B.S. Mathematics - Option A (“Pure Math”)

Bold boxes are required for all option A students and students are advised to do them as early as possible. Dashed arrows indicate either course satisfies the pre-req. Dashed boxes indicate sequence classes.

* Possible pre-req change soon

Requirements:

☐ MA 113 Calc I       ☐ MA 114 Calc II       ☐ MA 213 Calc III       ☐ MA 322 Matrix Alg       ☐ CS 115 Programming
☐ MA 214 Calc IV or MA 261 Number Theory       ☐ Upper-level sequence (351/352, 361/362, 471/472, or 416/417)
☐ Additional 12 hrs of 300+ MA courses       ☐ 14 hrs outside department (refer to official degree sheet for details)
☐ MA 391 (prereqs, one from each: 213 | 214 or 261 | 322 | 321, 351, 361, or 471 | 30+ completed credit hrs)
B.S. Mathematics - Option B ("Applied Math")

**Requirements:**
- MA 113/114/213/214 Calc I-IV
- MA 320 Probability
- MA 321 Numerical Methods
- MA 322 Matrix Alg
- STA 525 Stats
- CS 115/215 Programming
- Upper-level sequence (415/340, 416/417, or 432/433)
- Additional 6 hrs of 300+ MA courses
- 9 hrs in supporting program (refer to official degree sheet for details)
- MA 391 (prereqs, one from each: 213 | 214 or 261 | 322 | 321, 351, 361, or 471 | 30+ completed credit hrs)

Bold boxes are required for all option B students. Dashed arrows indicate that either course satisfies the pre-req. Be aware that a few arrows go behind other classes. Dashed boxes indicate sequence classes.

* Possible pre-req changes soon

^ STA 525 is the standard replacement for STA 321, which is not offered
B.S. Math Econ

Bold boxes are required for all math econ students. Note, there exists more math and econ classes and this chart only represents popular classes for math-econ students.
* Possible prereq changes soon

Math Finance is a new class, MA course number pending

Requirements:
☐ MA 113-214 Calc I-IV
☐ ECO 201/202 Principles of Econ
☐ Upper-level sequence (416/417/STA 525 or 471/472/417)
☐ One 300+ level ECO course and one 400+ level ECO course

☐ MA 320 or STA 524 Probability
☐ ECO 401/402 Int. Econ Theory
☐ ECO 391/491 Econometrics

☐ MA 322 Matrix Alg
☐ ECO 312 Monetary Economics
☐ ECO 370 The Global Economy

☐ MA 113 Calculus I
☐ MA 114 Calculus II
☐ MA 213 Calculus III
☐ MA 214 Calculus IV

☐ MA 322 Matrix Algebra
☐ MA 320 Probability
☐ MA/CS 416 Optimization
☐ MA/STA 320 Probability

☐ STA 524 Probability
☐ STA 525 Statistical Interference
☐ MA/STA 417 Decision Making

☐ ^AS 320/MA 4XX Math Finance
☐ ECO 590 Methods of Quantitative Economics
☐ ECO 472 International Monetary Economics
☐ ECO 471 International Trade

☐ MA 471 Analysis I
☐ STA 524 Probability
☐ ^AS 320/MA 4XX Math Finance

☐ MA 472 Analysis II
☐ MA/STA 320 Probability
☐ *MA/STA 417 Decision Making

☐ MA/ECS 37 Game Theory
☐ ECO 201 Principles of Economics I
☐ ECO 202 Principles of Economics II

☐ ECO 391 Business and Economic Statistics
☐ ECO 401 Intermediate Microeconomics
☐ ECO 402 Intermediate Macroeconomics

☐ ECO 312 Monetary Economics
☐ ECO 370 The Global Economy
☐ ECO 491 Applied Econometrics
Undergrads are advised to not take any graduate courses until they have successfully completed all basic major courses and at least one semester of a sequence. Speaking to the professor is also a must. Grad classes can be beneficial for upperclassmen but are not necessary, even for those intending on math grad school. Only take them if you really want to do it and feel prepared.

This represents primarily pure math courses. There are some MA/PHY courses regularly offered but not listed. Some pre-reqs are also not shown.

Topics courses are offered on a somewhat random basis and are subtitled.

* 537 is offered both semesters.