

Mathematics B.S. Pure and Applied Math 4-Year Pathway 2024-2025

Fall Freshman Courses (14 units total)		Course or GE Title	Units	GE/Major
FYS 124		Intro to Env Sci	4	FYS, B2,B3
MATH 150*		Calculus I	4	B4, major
HCOM 120 or 125, SBS 110, or (CAD 102 +CAD 90)		Critical Reading and Writing	3	A2
GE Area C2		Any Humanities (GE Area C2) course	3	C2
Spring Freshman Courses (16 units total)		Course or GE Title	Units	GE/Major
MATH 151		Calculus 2	4	Major
Any GE Area C1		Arts GE area C1		C1
HCOM 110		Fundamentals of Speaking & Listening	3	A1
HDFS 200 or KIN 161 or KIN 263		Any GE area E	3	E
Physical Science (B1) GE		Any GE area B1 course	3	B1
Fall Sophomore Courses (17 units total)		Course or GE Title	Units	GE/Major
MATH 230		Elementary Linear Algebra	4	Major
CST 231 or CST 319		Problem-Solving & Programming	4	Major
HCOM200, HCOM202, BIO131 or ENSTU130		Critical Thinking GE	3	A3
SL210S, ED212S, GS280S, HCOM260S, SBS212S		Civics/Service Learning GE course	3	DCSL, US2&3
HCOM 220, 224, 229, 243, or 247, or SPAN 260		GE area F (Ethnic Studies)	3	F
Spring Sophomore Courses (14 units total)		Course or GE Title	Units	GE/Major
MATH 240		Elementary Differential Equations	4	Major
MATH 250		Multivariate Calculus	4	Major
GE area C1 or C2 course		Additional C1 or C2 Arts or Humanities	3	C1 or C2
CST 274, or HCOM 251, 265 or SBS 111		US History D-area GE	3	US1, DGSS
Fall Junior Courses (16 units total)		Course or GE Title	Units	GE/Major
MATH 300		Major Proseminar	4	GWAR, Major
MATH 320		Applied Probability & Statistics	4	Major
MATH 322		Foundations of Modern Math	4	Major
MATH 361S (fall) or MATH/STAT elective #1		Mathematics Tutors or Major elective	4	UDSL or Conc
Spring Junior Courses (15 units total)		Course or GE Title	Units	GE/Major
MATH 330 (Spring only)		Advanced Linear Algebra	4	Major
MATH 362S (Spring) or MATH/STAT elective #1		Math Consultants or Major elective	4	UDSL or Conc
MATH 420 (Spring only)		Mathematical Analysis	4	Major
SPAN 340 or 350 or JAPN 340 or 350		UD C with World Culture & languages	3	UDC, WCL
Fall Senior Courses (15 units total)		Course or GE Title	Units	GE/Major
MATH 410 (Fall only)		Modern Algebra I	4	Major
MATH 421 or MATH/STAT elective #2		Math Analysis II or MATH/STAT Elec.	4	Concentration
MATH/STAT elective #3		See catalog for course list	4	Concentration
STAT 310 or any UDB		Data Visualization	3	UDB
Spring Senior (12 units total)		Course or GE Title	Units	GE/Major
MATH 400		Capstone Seminar	4	Major
MATH 411 or MATH/STAT elective #3		Modern Algebra II or MATH/STAT Elec.	4	Concentration
Any upper-division social science GE		UD Social Science	3	UDD
Free elective		Free elective	2	Elective
MATH (Pure&Applied) 4-yr path:			120	

***Students must complete an online placement to enroll in MATH 150. Contact the MATH advisor for information about the Calculus placement.**