

# MATH MAJOR CHECKLIST

**NOTE:** All 300-400 level courses must be taken for a letter grade to satisfy the major requirements

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For most upper-division courses you will need the following prerequisites. Circle the ones completed.

**Calculus:** Select ONE from MATH 253      MATH 263      **Bridge requirement:** Select ONE from the possibilities MATH 307      MATH 231–232      MATH 261–262

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For the major requirements there are four tracks to choose from. Choose only ONE of the tracks.

## Option 1: Pure mathematics track

Requirement	Yes/No
MATH256 (Differential Equations)	
MATH281–282 (Multivariable Calculus)	
MATH341–342 (Linear algebra)	
MATH315 (Elementary analysis)	
Four upper-division courses from the list below	

For the pure mathematics track the four upper-division courses must be chosen from the following list. Circle your choices:

391, 392, 393, 394, 395, 413, 414, 415, 431, 432, 433, 441, 444, 445, 446, 467

## Option 2: Applied mathematics track

Requirement	Yes/No
MATH256 (Differential Equations)	
MATH281–282 (Multivariable Calculus)	
MATH341–342 (Linear algebra)	
MATH315 (Elementary analysis)	
Four upper-division courses from the list below	

For the applied mathematics track the four upper-division courses must be chosen from the following list. Circle your choices:

343, 351, 352, 411, 412, 420, 421, 422, 456, 457, 458, 461, 462, 463

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## Option 3: Secondary teaching track

Requirement	Yes/No
MATH315 (Elementary analysis)	
MATH341 (Linear Algebra)	
MATH343 (Statistical models and methods)	
MATH346 (Number theory)	
MATH391–393 (Fundamentals of Abstract Algebra I–III)	
MATH394–395 (Geometries from an Advanced Viewpoint I–II)	
CIS122 (Introduction to programming)	

Note: With advisor approval, another programming course may be substituted for CIS122.

## Option 4: Design-your-own

Requirement	Yes/No
MATH256 (Differential Equations)	
MATH281–282 (Multivariable Calculus)	
MATH341–342 (Linear algebra)	
MATH315 (Elementary analysis)	
Four upper-division courses chosen with pre-approval of an advisor	

Note: For this track it is important to get **pre-approval** from an advisor; the four upper-division courses cannot be chosen arbitrarily.

On the line below, list the four upper-division courses you are using to meet this requirement:

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### Note for all tracks:

For students who have completed MATH261–263 with a grade of mid-C or better, the department will waive the MATH315 requirement.