

## Mathematics B.S. Degree (UTeach) Check List

Course Number	Course Name	Prerequisites	Semesters Offered
Math/Hnrs 2413	Calculus I	2312	Fall (H), Spring, Summer
Math/Hnrs 2414	Calculus II	2413	Fall, Spring (H), Summer
(H) Math 2415	Multivariate Calculus	2414	Fall (H), Spring, Summer
Math 3305	Ordinary Differential Equations	2414	Fall, Spring
Math 3380	Algorithms in Applied Mathematics	2414	Spring
Math 3425*	Foundations of Mathematics	2414	Fall, Spring
Math 3315	Linear Algebra and Matrix Theory	2414, coreq. 3425	Fall
Math 3336	Abstract Algebra I	3425	Spring
Math 3345	Real Analysis I	3425	Fall
Math 3365	Geometric Systems	3425	Spring
Math 3373 or Math 4373	Advanced ODE or Partial Differential Equations	3305, 3315, 3425 3305, 3315, 3425	Spring Fall (even)
Math 4350	Theory of Probability	3425	Fall
Math 4160	Senior Seminar I	Must be taken in final 3 semesters	Fall, Spring
Math 4161	Senior Seminar II	4160	Fall, Spring

In addition, you must take *three courses* from the following, and at least one of these must be from the first block of four courses.

Math 4336	Abstract Algebra II	3336	Fall (odd)
Math 4341	Real Analysis II	3345	Spring (odd)
Math 4351	Applied Statistics	4350	Spring (even)
Math 3373 or Math 4373	Advanced ODE or Partial Differential Equations	3305, 3315, 3425 3305, 3315, 3425	Spring Fall (even)
Math 4301	Number Theory	3425	Fall (even)
Math 4306	Topology	3425	Spring (even)
Math 4321	Combinatorics/Graph Theory	3425	Spring (odd)
Math 4342	Introduction to Complex Variables	2415, 3425	Fall (odd)
Math 4380	Modeling and Numerical Analysis	3380, 3425	Fall (periodically)

**All students must declare a minor, or follow a department-established track, or take guided electives toward their desired careers. Please speak with your math advisor for more information.**

Summer courses generally must have 10 enrolled students to be offered.

# MATHEMATICS DEGREE FLOWCHART

