Mathematics Major Checklist (Fall 2020)

Course(s)	Suggested Year	Done	Need
Core Courses (6 Units)			
*MATH 121 Calculus I	FR		
MATH 122 Calculus II	FR		
MATH 131 Discrete Mathematics	FR/SO		
MATH 201 Linear Algebra	SO		
MATH 491 Math Seminiar	SR		
CPSC 120 Programming	FR/SO		
Statistics Course (CHOOSE ONE)			
STAT 210 Statistical Methods I	SO/JR		
STAT 220 Statistical Methods II	SO/JR		
Transitions Course (CHOOSE ONE)			
MATH 268 Combinatorics and Graph Theory	SO		
MATH 278 Fundamentals of Geometry	SO		
MATH 288 Special Topics in Mathematics	SO		
Applied Courses (CHOOSE TWO)			
MATH 311 Operations Research	JR/SR		
MATH 321 Vector Calculus	JR/SR		
MATH 331 Differential Equations	JR/SR		
One of these units may be STAT 303 or STAT 304	JR/SR		
Theoretical Courses (CHOOSE TWO)			
MATH 361 Abstract Algebra	JR/SR		
MATH 371 Topology	JR/SR		
MATH 381 Real Analysis	JR/SR		
Electives (CHOOSE TWO)			
MATH 205 Research Experience (when combined with another 0.5 unit course)			
MATH 271 Mathematical Problem Solving (when combined with a 0.5 unit)			
MATH 332 Applied Differential Equations			
MATH 342 Numerical Analysis			
MATH 352 Complex Analysis			
MATH 388 Topics in Mathematics			
MATH 406 Independent Study (or MATH 405 and MATH 407)			
MATH 416 Internship			
MATH 496 Honors Project (or MATH 495 and MATH 497)			
ACSI 301 Theory of Interest			
Any Transitions, Applied, or Theoetical course not needed for above			
Any 300-level STAT course not counting as an Applied course			
One of these units may be CPSC 450, PHYS 330, PHYS 350, or PHYS 390			

* MATH 121 is not included in the major itself but is a prerequisite for MATH 122.

Note that this check sheet is intended as a guide; the Academic Catalog contains more details and nuances, and students are encouraged to check that book along with the academic advisors as needed.