

**MATH minor plan  
and  
4-year plan for BA in Mathematics (MTHM)  
(requires a minor and/or major in another field)**

(as of March 30, 2016)

	Fall Semester	Spring Semester
First Year	[4] Math212 (Calculus I) [3] Stat210 (Statistics)	[4] Math213 (Calculus II) [3] Math247 (Discrete Mathematics) <sup>(1)</sup>
Second Year	[4] Math312 (Multivariable Calculus) [4] Math242 (Linear Algebra) <sup>(1)</sup>	[3] Math313 (Differential Equations) <sup>(2)(3)</sup> [4Δ] Math327 (Foundations of Mathematics)
Third Year	[3Δ] Math4xx <sup>(4)</sup> OR [3] Elective <sup>(5)</sup>	[3Δ/@] Math4xx <sup>(4)</sup> [3] Elective <sup>(5)</sup>
Fourth Year	[3Δ/@] Math4xx <sup>(4)</sup>	[3] Elective <sup>(5)</sup> OR [3Δ/@] Math4xx <sup>(4)</sup>

**Purple Bold Text: Required for minor and BA degree.**

Blue Text: Required for BA degree.

**(1) Optional for minor: Required to choose one of Math242, Math247, or CS275.**

(2) A student taking Math313 without Math242 should take the 1-credit Math314 concurrently with Math313.

**(3) Minor requires one additional elective course numbered 300 or higher.**

(4) Three of Math447, Math448, Math452 or Math453 required. These courses are offered on a three-semester cycle. If taking all four, one will count as an elective. For students double majoring in DSCI, MTHT, or STAT, only two of Math447, Math448, Math452 or Math453 is required plus an additional MATH elective.

(5) BA degree requires a total of 6 s.h. of electives numbered Math302, 307, 317 or above. One appropriate 3-s.h. STAT or DSCI course can serve as an elective.

[n] Course is n semester hours.

[Δ] Writing Intensive

[©] Oral Intensive

## 4-year plan for BS in Mathematics (MATH)

(as of March 30, 2016)

	Fall Semester	Spring Semester
<b>First Year</b>	[4] Math212 (Calculus I) [3] Stat210 (Statistics)	[4] Math213 (Calculus II) [3] Math247 (Discrete Mathematics) [3] DSCI210 (Data Science) OR [4] CS243 (Algorithms I)
<b>Second Year</b>	[4] Math242 (Linear Algebra) [4] Math312 (Multivariable Calculus) [3] Applications of Math Elective <sup>(1)</sup>	[3] Math313 (Differential Equations) [4Δ] Math327 (Foundations of Mathematics) [3] Applications of Math Elective <sup>(1)</sup>
<b>Third Year</b>	[3Δ] Math4xx <sup>(2)</sup> or Elective [3] Elective <sup>(3)</sup> <i>(Find Faculty Member for Independent Project) <sup>(4)</sup></i>	Math337 (Probability) OR [3] Math347 (Number Theory) <sup>(5)</sup> [2] Math395 (Professional Skills for Mathematics) [3Δ/◎] Math4xx <sup>(2)</sup> [1] Math490 (Independent Project) <sup>(4)</sup>
<b>Fourth Year</b>	[3Δ/@] Math4xx <sup>(2)</sup> [3] Elective <sup>(3)</sup> [1] Math490 (Independent Project) <sup>(4)</sup>	[3@] Math4xx <sup>(2)</sup> or Elective <sup>(3)</sup> [1] Math495 (Communication of Independent Project) [1] Math490 (Independent Project) <sup>(4)</sup>

(1) Choose a total of 6 s.h. from BIO310, BIO312, Chem212 or higher, CME250 or higher, CS250, CS341 or higher, DSCI310 or higher, ECON340, FIN335, FIN360, FIN377, FIN390, PHYS221 or higher, STAT310 or higher.

(2) Three of Math447, Math448, Math452 or Math453 required. These courses are offered on a three-semester cycle. If taking all four, one will count as an elective.

(3) 9 s.h. of electives required; 3 s.h. from List A below, 3 s.h. from List B below, and 3 s.h. general elective from Math302, 307, 317 and above or various STAT or DSCI courses.

(4) 3 s.h. of Math490 (Independent Project) required. This course must be arranged with a faculty advisor and may be broken up across semesters. Some faculty advisors prefer to start in third year. A summer internship between third and fourth years may also satisfy the requirement. Students should coordinate with their academic advisor.

(5) One of Math337 or Math347 required. If both taken, one will count as general elective. Both are offered spring semesters only.

[n] Course is n semester hours.

[Δ] Writing Intensive

[◎] Oral Intensive

### List A Electives

- Math302 (Chaos): Offered spring semesters every third year
- Math332 (Numerical Analysis): Offered fall semesters of odd years
- Math342 (Advanced Linear Algebra): Offered fall semesters every third year
- Math453 (Advanced Calculus II): Offered every third semester

### List B Electives

- Math317 (Complex): Offered spring semesters every third year
- Math413 (Applied Mathematics): Offered fall semesters of even years
- Math448 (Abstract Algebra II): Offered every third semester
- Math462 (Topology): Offered fall semesters every third year