



Applied Mathematics Major: Sample Degree Plan

a) Data Science Concentration

Year	Fall Semester	Spring Semester
Freshman	MAT 141-Precalculus CSCI 171-The Nature of Computing	MAT 151-Calculus I CSCI 172-Introduction to Data Science
Sophomore	MAT 152-Calculus II MAT 310-Linear Algebra MAT 265-Elements of Mathematical Proof	MAT 253-Calculus III MAT 351-Ordinary Differential Equations
Junior	MAT 301-Probability & Statistics I CSCI 362-Database and Data Mining	MAT 302-Probability & Statistics II CSCI 358-Machine Learning
Senior	MAT 367-Multivariate Analysis MAT Elective 1	MAT 455-Data Analysis (Capstone) MAT Elective 2

b) Cryptography Concentration

Year	Fall Semester	Spring Semester
Freshman	MAT 141-Precalculus CSCI 171-The Nature of Computing	MAT 151-Calculus I CSCI 172-Introduction to Data Science
Sophomore	MAT 152-Calculus II MAT 310-Linear Algebra MAT 265-Elements of Mathematical Proof	MAT 253-Calculus III MAT 351-Ordinary Differential Equations
Junior	MAT 301-Probability & Statistics I MAT 410-Abstract Algebra	MAT 302-Probability & Statistics II CSCI 358-Machine Learning
Senior	CSCI 360-Cryptography & Cryptanalysis MAT Elective 1	MAT 460-Mathematical Cryptography (Capstone) MAT Elective 2