# MATHEMATICS, B.S.

**COMMON CORE:**
- Analytical Reading/Writing: WRT102
- Academic Writing: WRT202
- Human Communication: CM104
- Information Literacy: IFL101
- Calculus I: MAT171
- Physical Education (2 crs.)

**AVERAGE DISTRIBUTION REQUIREMENTS:**
- I. Fine Arts & Humanities: 6 Credits
- II. Social & Behavioral Sciences: 6 Credits
- III. Laboratory Sciences: SATISFAIED BY MAJOR REQUIREMENTS
- IV. Amer./West. Civ., Amer. Govt.: 6 Credits
- V. Int'l. Studies/Foreign Lang.: 6 Credits

**ELECTIVE COURSES:**
- 21 Credits

**REQUIRED MAJOR COURSES:**
- 62 Credits
  - Each of the following: (53 Credits)
    - Fund. of Computer Science I: CS101
    - Calculus I: MAT171
    - Explor. Math/Computer: MAT230
    - Elem. Linear Algebra: MAT260
    - Calculus II: MAT172
    - Differential Equations: MAT272
    - Math Structures: MAT280
    - Number Theory: MAT320
    - Abstract Algebra I: MAT361
    - Advanced Calculus I: MAT371
    - Advanced Calculus II: MAT372
    - Point-Set Topology: MAT480
    - Senior Seminar: MAT493
    - History of Math: MAT495
    - Engineering Physics: PHY160
    - Engineering Physics†: PHY

**ELECTIVES IN MAJOR:**
- 9 Credits
  - Chosen from the following:
    - MAT345, MAT350, MAT362, MAT391, MAT440, MAT470, MAT473, MAT477, MAT490, MAT496

**The Physical Sciences Dept. has suggested the following career-oriented tracks:**

- **Actuarial Track:**
  - Financial Accounting: ACC220
  - Macro Economics (ADR II): ECO200
  - Micro Economics (ADR II): ECO201
  - Managerial Finance I: FIN300
  - Managerial Finance II: FIN330
  - Risk Mgmt and Insurance: MBA672
  - Comp. and Benefits Systems: MBA697
  - Probability and Statistics: MAT350

- **Computational Track with Minor in Computer Sci.:**
  - Fund. Computer Science II: CS201
  - Analysis of Algorithms: CS360
  - One course from the following:
    - CS320, CS340, CS370
    - Cryptology: MAT391
    - Numerical Analysis: MAT470

- **Government Track:**
  - 12 credits of a Foreign Language of choice (6 credits fulfill ADR V)
  - Intro to East Asia: INT144
  - or Intro to Middle East: INT146
  - Cryptology: MAT391
  - Numerical Analysis: MAT470
  - Math Internship: MAT490
  - Reading and Research: MAT496

- **Pure Math/Graduate School Track:**
  - Abstract Algebra II: MAT362
  - Numerical Analysis: MAT470
  - Partial Differential Equations: MAT473
  - Complex Analysis: MAT477
  - Reading and Research: MAT496

- All courses must be completed with a minimum "2.0" grade. Courses may not be taken on a pass/fail basis.
- A minimum of 12 credits of the Area Distribution Requirements must be at the 200-level or above. Courses may not be taken on a pass/fail basis. See Registrar's Office for official list of courses.
- Six credits are to be taken in one of these two areas; if foreign language is selected, six credits must be in one language.
- Requirements listed apply to students who matriculate into or declare this major during the 2010-2011 academic year.

**Signature Pages:**
(Signed) Faculty Advisor    Date
(Signed) Dept. Chair            Date