MAJOR REQUIREMENTS - MAT (Minimum 54 hours)

Core Courses: (33 hours)

____ +2, 3MAT 161  Calculus with Analytical Geometry I (4) Prerequisite: MAT 112 or 115 or equivalent preparation
____ 3MAT 162  Calculus with Analytical Geometry II (4) Prerequisite: MAT 161
____ *3MAT 261  Multivariate Calculus (4) Prerequisite: MAT 162
____ MAT 275  Axiomatic Systems (3) Prerequisite: MAT 152 or 161
____ MAT 311  Intermediate Analysis (3) Prerequisites: MAT 261 and 275
____ 3MAT 335  Linear Algebra and Matrices (3) Prerequisite: MAT 162
____ MAT 336  Abstract Algebra (3) Prerequisite: MAT 275 or consent of instructor
____ MAT 495  Seminar in Mathematics (3) Prerequisite: 9 hours of MAT courses at the 300-400 level
(Meets Applied Learning and Oral Communication Requirements)
____ +3STT 215  Introduction to Statistics (3) Prerequisite: Satisfactory performance on the mathematics placement test or MAT 105
____ STT 315  Probability and Statistics (3) Prerequisites: STT 215 and MAT 152 or 162

Option 1: Mathematics (21 hours)

____ MAT 361  Differential Equations (3) Prerequisite: MAT 261
____ MAT 365  Choose one of the following: MAT 321, 337, 375, 435.
____ MAT 367  Choose one of the following: MAT 325, 365, 367, 411.
____ MAT 411  Choose 3 hours of MAT at the 300-400 level.
______ Choose 9 hours of MAT or STT at the 300-400 level.

1+*PHY 201 is highly recommended as the University Studies Scientific Approaches requirement

2 Students interested in the degree program in MAT are encouraged to begin with MAT 161. Initial placement is based on high school background and the MAT Placement Test. Students not prepared for MAT 161 should begin with MAT 115 or 111-112, as appropriate.


NOTE: It is strongly recommended that a student either complete a minor in a discipline that applies mathematics or elect advanced coursework involving mathematical applications in another discipline. A list of recommended courses in biology, chemistry, computer science, earth sciences, economics, information systems and operations management, physics, psychology, sociology, and statistics is available in the department office. For the teacher licensure option, the licensure requirements fulfill this recommendation. A student who plans to pursue graduate study in mathematics is urged to take MAT 411-412.

NOTE: MAT 495 (Seminar in Mathematics) or MAT 499 (Honors Work in Mathematics) meet the Applied Learning Requirement.

An overall average of “C” (2.00) or better is required for all 300-400 level MAT or STT courses counted toward the major.

*These courses require a lab
+May also be used to satisfy University Studies Foundations & Approaches and Perspectives requirements

Requirements to declare MAT: Completion of 24 hours
For further information, see the MAT website: http://www.uncw.edu/math and http://catalogue.uncw.edu.