

**MATHEMATICS—Applied Statistics  
Bachelor of Science (B.S.)**

**Required Mathematics courses (40 credit hours)**

MA 151 Calculus and Analytic Geometry I (5)
MA 152 Calculus and Analytic Geometry II (5)
MA 253 Calculus and Analytic Geometry III (3)
MA 301 Linear Algebra (3)
MA 340 ANOVA/ Design of Experiments (3)
MA 341 Nonparametric Tests/Quality Control (3)
MA 342 Statistical Computing (3)
MA 344 Mathematical Statistics I (3)
MA 345 Mathematical Statistics II (3)
MA 346 Regression Analysis (3)
MA 347 Stochastic Processes (3)
MA 348 Time Series Analysis (3)

**Required Computer Information Sciences courses (16 credit hours)**

CM 111 Introduction to Structured Programming (4)
CM 245 Contemporary Programming Methods (3)
CM 307 Data Structures (3)
CM 332 Data Mining (3)
CM 336 Database Management (3)

*These courses will complete a Computer Information Science minor. Contact CIS Chair to declare.*

**Required Science Concentration—30 credit hours:**

30-hour concentration in the Natural Sciences (Biology, Chemistry, Mathematics & Statistics, Physics & Astronomy, or Computer Information Science). These courses must be in departments other than the major, with at least 15 hours in one department.

*With careful selection of Natural Science electives and elective courses, a student could obtain a minor in Chemistry, Forensic Chemistry, Physics, or Biology. The minor must be declared in the respective Department.*

**General Education (31-32 credit hours)**

EN 101 Introductory College Writing (3)
EN 200 Intermediate College Writing (3)
CN 101 Intro Communication Studies <b>OR</b> CN 150 Public Speaking <b>OR</b> CN 151 Intro to Interpersonal Communication <b>OR</b> CN 351 Special Topics in Interpersonal Communication (3)
4-5 credit hours of Natural Sciences with a lab
6 credit hours of Arts and Humanities from two different disciplines Arts and Humanities I (3) Arts and Humanities 2 (3)
6 credit hours of Social Sciences from two different disciplines Social Science I (3) Social Science 2 (3)
6 credit hours of Institution Specific from two different disciplines Inclusion and Belonging (3) Scientific Literacy (3) <b>MA 140 can count here</b>

**Additional Specific Degree requirements (10 credit hours)**

WU 101 Washburn Experience (3)
EN 300 Adv College Writing <b>OR</b> EN 308 Sci & Tech Writing <b>OR</b> EN 312 Persuasive Writing (3)

**Additional General Degree requirements**

45 total credit hours of 300 level or above (39 credits specifically listed above)
72 hours non-math courses
99 hours in College of Arts and Sciences
120 total hours needed