

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 Alg. and MATH 242 Diff Eq. or MATH 244 and MATH 344 Linear Analysis I, II	8
MATH 241 Calculus IV	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

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

² CSC X235 and X236 will substitute for the CSC/CPE 101 and 102 requirement.

³ Students planning to seek the Single Subject Credential in Mathematics should take MATH 300, 341, 419, 442, and 443. Though not part of the curriculum for the B.S., MATH 424 should also be taken by students seeking the teaching credential, and must be taken prior to the start of student teaching.

SUPPORT REQUIREMENTS (36 to 32)	UNITS
CSC/CPE 101 and 102 Fund Comp Sci I, II or ² CSCX235 and X236 Fund Comp Sci for Eng. I, II or MATH 211 and 212 Computational Math I, II	8
CSC/CPE 103/MATH 300/MATH 350 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

FREE ELECTIVES: UNITS

17

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	Comparitive Social Institutions	4
D4	Self Development (CSU Area E)	4
D5	Upper-Division Elective	4

Area F: Technology		Units
F	Upper-Division Elective	4

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:

⁴ MATH 344 (4), 417 (4), 419 (4), 470 (1-4)

Advanced Work in Support. Select from:

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

⁴ MATH 344 may be counted as an additional elective in the major only if not taken as a track with MATH 244 in the core.