

Mathematics (BA or BS), Pre-MAE

FALL - Semester 1

MATH 198: Analytic Geometry with Calculus I
TRU 117: Self & Society Sem: Game Theory
TRU 100: Truman Symposium
 Dialogues coursework

FALL - Semester 3

MATH 200: Foundations of Mathematics
MATH 264: Analytic Geometry with Calculus III
ED 100: Introduction to Education
 CHEM 130 or PHYS 195
 Foreign Language

FALL - Semester 5

MATH 363: College Geometry
MATH 455: History of Mathematics I*
 JINS 3XX: Junior Interdisciplinary Seminar Dialogues or
 BS/BA coursework
 Elective

FALL - Semester 7

MATH 461: Advanced Calculus I
MATH 499: Mathematics Capstone Seminar
ED 593: Psychological Foundations of Education
 Electives

SPRING - Semester 2

MATH 263: Analytic Geometry with Calculus II
 CS 170: Intro to Computer Science
 Dialogues coursework

SPRING - Semester 4

MATH 357: Linear Algebra
ED 388: Exploratory Field Experiences
ED 389: Foundations of Education
 STAT 290: Statistics
 Foreign Language

SPRING - Semester 6

MATH 398: Junior Seminar in Mathematics
MATH 451: Algebraic Structures I
MATH XXX: One course from List A or B
ED 393: Clinical Experiences in Teaching
ED 394: Experiences in Classroom Teaching
 Dialogues or BS/BA coursework

SPRING - Semester 8

MATH XXX: One course from List A or B
MATH XXX: One course from List A or B
ED 410: Capstone: On Becoming an Educator
 Electives (as needed) to total at least 120 hours

NOTES:

*This course is offered only in the fall of even years.

*The following courses are recommended as options for Math electives: Math 335, Math 347, Math 452, Math 454, Math 462, Math 464, Math 467

Graduation Requirements: Total credit hrs \geq 120 (40 credit hrs @ 300-level or higher)

List A of Elective Courses:

MATH 363: College Geometry
 MATH 440: Topology
 MATH 447: Combinatorial Analysis
 MATH 452: Algebraic Structures II
 MATH 454: Theory of Numbers
 MATH 462: Advanced Calculus II
 MATH 465: Differential Geometry
 MATH 468: Intro to Set Theory
 MATH MATH 469: Intro to Math Logic
 MATH MATH 515: Complex Variables I
 STAT STAT 570: Math. Probability & Stat. I

List B of Elective Courses:

MATH 300: Introduction to Numerical Analysis
 MATH 330: Mathematics of Finance
 MATH 335: Game Theory

MATH 345: Introduction to Mathematical Biology
MATH 347: Discrete Mathematics
MATH 364: Vector Analysis
MATH 365: Ordinary Differential Equations
MATH 400: Methods of Optimization
MATH 455: History of Mathematics I
MATH 456: History of Mathematics II
MATH 464: Higher Geometry
MATH 511: Numerical Analysis
MATH 521: Partial Differential Equations
MATH 530: Topics in Mathematical Modeling
MATH 564: Advanced Linear Algebra
STAT 571: Mathematical Probability and Statistics II

The Dialogues Curriculum requires a certain number of courses/credit hours in the following Perspectives: Social, Arts and Humanities, STEM, Communications, and Statistics. The exact number of courses a student will be required to take during their undergraduate career varies individually according to the credit transferred in.

Department Chair: Please contact the [Center for Academic Excellence](#) with any updates to the plan above.