

**I. GENERAL EDUCATION CURRICULUM ..... 44**

Math 1110 will meet the Quantitative Literacy general education requirement.

**II. MAJOR REQUIREMENTS (not including 4 s.h. counted in Area I, above)..... 61**

**2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under II. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.**

**A. Mathematics Common Core (14-15 hours)**

- MAT 1110 \_\_\_\_\_ (4) Calculus with Analytic Geometry I (*Pre: MAT 1025 w/min grade C-*)
- MAT 1120 \_\_\_\_\_ (4) Calculus with Analytic Geometry II (*Pre: MAT 1110 w/min grade C-*)
- MAT 2240 \_\_\_\_\_ (3) Introduction to Linear Algebra (*Pre: MAT 1120*)

Choose one:

- MAT 2110 \_\_\_\_\_ (3) Techniques of Proof (*Pre: MAT 1120*)
- MAT 2510 \_\_\_\_\_ (4) Sophomore Honors Seminar (*Pre: MAT 1120*)

**B. General Mathematics Concentration (25-26 hours)**

- MAT 2130 \_\_\_\_\_ (4) Calculus with Analytic Geometry III (*Pre: MAT 1120 w/min grade C-*)
- MAT 2310 \_\_\_\_\_ (3) Computational Mathematics (*Pre: MAT 1120*)
- MAT 3130 \_\_\_\_\_ (3) Introduction to Differential Equations (*Pre: MAT 1120*)
- MAT 3220 \_\_\_\_\_ (3) Introduction to Real Analysis [**WID**] (*Pre: ENG 2001, MAT 2110 or 2510*)
- MAT 4310 \_\_\_\_\_ (3) Numerical Methods (*Pre: MAT 2310*)

Choose one:

- MAT 4040 \_\_\_\_\_ (1) Mathematics Capstone [**CAP**] (*Pre: Sr. standing*)
- MAT 4510 \_\_\_\_\_ (1) Senior Honors Thesis [**CAP**] (*Pre: MAT 3510; 3.45+ GPA in math*)

6-9 hours of approved electives\*\* in mathematical sciences to bring total hrs in AREA II to 65 (3 hours must be at 4000 level)

---

**C. Statistics Concentration (25 hours)**

- STT 3850 \_\_\_\_\_ (4) Statistical Data Analysis I (*Pre: MAT 1110*)
- STT 3851 \_\_\_\_\_ (3) Statistical Data Analysis II [**WID**] (*Pre: ENG 2001, STT 3850*)
- STT 4860 \_\_\_\_\_ (3) Probability Models & Statistical Inference I (*Pre: MAT 2130*)
- STT 4865 \_\_\_\_\_ (3) Statistical Inference II (*Pre: STT 4860*)

3 hours of approved statistics electives\*\* at or above STT 3830 (excluding STT 4811 and 4812)

---

9 hours of approved electives\*\* in related coursework which may include courses from outside mathematical sciences

---

*\*\*Must be approved by advisory committee.*

**III. MINOR (optional)**

**IV. ELECTIVES (taken to total 122 hours for the degree) ..... 17**

**2 semester hours of free electives must be outside the major discipline.**