# Math B.S. - OPTION III: Integrated Teaching Option

**(for majors from the 2024-2025 catalogue year)**

Student _____ CIN_____ ADVISOR_____

| GE Requirements (Total 30 units) | Term | Grade | Double counts as |
|---|---|---|---|
| **Block A: English Language Comm. & Critical Thinking (9)** | | | |
| A1 Oral Communication Course = | | | |
| A2 Written Communication Course = | | | |
| A3 Critical Thinking & Composition Course = | | | |
| **American Institutions (6)** | | | |
| US History course = | | | |
| US Constitution course = | | | |
| **Block B: Natural Sciences (0)** | | | |
| Fulfilled by major requirements | | | |
| **Block C: Arts and Humanities (6)** | | | |
| C1 Arts Course = | | | |
| C2 Humanities Course = | | | |
| **Block D: Social Sciences (3)** | | | |
| D Course = | | | |
| **Block E: Lifelong Understanding and Self-development (3)** | | | |
| E Course = Suggested NSS 1001 for Freshmen | | | |
| **Block F: Ethnic Studies (3)** | | | |
| F Course = | | | |
| **Upper Division Blocks B, C, D (0)** | | | |
| Fulfilled by major requirements | | | |

An IHE course is required of all first-time freshmen (Taking NSS 1001 satisfies both IHE & Block E)

| Major Requirements (Total 104 Units) (Major Core + Major Option) | Term | Grade | Double counts as |
|---|---|---|---|
| **Lower Division Required Core Courses (32 units)** | | | |
| CS 2010 (3) or MATH 2170 (3) | | | |
| ***MATH 2110 - Calculus I (4)** | | | **GE Block B4** |
| MATH 2120 - Calculus II (4) | | | |
| MATH 2130 - Calculus III (3) | | | |
| MATH 2150 - Differential Equations (3) | | | |
| MATH 2450 - Foundations of Mathematics I (3) | | | |
| MATH 2550 - Introduction to Linear Algebra (3) | | | |
| ***PHYS 2100 - General Physics I: Mechanics (4)** | | | **GE Block B1** |
| ***BIOL 1100 – Cellular Basis of Life (5)** | | | **GE Block B2** |
| **Upper Division Required Core Courses (7 units)** | | | |
| MATH 3450 Foundations of Mathematics II (4) | | | |
| MATH 4650 - Analysis I (3) | | | |

***DOUBLE COUNT**
**The courses shown in bold font double count for certain GE and university requirements as shown on right most column.**

| Option Specific Required Courses (65 units) | Term | Grade | Double counts as |
|---|---|---|---|
| **Option-specific Math Courses (27 units)** | | | |
| MATH 2600 – Analytic Geometry (3) | | | |
| MATH 2740 - Introduction to Statistics (3) | | | |
| ***MATH 3950 - Field Experience I (3)** | | | **cl, WI UD GE B** |
| ***MATH 3960 - Field Experience II (2)** | | | **cl, WI UD GE B** |
| MATH 4300 - Modern Geometry (3) | | | |
| MATH 4460 - Theory of Numbers (3) | | | |
| MATH 4550 - Modern Algebra (3) **OR** MATH 4570 - Linear Algebra (3) | | | |
| MATH 4740 - Theory of Probability (3) | | | |
| MATH 4901 - Capstone Course for Teachers of Mathematics (4) | | | **WI** |
| **Option Specific Credential Courses (38 units)** Courses in ***italics*** can be taken before admission into credential program. | | | |
| EDCI 4000 - Transformative Teaching in Diverse Urban Classrooms (3) | | | |
| *EDSE 4301 - Supporting Academic Language Development for English Learners (3)* | | | |
| ****EDFN 4400 - Educational Foundations: Schooling in a Diverse Society (3)*** | | | **UD GE D and (d)** |
| *EDSP 4000 - Foundations of Special Education (3)* | | | |
| *EDFN 4131 - Psychological Foundations of Education (3)* | | | |
| EDCI 4292 - 21st Century Assessment Strategies and Processes (3) | | | |
| EDSE 4212M - Instructional Methods for Secondary School Subjects-Mathematics (3) | | | |
| EDSE 4453 - Directed Teaching in Secondary Schools (5) | | | |
| EDSE 4463 - Proseminar: Assessment of Teaching Performance (3) | | | |
| ***EDSE 4502 -Understanding Academic Language Development (3)** | | | **UD GE C** |
| EDSE 5000 - Transformative Classroom Instruction and Management (3) | | | |
| EDSE 5002 - Advanced Secondary Instructional and Management Strategies (3) | | | |

**GRADUATION REQUIREMENTS**
Minimum **40** units of upper division courses AND **120** total units are required for graduation. For an extensive list of other graduation requirements, check "academic requirement" in your GET account.

**GE REQUIREMENTS:** One race/ethnicity course (re), and one civic learning course (cl), and an IHE course must be fulfilled in lower division GE blocks by freshmen.

All other requirements (One upper division Civic Learning course (*cl*), two writing intensive courses (WI), and one diversity course (*d*)) are met within the major.

**CREDENTIAL REQUIREMENTS:**

Students need to **apply to COE for admission into credential program** in junior year, typically during Math 3950 enrollment. The only courses that can be taken **before** credential admission are EDSE 4301, EDFN 4400, EDFN 4131, and EDSP 4000.

Contact Credential Advisor **Dr. Raychaudhuri** at draycha@calstatela.edu for advice.