409, 413, 414, 416, 418, 419, 435, 437, 440, 442,	STAT 302, 305, 323, 330, 331, 334, 416, 417, 418, 419, 421, 423, 425, 426, 427		
443, 451, 452, 453, 459 or 460, 461&462, 470,			
475 ⁶ , 476 ⁶ , 482, 483;	Computer Science Category:		
CSC/CPE 202, 203; CSC 349; PHYS 132 or 133,	CSC/CPE 202, 203, 357; CSC 225, 349, 448		
211, 301, 302, 322, 323, 405, 408;	Mechanical Engineering Category:		
STAT 301, 302, 305, 425, 426, 427	ME 211, 212, 302, 326, 341		
	Economics Category:		
44	ECON 311, 312, 313, 403, 408, 409		
PURE MATHEMATICS CONCENTRATION			
MATH 408 Complex Analysis I			
MATH 413 Introduction to Analysis II	MATHEMATICS TEACHING CONCENTRATION		
MATH 440 Topology I4	MATH 300 Technology in Math Educ		
MATH 482 Abstract Algebra II	MATH 341 Theory of Numbers		
Select 3 courses from the following:	MATH 419 Intro to the History of Math		
MATH 406, 409, 414, 435, 483	MATH 423 Adv Mathematics for Teaching		
Select from the following:	MATH 442 Euclidean Geometry		
MATH 350;			
STAT 301 or STAT 305 or STAT 425	MATH 482 Abstract Algebra II		
Select 16 units from the following:	SCM 300 ¹⁰ Early Field Experience		
MATH 304, 335, 341, 344, 350, 404, 406, 409,	STAT 301 Statistics I		
414, 416, 418, 435, 437, 451, 452, 453, 459 or	STAT 302 or STAT 305 or STAT 425		
460, 461&462, 470, 475, 483	Select from the following:		
48	CSC/ CPE 202;		
	MATH 304, 335, 344, 406, 408, 413, 416, 435, 437,		
	440, 451, 459 or 460, 461&462, 470;		
A single course cannot be used to satisfy multiple tracks.	PHYS 132 or 133, 302		

⁴A single course cannot be used to satisfy multiple tracks.

GENERAL CURRICULUM IN MATHEMATICS

⁵ Consultation with advisor is recommended prior to selecting electives; bear in mind that selections may impact pursuit of post-baccalaureate studies and/or goals.

⁶Maximum 8 units combined between MATH 475 and 476.

⁷Only students in the Applied Mathematics concentration who are pursuing a Data Science minor should select Track B. To meet pre-requisites they should aslo take STAT 302, 331, and 419 as their Approved Electives.

⁸ Students who select Track B should select the Statistics Category for their Approved Electives.

⁹ Other choices are also possible and should be pre-approved on a substitution petition in consultation with an academic advisor. Approved Electives are to be taken outsde of the Mathematics department and should have significant applications to mathematics.

 $^{^{10}\}mathrm{SCM}$ 300 requires 45 hours of observations at local schools. Students should plan their schedules to have a four-hour block free druing elementry school hours each week.