NAME
STUDENT ID
CONCENTRATION
MINOR
Cal Poly, Higher Ed., and Major GPA at least 2.00 [ ] YES [ ] NO

US Cultural Pluralism Met
60 Units Upper-Division Met Taken/Remaining GWR Met
Upper-Division GE Met Taken/Remaining Free Electives Met
C- or higher in A1, A2, A3, and B4
Residency Requirements Met


4

## 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.

| Note: No Major or Concentration courses may be selected as credit/no credit. |  |  |  |
| :---: | :---: | :---: | :---: |
| MAJOR COURSES (105-117) | Units | Grade | Grd Pts |
| MATH 141 Calculus I (B4) ${ }^{1}$ | 4 |  |  |
| MATH 142 Calculus II (B Elective) ${ }^{1}$ | 4 |  |  |
| MATH 143 Calculus III | 4 |  |  |
| MATH 202 Orientation to Math Major | 1 |  |  |
| MATH 206 Linear Algebra I | 4 |  |  |
| MATH 241 Calculus IV | 4 |  |  |
| MATH 242 Differential Equations I | 4 |  |  |
| MATH 248 Methods of Proof in Mathematics | 4 |  |  |
| MATH 306 Linear Algebra II | 4 |  |  |
| MATH 336 Combinatorial Math | 4 |  |  |
| MATH 412 Introduction to Analysis I | 4 |  |  |
| Select from the following: ${ }^{2}$ MATH 459,460 , or $461 \& 462$ | 4 |  |  |
| MATH 481 Abstract Algebra I | 4 |  |  |
| CSC/CPE 101 Fund. of Comp. Sci. | 4 |  |  |
| PHYS 141 General Physics IA | 4 |  |  |
| PHYS 132 or PHYS 133 (B1\&B3) ${ }^{1}$ | 4 |  |  |
| General Curriculum or Concentration ${ }^{2}$ (see reverse) | 44/56/48/48 ${ }^{3}$ |  |  |
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GENERAL EDUCATION (GE)
72 units required, 12 of which are specified in Major and/or Support Minimum of $\mathbf{1 2}$ units required at the $\mathbf{3 0 0}$ level.

## Area A English Language Comm and Critical Thinking

A1 Oral Communication
.4
A2 Written Communication 4
A3 Critical Thinking
4

Area B Scientific Inquiry \& Quantitative Reasoning
B1 Physical Science (4 units in Major) ${ }^{1}$
B2 Life Science 4

B3 Laboratory Activity (in Major)
B4 Math/Quantitative Reasoning (4 units in Major) ${ }^{1}$... Upper-Division B.
Area C Arts and Humanities
Lower-division Area C courses must come from 3 different subject prefixes
C1 $\mathrm{Arts}^{4}$.
4
C2 Humanities ${ }^{4}$
4
Lower-Division C Elective: C 1 or $\mathrm{C} 2{ }^{4}$ 4

Upper-Division C
Area D Social Sciences
D1 American Instit. (Title 5/40404).
4
Courses in D2 must come from two different subject prefixes
D2 Lower-Division D ${ }^{5}$......................................... 4
D2 Lower-Division D ${ }^{5}$........................................................ 4
Upper-Division D


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) ${ }^{1}$
5/3/11/11 ${ }^{3}$
${ }^{1}$ 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
${ }^{4} \mathrm{C} 1, \mathrm{C} 2$ and C elective must come from three different subject prefixes.
${ }^{5}$ Second D2 must be a different subject prefix from the first D2.

## GENERAL CURRICULUM IN MATHEMATICS or MATHEMATICS CONCENTRATIONS

GENERAL CURRICULUMThis is the default curriculum for students who do notdeclare a concentration.
STAT 301 or STAT 305 or STAT 425 ..... 4
Tracks ${ }^{4}$ ..... 24
Choose three tracks from the following list, with atleast one track chosen from the first four tracks listed.A track consists of two paired courses representing
depth of study with a particular focus.

1. MATH 413 and 414
2. MATH 482 and ( 483 or 406)
3. MATH 406 and (413 or 440)
4. MATH 482 and ( 413 or 440 )
5. MATH 304 and 404
6. MATH 335 and 435
7. MATH 344 and ( 416 or 418)
8. MATH 350 and ( 341 or 344 )
9. MATH 408 and 409
10. MATH 437 and 453
11. MATH 442 and 443
12. MATH 451 and 452
Approved Electives ${ }^{5}$ ..... 16
Select 16 units from the following electives.
MATH 304, 335, 341, 344, 350, 404, 406, 408,$409,413,414,416,418,419,435,437,440,442$,$443,451,452,453,459$ or $460,461 \& 462,470$,$475^{6}, 476^{6}, 482,483$;
CSC/CPE 202, 203; CSC 349; PHYS 132 or 133,211, 301, 302, 322, 323, 405, 408;
STAT 301, 302, 305, 425, 426, 42744
PURE MATHEMATICS CONCENTRATION
MATH 408 Complex Analysis I ..... 4
MATH 413 Introduction to Analysis II ..... 4
MATH 440 Topology I ..... 4
MATH 482 Abstract Algebra II ..... 4
Select 3 courses from the following: ..... 12
MATH 406, 409, 414, 435, 483
Select from the following: ..... 4
MATH 350;
STAT 301 or STAT 305 or STAT 425
Select 16 units from the following: ..... 16
MATH 304, 335, 341, 344, 350, 404, 406, 409,414, 416, 418, 435, 437, 451, 452, 453, 459 or460, 461\&462, 470, 475, 483
48

[^0]APPLIED MATHEMATICS CONCENTRATION
MATH 304 Vector Analysis ..... 4
MATH 344 Linear Analysis II ..... 4
MATH 350 or CSC/CPE 202 ..... 4
MATH 408 Complex Analysis I. ..... 4
MATH 413 Introduction to Analysis II ..... 4
MATH 416 or MATH 418. ..... 4
MATH 451 Numerical Analysis I ..... 4
STAT 301 or STAT 305 or STAT 425. ..... 4
Tracks ${ }^{7,8}$ ..... 12
Select courses from one of the following tracks:
Track A:
MATH 335, 406, 409, 414, 416, 418, 437, 452, 453,
460, 461\&462, 476
Track B ${ }^{7,8}$ :
DATA 301, 401; MATH 335 or 453
Approved Electives ${ }^{5,9}$ ..... 12
Select 12 units from one of the following fivecategories, with at least one course at the 300 or
400 level. ${ }^{8}$
Physics Category:
ASTR 301, 302, 326;
PHYS 132 or $133,211,301,302,303,318,322$,323, 405, 408, 412, 417
Statistics Category:
STAT 302, 305, 323, 330, 331, 334, 416,
417, 418, 419, 421, 423, 425, 426, 427
Computer Science Category:
CSC/CPE 202, 203, 357; CSC 225, 349, 448
Mechanical Engineering Category:
ME 211, 212, 302, 326, 341
Economics Category:
ECON 311, 312, 313, 403, 408, 409
MATHEMATICS TEACHING CONCENTRATION
MATH 300 Technology in Math Educ ..... 4
MATH 341 Theory of Numbers ..... 4
MATH 419 Intro to the History of Math .....  .4
MATH 423 Adv Mathematics for Teaching ..... 4
MATH 442 Euclidean Geometry ..... 4
MATH 443 Modern Geometries ..... 4
MATH 482 Abstract Algebra II ..... 4
SCM $300^{10}$ Early Field Experience ..... 4
STAT 301 Statistics I ..... 4
STAT 302 or STAT 305 or STAT 425 ..... 4
Select from the following: .....  8
CSC/ CPE 202; MATH 304, 335, 344, 406, 408, 413, 416, 435, 437, 440, 451, 459 or $460,461 \& 462,470$;
PHYS 132 or 133, 302
48
${ }^{9}$ Other choices are also possible and should be pre-approved on asubstitution 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.
${ }^{10}$ 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.


[^0]:    ${ }^{4}$ A single course cannot be used to satisfy multiple tracks.
    ${ }^{5}$ Consultation with advisor is recommended prior to selecting electives; bear in mind that selections may impact pursuit of post-baccalaureate studies and/or goals.
    ${ }^{6}$ Maximum 8 units combined between MATH 475 and 476.
    ${ }^{7}$ Only 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.

