Baccalaureate Degree (Minimum 124 Credits)  
Cumulative “2.0” or Better Required for Graduation

Worksheet for **MATHEMATICS, B.S.**
Dept. of Physical Sciences

**COMMON CORE:** 17 Credits
- Analytical Reading/ Writing WRT102
- Academic Writing WRT202
- Human Communication CM104
- Information Literacy IFL101
- Calculus I MAT171
- Physical Education (2 crs.)

**AREA DISTR. REQUIREMENTS:**

<table>
<thead>
<tr>
<th>I. Fine Arts &amp; Humanities 6 Credits</th>
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<tr>
<td>II. Social &amp; Behavioral Sciences 6 Credits</td>
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<td>III. Laboratory Sciences 6 Credits</td>
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**SATISFIED BY MAJOR REQUIREMENTS**

<table>
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<tr>
<th>IV. Amer./West. Civ., Amer. Govt. 6 Credits</th>
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<tr>
<td>V. Int’l. Studies/Foreign Lang. 6 Credits</td>
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**ELECTIVE COURSES:** 21 Credits

**REQUIRED MAJOR COURSES:** 62 Credits

- Fund. of Computer Science I CS101
- Calculus I MAT172
- Calculus III MAT271
- Differential Equations MAT272
- Math Structures MAT280
- Linear Algebra II MAT360
- Abstract Algebra I MAT361
- Abstract Algebra II MAT362
- Elementary Analysis I MAT371
- Elementary Analysis II MAT372
- Mathematics Seminar MAT493
- Engineering Physics PH160

**MATH ELECTIVES:** (15 Credits)

Choose five from the following:
- MAT320, MAT345, MAT350, MAT390, MAT391, MAT440, MAT470, MAT473, MAT477, MAT480, MAT490, MAT496

**SCIENCE ELECTIVES:** (4 Credits)

Choose one from the following:
- BIO150, BIO152, CHM122, CHM134, PHY162, PHY260 or PHY262

- Cryptology MAT391
- Numerical Analysis MAT470

**ACTUARIAL TRACK:**
- Financial Accounting ACC220
- Micro Economics (ADR II) ECO200
- Managerial Finance FIN300
- Risk Mgmt and Insurance FIN330
- Probability and Statistics MAT350

**COMPUTATIONAL TRACK WITH MINOR IN COMPUTER SCI.:**
- Fund. Computer Science II CS201
- Analysis of Algorithms CS360

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

**PURE MATH/GRADUATE SCHOOL TRACK:**
- Numerical Analysis MAT470
- Partial Differential Equations MAT473
- Complex Analysis MAT477
- Point-Set Topology MAT480
- Reading and Research MAT496

- A grade of “2.0” or better is required.
- 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 2011-2012 academic year.

**Physical Sciences Dept. has suggested the following career-oriented tracks:**
- Actuarial Track:
  - Financial Accounting ACC220
  - Micro Economics (ADR II) ECO200
  - Managerial Finance FIN300
  - or Managerial Finance FIN330
  - Risk Mgmt and Insurance FIN330
  - or Comp. and Benefits Systems MBA672
  - 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 Eastern Asia INT144
  - Intro to Middle East INT146
  - Cryptology MAT391
  - Numerical Analysis MAT470
  - Math Internship MAT490
  - Reading and Research MAT496
- Pure Math/Graduate School Track:
  - Numerical Analysis MAT470
  - Partial Differential Equations MAT473
  - Complex Analysis MAT477
  - Point-Set Topology MAT480
  - Reading and Research MAT496