California State University DOMINGUEZ HILLS

First-Time Freshman 4-year Degree Roadmap

Bachelor of Science in Mathematics: Mathematics Education Option

The purpose of the Degree Roadmap is to serve as a guide for planning one's academic coursework required to complete a specific major semester by semester. Before enrolling, you can use the Degree Roadmap to get a feel for the courses you'll take in this major. After enrolling, refer to the University Catalog, Class Schedule and consult with your academic advisor each semester for advisement to specify which courses you will take to fulfill each graduation requirement and are progressing toward graduation in a timely manner as possible. **The Degree Roadmap is subject to change and is NOT to be considered a replacement for advisement with an academic advisor.** ***See University Catalog*** for information on the Graduate Writing Assessment Requirement (GWAR). ****See reverse side for General Education (GE) course requirements. **A minimum of 120 units are required for completion of degree.***

Entry Level Skills Tests

English

EPT Waiver:	**SAT I 500, ACT 22, AP 3 or EAP Exempted**	
Course Placement Total Scores:	**120-140**	**ENG 88**
	141-146	**ENG 99**
	143-146	**ENG 195: satisfies ENG 99 & ENG 110**
	147	**ENG 110**

Math

ELM Waiver:	**SAT I & II 550, ACT 23, AP 3 or EAP**	
Course Placement Total Scores:	**00-40**	**MAT 3**
	42-48	**MAT 9**
	50	**G.E. Math**

First Semester

Course		Units
MAT 131	Elementary Statistics	3
MAT 191	Calculus I (meets GE B4*)	5
GE A1*	Freshman Composition I	3
GE A3*	Oral Communication area	3
GE E*	The Whole Person area (UNV 101 recommended)	3

Second Semester

Course		Units
MAT 143	Problem Solving in Mathematics	3
MAT 193	Calculus II	5
GE A1*	Freshman Composition II	3
GE A2*	Logic/Critical Reasoning	3
GE D3*	Perspectives on U.S. History area	3

Third Semester

Course		Units
MAT 211	Calculus III	5
MAT 241	Programming & Technology for Secondary School Mathematics Teaching	3
PHY 130	Physics I (meets GE B1*)	5
GE B2*	Life Science area	3
GE B3*	Science Laboratory area	1

Fourth Semester

Course		Units
MAT 271	Foundations of Higher Mathematics	3
MAT 281	Discrete Mathematics	3
PHY 132	General Physics II	5
GE C1*	Humanities area	3
GE C3*	Humanities - Letters Courses area	3

Fifth Semester

Course		Units
MAT 333	Abstract Algebra	3
MAT 447	Number Theory	3
GE D1*	Perspectives on Individuals, Groups, & Society area	3
GE D4*	Perspectives on U.S. and California Government area	3
GWAR	ENG 350 or GWE	0-3

Sixth Semester

Course		Units
MAT 331	Linear Algebra	3
MAT 347	Modern Geometry	3
MAT 443	History of Mathematics	3
GE D2*	Global & Historical Perspectives area	3

Seventh Semester

Course		Units
MAT 401	Advanced Analysis I	3
MAT 489	Fundamental Math & Teaching in Seconary School	4
GE C2*	Humanities - Art Courses area	3
GE F2*	Studies in the Natural Sciences area	3

Eighth Semester

Course		Units
MAT 411	Mathematical Modeling	3
MAT 490	Seminar in Mathematics Education	3
GE F1*	Studies in the Humanities area	3
GE F3/G*	Studies in Social Sciences area/Cultural Pluralism area	3

Total Units: 117-120**

NOTE: **Upper division elective courses cannot double count for upper division GE courses. This is a single field major. No minor required.**

College of Natural and Behavioral Sciences

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Learn More

- To learn more about the B.S. in Mathematics at CSUDH, call the Department of Mathematics at (310) 243-3378, visit NSM A-124, or visit ***NBS.CSUDH.EDU***.
- For more information on applying to CSUDH, visit ***CSUDH.EDU/FutureStudents***.
- Apply online at ***CSUMENTOR.EDU***.
- Career information, visit ***CSUDH.EDU/CareerCenter***.

Faculty

John Wilkins, Department Chair
Ph.D., University of California, Los Angeles

Jacqueline Barab, Associate Professor
Ph.D., Indiana University, Bloomington

Frederic Brulois, Associate Professor
Ph.D., Stanford University

George Jennings, Professor
Ph.D., University of California, Los Angeles

Matthew Jones, Associate Professor
Ph.D., University of California, Los Angeles

Wai Yan Pong, Associate Professor
Ph.D., University of Illinois, Chicago

Serban Raianu, Professor
Ph.D., University of Bucharest, Romania

Alexander Stanoyevitch, Professor
Ph.D., University of Michigan

Career Options

Many students are interested in passing their learning on to future generations through teaching. Others seek advanced degrees in mathematics or other sciences and pursue cutting-edge research. Some will pursue degrees in business or economics, where the ability to work with numbers can be a great advantage such as careers as business executives at major software companies, as analysts for stock trading companies, as actuaries and risk management experts for insurance companies and the health care industry, as scientists and data analysts in engineering and biotech firms, as software designers and programmers.

*General Education (GE) Requirements

A. Basic Skills:
Courses must be passed with a grade of "C" or higher.
GE A1: ENG 110, ENG 111 (both required)
GE A2: PHI 120 or PSY 110
GE A3: THE 120
GE A4: CSC 101 or LIB 150 (optional category)

B. Area of the Natural Sciences and Quantitative Reasoning:
Select one course from each category below. Category 4 courses must be passed with a grade of "C" or higher.
GE B1: CHE 102, EAR 100, GEO 200, PHY 100
GE B2: ANT 101, BIO 102
GE B3: BIO 103, EAR 101, CHE 103
GE B4: MAT 105, 131, 153, 171, 191, 193

C. Area of the Humanities:
Select one course from each category below.
In categories 2 and 3, select courses from different departments.
GE C1: HUM 200
GE C2: ART 100, ART 101, CHS 125, COM 130, DAN 130, MUS 101, MUS 110, THE 100, THE 160
GE C3: AFS 200, AFS 231, APP 101, CHS 100, CHS 205, ENG 230, FRE 220, HUM 212, PHI 101, PHI 102, SPA 151, SPA 221

D. Area of the Social Sciences:
Select one course from each category below.
In categories 1 and 2, select courses from different departments.
GE D1: AFS 212, AFS 220, ANT 100, APP 212, CHS 212, PSY 101, SOC 101, SOC 102, WMS 250
GE D2: AFS 201, ANT 102, CHS 200, GEO 100, HIS 120, HIS 121, POL 100
GE D3: HIS 101
GE D4: POL 101

E. Objectives for Lifelong Learning and Self-Development:
Select one course from the following.
GE E: HEA 100, HSC 201, KIN 235, REC 100, UNV 101

F. Upper Division Integrative Studies:
Select one course from each category. Courses in this category are to be taken after 60 semester units and ALL lower division General Education courses have been completed.
GE F1: HUM 310, 312, 314
GE F2: SMT 310, 312, 314, 416
GE F3: SBS 318[1]

G. Cultural Pluralism Requirement:
Within their General Education selections or within other requirements, all students must take one course which addresses cultural pluralism (i.e. the impact of the integration of cultures).
GE G: ANT 312, 336, 337, 338, 339, 340, 342, 389, CHS 300, HIS 305, MUS 401, PHI 383, SBS 318, SOC 322, SOC 331, SOC 383

1 SBS 318 satisfies both F3 and G areas. Students will receive only three units credit, but will have met both requirements.

Last modified on September 30, 2011