# Bachelor of Science in Mathematics Option in Applied Mathematics (Suboption II: Application in Economics and Finance) Four Year Degree Worksheet 2017-2018 Catalog 

This degree worksheet is intended to help you develop a balanced course schedule while completing your degree within 4 years. The same sequence of courses (with fewer courses each semester) is also recommended for students completing their degree in 5 or 6 years. This worksheet is not intended to replace academic advising with your assigned advisor. Students should consult with their assigned advisor to determine the appropriate sequence of required courses and electives based on their academic goals.

CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification.

## Year 1

| 1 | Cemester | Course \# | MATH 122 | Calculus I (4) |
| :---: | :--- | :--- | :--- | :--- | Prerequisites $\quad$ Notes

## Year 2

| Semester | Course \# | Course Title (Units) | Prerequisites | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 3 | MATH 224 | Calculus III (4) | MATH 123 |  |
|  | ECON 101 | Principles of Microeconomics (3) |  |  |
|  | CECS 174 | Intro Programming and Problems Solving (3) |  |  |
|  | GE (area C,D,E) | Other Explorations (3) |  |  |
|  | Elective | Elective (3) |  |  |
| 4 | MATH 247 | Introduction to Linear Algebra (3) | MATH 123 |  |
|  | MATH 380 | Probability and Statistics (3) | MATH 224 |  |
|  | ECON 310; <br> OR <br> FIN 300 | Microeconomic Theory (3); <br> OR <br> Business Finance (3) | ECON 100 and 101, MATH 115 or 119A or 122; <br> OR <br> none |  |
|  | GE (area B1b) | Physical Science (3-4) |  | B1a or B1b with lab |
|  | GE (area C, D, E) | Other Explorations (3) |  |  |

## Year 3

| Semester | Course \# | Course Title (Units) | Prerequisites | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 5 | MATH 323 | Introduction to Numerical Analysis (4) | MATH 224 |  |
|  | MATH 364A | Ordinary Differential Equations (3) | MATH 224 and 247 |  |
|  | ECON 311; <br> OR <br> FIN 350 | Macroeconomic Theory (3); <br> OR <br> Investment Principles (3) | ECON 100 and 101, MATH 115 or 119A or 122; <br> OR <br> FIN 300 |  |
|  | GE (area C, D, E) | Other Explorations (3) |  |  |
|  | GE (area C, D, E) | Other Explorations (3) |  |  |


| Semester | Course \# | Course Title (Units) | Prerequisites | Notes |
| :---: | :--- | :--- | :--- | :--- |
| 6 | MATH 361A | Introduction to Mathematical <br> Analysis I (3) | MATH 224 and 247 |  |
|  | STAT 381 | Mathematical Statistics (3) | MATH 247 and 380 |  |
|  | ENGL 101; <br> OR <br> ENGL 317 | Composition (3); <br> OR <br> Technical Communication (3) | GE Written Communication (A1) and <br> GE Oral Communication (A2) and GE <br> Critical Thinking (A3) and MATH 122 <br> (B2) | 101 not <br> offered |
|  | Elective | Economics or Finance (3) | MATH 122 (B2) and GE Written <br> Communication (A1) and GE Oral <br> Communication (A2) and GE Critical <br> Thinking (A3) |  |
|  | GE (area F) | Capstone (3) |  |  |

## Year 4

| Semester | Course \# | Course Title (Units) | Prerequisites | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 7 | MATH 361B | Intro. to Mathematical Analysis II (3) | MATH 361A |  |
|  | MATH 474; <br> OR <br> MATH 485 | Mathematics of Financial Derivatives <br> (3); <br> OR <br> Mathematical Optimization (3) | MATH 380, and either 364A or 370A; <br> OR <br> MATH 247 and either 323, 347 or 380 | 474 is <br> Spring only <br> 485 is <br> Fall only |
|  | Upper Division Elective | MATH/STAT Elective (3) |  |  |
|  | Elective | Economics or Finance (3) |  |  |
|  | GE (area F) | Capstone (3) | MATH 122 (B2) and GE Written Comm. (A1) and GE Oral Comm. (A2) and GE Critical Thinking (A3) |  |
| 8 | Upper Division Elective | MATH/STAT Elective (3) |  |  |
|  | Upper Division Elective | MATH/STAT Elective (3) |  |  |
|  | Elective | Economics or Finance (3) |  |  |
|  | GE (area F) | Capstone (3) | MATH 122 (B2) and GE Written Comm. (A1) and GE Oral Comm. (A2) and GE Critical Thinking (A3) |  |
|  | Elective | Elective (1) |  |  |

