CNSM Academic Advising Center
College of Natural Sciences and Mathematics California State University Long Beach www.csulb.edu/cnsm/advising

# Bachelor of Science in Mathematics Four Year Degree Worksheet <br> <br> 2017-2018 Catalog 

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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

| Semester | Course \# | Course Title (Units) | Prerequisites | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1 | MATH 122 | Calculus I (4) | MATH 111 and 113 |  |
|  | GE (area A1) | Written Communication (3) |  |  |
|  | GE (area C,D,E) | Other Explorations (3) |  |  |
|  | GE (area C,D,E) | Other Explorations (3) |  |  |
|  | NSCI 190A | Experience Success Program 1 (1) |  | Fall only |
| 2 | MATH 123 | Calculus II (4) | MATH 122 |  |
|  | GE (area A2) | Oral Communication (3) |  |  |
|  | GE (area A3) | Critical Thinking (3) |  |  |
|  | GE (area C,D,E) | Other Explorations (3) |  |  |
|  | Elective | Elective Requirement (3) |  |  |

## Year 2

| Semester | Course \# | Course Title (Units) | Prerequisites | Notes |
| :---: | :--- | :--- | :--- | :--- |
| 3 | MATH 224 | Calculus III (4) | MATH 123 |  |
|  | PHYS 151 | Mechanics and Heat (4) | MATH 122 |  |
|  | CECS 174 | Intro Programming and Problems <br> Solving (3) |  |  |
|  | GE (area C,D,E) | Other Explorations (3) |  |  |
|  | Elective | Elective (1) |  |  |
|  | MATH 247 | Introduction to Linear Algebra (3) | MATH 123 |  |
|  | MATH 233 | Fundamental Concepts for |  |  |
| GE (area C,D,E) | Other Explorations (3) |  |  |  |
|  | GE (area C,D,E) | Other Explorations (3) |  |  |
|  | Elective | Elective (3) |  |  |

## Year 3

| Semester | Course \# | Course Title (Units) | Prerequisites | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 5 | MATH 364A | Ordinary Differential Equations (3) | MATH 224 and 247 |  |
|  | MATH 380 | Probability and Statistics (3) | MATH 224 |  |
|  | MATH 341 OR MATH 347 | Number Theory (3) OR <br> Linear Algebra (3) | MATH 233 <br> OR <br> MATH 233 and 247 |  |
|  | ENGL 101; <br> OR <br> ENGL 317 | Composition (3); <br> OR <br> Technical Communication (3) | GE Written Communication (A1) and GE Oral Communication (A2) and GE Critical Thinking (A3) | 101 not offered |
|  | Elective | Elective (3) |  |  |
| 6 | MATH 361A | Introduction to Mathematical Analysis I (3) | MATH 224 and 233 |  |
|  | MATH 444 | Introduction to Abstract Algebra (3) | MATH 233, 247, and either 341 or 347 |  |
|  | GE (area B1a) | Life Science (3-4) |  | B1aNL is okay |
|  | GE (area C, D, E) | Other Explorations (3) |  |  |
|  | Elective | Elective (3) |  |  |

## Year 4

| Semester | Course \# | Course Title (Units) | Prerequisites | Notes |
| :---: | :---: | :---: | :---: | :---: |
| 7 | MATH 361B | Intro. to Mathematical Analysis II (3) | MATH 361A |  |
|  | Elective | MATH Elective (3) |  |  |
|  | GE Capstone (area F) | General Education \& Foundation (3) | GE Written Communication (A1) and GE Oral Communication (A2) and GE Critical Thinking (A3) and MATH 122 (B2) |  |
|  | GE Capstone (area F) | General Education \& Foundation (3) | GE Written Communication (A1) and GE Oral Communication (A2) and GE Critical Thinking (A3) and Math 122 (B2) |  |
|  | Elective | Elective (3) |  |  |
| 8 | Elective | MATH Elective (3) |  |  |
|  | Elective | MATH Elective (3) |  |  |
|  | Elective | MATH Elective (3) |  |  |
|  | GE Capstone (area F) | General Education \& Foundation (3) | GE Written Communication (A1) and GE Oral Communication (A2) and GE Critical Thinking (A3) and MATH 122 (B2) |  |
|  | Elective | Elective (3) |  |  |

