

For course prerequisites, refer to the "Course Descriptions" section of the catalog. Academic advisors should be consulted when scheduling courses.

GENERAL EDUCATION (GE) 2001 (60)
 72 units required; 12 units are in Major/Support.
 Refer to catalog for selection of GE courses.

MAJOR REQUIREMENTS (73 to 77)	UNITS
MATH 141 Calculus I (B1)	4
MATH 142 Calculus II	4
MATH 143 Calculus III	4
MATH 202 Orientation to the Math Major	1
MATH 206 Linear Algebra I	4
MATH 241 Calculus IV	4
MATH 242 Differential Equations	4
MATH 248 Methods of Proof in Mathematics	4
MATH 336 Combinatorial Mathematics	4
MATH 412 Introduction to Analysis I	4
MATH 459 Undergraduate Seminar	4
MATH 461 Senior Project	2
MATH 462 Senior Project	2
MATH 481 Abstract Algebra I	4
Advanced Work in Major:¹	24 to 28

SUPPORT REQUIREMENTS (36 to 31)	UNITS
CSC/CPE 101 Fund Comp Sci I	4
CSC/CPE 102 Fund Comp Sci II	4
CSC/CPE 103/MATH 300/MATH 350 ²	3-4
PHYS 131 General Physics (B3 & B4)	4
PHYS 132 General Physics	4
PHYS 133 General Physics	4
STAT 321 Prob. and Stat. for Engrs and Scientists (B6)	4
STAT 322 Stat. Analysis for Engrs and Scientists	4
Advanced Work in Support:¹	4 to 0

Area A: Communication		Units
A1	Expository Writing	4
A2	Oral Communication	4
A3	Reasoning, Argumentation and Writing	4

Area B: Science and Mathematics		Units
B1	Mathematics/Statistics	0
B2	Life Science	4
B3	Physical Science	0
B4	B2 or B3 Lab	0

Area C: Arts and Humanities		Units
C1	Literature	4
C2	Philosophy	4
C3	Fine/Performing Arts	4
C4	Upper-Division Elective	4
Area C Elective (Choose one course from C1-C4)		4

Area D/E: Society and the Individual		Units
D1	The American Experience	4
D2	Political Economy	4
D3	Comparative Social Institutions	4
D4	Self Development (CSU Area E)	4
D5	Upper-Division Elective	4

Area F: Technology		Units
F	Upper-Division Elective	4

¹Advanced Work in Major and Support are to total 28 units.

²Students planning to seek the Single Subject Credential in Mathematics should take MATH 300, 341, 419, 442, and 443.

FREE ELECTIVES	UNITS
	17-18

MATHEMATICS ADVANCED WORK

Select 28 units from the following:

Advanced Work in Major:

Three advanced study tracks must be completed, at least two of which are to be chosen from the first four tracks listed:

- MATH 306 and MATH 406 Linear Algebra II, III (4) (4)
- MATH 341 Theory of Numbers (4) and MATH 482 Abstract Algebra II (4)
- MATH 413 and MATH 414 Introduction to Analysis II, III (4) (4)
- MATH 431 and MATH 432 Mathematical Optimization I, II (4) (4)
- MATH 304 Vector Analysis (4) and MATH 404 Differential Geometry (4)
- MATH 304 Vector Analysis (4) and MATH 418 Partial Differential Equations (4)
- MATH 333 Numerical Analysis I (4) and MATH 433 Numerical Analysis II (4)
- MATH 335 Graph Theory (4) and MATH 437 Game Theory (4)
- MATH 408 Complex Analysis I (4) and MATH 409 Complex Analysis II (4)
- MATH 442 Euclidean Geometry (4) and MATH 443 Modern Geometries (4)

Additional Advanced Work in Major. Select from:

MATH 417 (4), 419 (4), 470 (1-4)

Advanced Work in Support. Select from:

CSC 349 (4), 361 (4)
 IME 301 (4)
 STAT 425 (4)
 PHYS 301 (3), 302 (3), 323 (5), 405 (4), 408 (4)