

# Math Major Checklist

**NOTE:** All upper-division courses (numbered 300 or above) must be taken for a letter grade to satisfy the major requirements.

## Basic requirements for a mathematics major:

1.  MATH 253 (Calculus III). Calculus I and II are required to take MATH 253. There are several calculus series.
2.  MATH 281 (Multivariable Calculus I).
3.  One of the following two-term sequences (Bridge Requirement):
  - a. MATH 307 and four MathLabs (MATH 201 – 206)
  - b. MATH 231 and 232 and two MathLabs
  - c. MATH 261 and 262 and two MathLabs
4.  MATH 341 (Linear Algebra I)
5.  One of the following computer programming courses:
  - a. CIS 122
  - b. CIS 210
  - c. Other advisor-approved course

**60 credits are required for a math major**

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## Option 1: Standard track

1.  All requirements in the “Basic requirements” section above
2.  MATH 282 (Multivariable Calculus II)
3.  MATH 342 (Linear Algebra II)
4.  One of the following two-term sequences:\*
  - a. MATH 316 and 317 (Fundamentals in Analysis I, II)
  - b. MATH 347 and 348 (Fundamentals in Number Theory I, II)
  - c. MATH 391 and 392 (Fundamentals in Algebra I, II)
5.     Four upper-division math courses, including at least one two-term sequence. None of these courses can overlap with any other requirement.

MATH 320	MATH 410	MATH 316 and 317	MATH 411 and 412
MATH 343†	MATH 415	MATH 347 and 348	MATH 413 and 414
MATH 345†	MATH 420	MATH 351 and 352	MATH 421 and 422
MATH 394	MATH 433	MATH 391 and 392	MATH 431 and 432
MATH 395	MATH 441		MATH 444 and 445 and 446
MATH 397	MATH 456		MATH 461 and 462†
	MATH 457		MATH 461 and 467
	MATH 458		
	MATH 463		

\*For those completing MATH 261, 262, and 263 with grades of C or better the department will waive this requirement.

†Students can only receive credit for one of Math 343, 345 or Math 462.

## Option 2: Pure track

1.  All requirements in the “Basic requirements” section above
2.  MATH 282 (Multivariable Calculus II)
3.  MATH 342 (Linear Algebra II)
4.  MATH 316 AND 317 (Analysis requirement)\*
5.  One of the following (Algebra requirement):
  - a. MATH 391 and 392
  - b. MATH 444 and 445
6.   Two upper-division math courses. None of these courses can overlap with any other requirement:

MATH 320	MATH 410	MATH 347 and 348	MATH 411 and 412
MATH 343†	MATH 420	MATH 351 and 352	MATH 413 and 414 and 415
MATH 345†	MATH 441	MATH 391 and 392	MATH 421 and 422
MATH 397	MATH 456	MATH 394 and 395	MATH 431 and 432 and 433
	MATH 457		MATH 444 and 445 and 446
	MATH 458		MATH 461 and 462†
	MATH 463		
	MATH 467		

\*For those completing MATH 261, 262, and 263 with grades of C or better the department will waive this requirement.

†Students can only receive credit for one of Math 343, 345 or Math 462.

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## Option 3: Secondary education track

1.  All requirements in the “Basic requirements” section above
2.  MATH 343 (Introduction to Statistics)
3.   Two of the following sequences:
  - a. MATH 316 and 317 (Fundamentals in Analysis I, II)\*
  - b. MATH 347 and 348 (Fundamentals in Number Theory I, II)
  - c. MATH 391 and 392 (Fundamentals in Algebra I, II)
4.  MATH 394 and 395
5.  MATH 397

\*For those completing MATH 261, 262, and 263 with grades of C or better the department will waive this part of the requirement.