

College of Science and Mathematics

Department: MATHEMATICS & STATISTICS
Major Program: B.S. MATHEMATICS
Concentration: Applied Mathematics

Quarters	Hours
I. General Education Required Substitutions: Area I: MTH229,230 (counted in dept requirements) Area V: PHY240/200,242/202,244/204 (counted in related course requirements) Area VI: Choose one from list	40
II. Departmental Core Requirements MTH229, 230, 231, 232, 233, 255, 280, 355, 431, 432, 492	43
III. Departmental Requirements and Electives <i>At least four from:</i> MTH306, 314, 316, 317, 332, 333 STT360, 361 <i>Two from:</i> MTH407, 415, 419, 456, 458, 480, 481, 482 <i>Two additional 400-level elective courses</i> <i>Elective:</i> Those listed above, plus MTH433, 451, 452, 457, STT461, 462	29
IV. Related Course Requirements PHY 240/200, 242/202, 244/204 Either PHY371,372 or ME212,213 CS 141 and either CS142 or 240, or equivalent At least 12 hrs of advanced technical electives	42
V. General Electives	29
Total	183

Semesters	Hours
I. General Education Required Substitutions: MTH2300 (Calc I) (counted in dept requirements) PHY2400,2410 (General Physics I, II) (counted in related course requirements)	27
II. Departmental Core Requirements MTH2300,2310,2320 (Calc I,II,III) MTH2330 (DE) or MTH2350 (DE/Matrix) MTH2530 (Elementary Linear Algebra) MTH2800 (Intro Math Proof) MTH4310 (Real Analysis I)	24
III. Departmental Requirements and Electives MTH4810 (Applied Math I) Three of the following: MTH3060 (Modeling) MTH3160 (Numerical Methods) MTH3320 (Complex Variables) MTH3330 (PDE) STT3600 (Applied Statistics I) Four additional department-approved elective courses, including at least two at 4000-level	24
IV. Related Course Requirements PHY2400,2410 (General Physics I,II) CS1410 (Intro Programming) or CEG2200 (C for Engineers & Scientists) PHY3710 (Analytical Mechanics) or ME2120 (Statics/Dynamics) 9 hours of approved advanced technical electives	24
V. General Electives	21
Total	120