



California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) MATHEMATICS
Subplan/Option Applied Mathematics/Statistics

Catalog Year 2012-2013
Minimum Units Required 180

Name _____
Student ID _____

TGA _____
GWT Satisfied Yes No

| Required Core Courses | | |
|----------------------------------|---------|-----------|
| Course | | Units |
| Intro to C++ | CS 128 | 4 |
| Analytic Geometry & Calculus III | MAT 116 | 4 |
| Intro to Numerical Methods | MAT 201 | 4 |
| Intro Linear Algebra | MAT 208 | 4 |
| Calculus of Sev Variables I | MAT 214 | 3 |
| Calculus of Sev Variables II | MAT 215 | 3 |
| Differential Equations | MAT 216 | 4 |
| Basic Set Theory & Logic | MAT 310 | 4 |
| Intermediate Analysis I | MAT 314 | 4 |
| Intermediate Analysis II | MAT 315 | 4 |
| Modern Algebra I | MAT 417 | 4 |
| Modern Algebra II | MAT 418 | 4 |
| Complex Variables | MAT 428 | 4 |
| Applied Prob Theory | STA 241 | 4 |
| Applied Statistics | STA 341 | 4 |
| Total Units | | 58 |

| Required Subplan/Option Core Courses | | |
|--|---------|-----------|
| Course | | Units |
| <i>Choose 6 courses from the following List.</i> | | |
| | | 24 |
| Graph Theory | MAT 370 | (4) |
| Math of Operations Research | MAT 380 | (4) |
| Math of Operations Research | MAT 381 | (4) |
| Numerical Analysis | MAT 401 | (4) |
| Numerical Methods | MAT 402 | (4) |
| Differential Equations | MAT 431 | (4) |
| Differential Equations | MAT 432 | (4) |
| Combinatorics | MAT 470 | (4) |
| Mathematical Programming | MAT 480 | (4) |
| Math Modeling | MAT 485 | (4) |
| Math Modeling | MAT 486 | (4) |
| Sampling Theory and Applications | STA 310 | (4) |
| Nonparametric Statistics | STA 420 | (4) |
| Applied Survival Analysis | STA 425 | (4) |
| Stochastic Processes | STA 430 | (4) |
| Applied Regression Analysis | STA 432 | (4) |
| ANOVA & Design of Experiments | STA 435 | (4) |
| Mathematical Statistics I | STA 440 | (4) |
| Mathematical Statistics II | STA 441 | (4) |
| Special Topics | STA 499 | (1-4) |
| Total Units | | 24 |

| Required Support Courses | | |
|--------------------------------------|--------------|-----------|
| Course | | Units |
| Freshman Composition (A2) | ENG 104 | 4 |
| Analytic Geometry & Calculus I (B4) | MAT 114 | 4 |
| Analytic Geometry & Calculus II (B4) | MAT 115 | 4 |
| General Physics (B1, B3) | PHY 131/131L | 3/1 |
| General Physics | PHY 132/132L | 3/1 |
| General Physics | PHY 133/133L | 3/1 |
| Total Units | | 24 |

| Unrestricted Electives | |
|---|-------------|
| Course | Units |
| Unrestricted Electives | 6-18 |
| Select a sufficient number of courses so that the total from "Required Support," "GE," and "Unrestricted Electives" is at least 98 units. | |
| Total Units | 6-18 |

| General Education Requirements | |
|---|-----------|
| Area | Units |
| Area A Communication & Critical Thinking | 12 |
| 1 Oral Communication | |
| 2 Written Communication | |
| 3 Critical Thinking | |
| Area B Mathematics & Natural Sciences | 16 |
| <i>Select at least one lab course from sub-area 1 or 2.</i> | |
| 1 Physical Science | |
| 2 Biological Science | |
| 3 Laboratory Activity | |
| 4 Math/Quantitative Reasoning | |
| 5 Science & Technology Synthesis | |
| Area C Humanities | 16 |
| 1 Visual and Performing Arts | |
| 2 Philosophy and Civilization | |
| 3 Literature and Foreign Language | |
| 4 Humanities Synthesis | |
| Area D Social Sciences | 20 |
| 1 U.S. History, Constitution, American Ideals | |
| 2 History, Economics and Political Science | |
| 3 Sociology, Anthropology, Ethnic & Gender Studies | |
| 4 Social Science Synthesis | |
| Area E Lifelong Understanding & Self Development | 4 |
| Total Units | 68 |

| American Institutions | Units |
|---|-------|
| Courses that satisfy this requirement may also satisfy G.E. Area D1 | 8 |

| American Cultural Perspectives Requirement | Units |
|---|-------|
| Refer to catalog for list of courses that satisfy this requirements. Course may also satisfy major, minor, GE, or unrestricted elective requirements. | 4 |

| The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet. | | |
|---|--------------|---------|
| Course | | GE Area |
| Freshman Composition | ENG 104 | A2 |
| General Physics | PHY 131/131L | B1, B3 |
| Analytic Geometry and Calculus I | MAT 114 | B4 |
| or Analytic Geometry and Calculus II | MAT 115 | (B4) |
| The remaining GE requirements may be satisfied by any course approved for that area. | | |

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.