# Bachelor of Science (B.S.) Degree with Major in Mathematics

## Sample Four-Year Plan Starting in Odd Year

### First Year Fall (Odd Year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBL</td>
<td>Old Testament Survey</td>
<td>3</td>
</tr>
<tr>
<td>COR</td>
<td>Gateway Seminar</td>
<td>2</td>
</tr>
<tr>
<td>EGL</td>
<td>English I: Composition</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Second Year Fall (Even Year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>Introduction to Computing</td>
<td>3</td>
</tr>
<tr>
<td>HST</td>
<td>Integrated Humanities I</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Problem-Solving Seminar</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Linear Algebra &amp; Differential Eq.</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Foundations of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>14</strong></td>
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</table>

### Third Year Fall (Odd Year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH</td>
<td>Real Analysis†</td>
<td>3</td>
</tr>
<tr>
<td>PHY</td>
<td>General Physics I (Nat.Sci.(NS)Elective)</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Selected Topics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Arts &amp; Humanities (AH) Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social/Behavioral Sci. (SBS) Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Fourth Year Fall (Even Year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBL</td>
<td>Essentials of Christian Formation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SBS or AH Elective (see above)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
</tr>
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</table>

### First Year Spring (Even Year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBL</td>
<td>New Testament Survey</td>
<td>3</td>
</tr>
<tr>
<td>EGL</td>
<td>English II: Literary Analysis/Research</td>
<td>2</td>
</tr>
<tr>
<td>MTH</td>
<td>Calculus II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Whole Person Wellness Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
</tr>
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</table>

### Second Year Spring (Odd Year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HST</td>
<td>Integrated Humanities II</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Vector Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Foundations of Geometry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
</tr>
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### Third Year Spring (Even Year)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBL</td>
<td>Essentials of Evangelical Theology</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Probability &amp; Statistics (or MTH 3173)</td>
<td>3</td>
</tr>
<tr>
<td>MTH</td>
<td>Abstract Algebra†</td>
<td>3</td>
</tr>
<tr>
<td>PHY</td>
<td>General Physics II (NS Elective/lab)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>16</strong></td>
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### Fourth Year Spring (Odd Year)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSC</td>
<td>Faith and Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Intercultural Engagement Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

### Total Hours for Four Years: 120

† Note: The order of alternate year courses will differ depending on whether a student begins his/her studies at JBU in an odd or even year.

### Mathematics Electives

- MTH 3101 Mathematics Teaching Practicum (Upon request)
- MTH 3113 Selected Topics (Upon request)
- MTH 3143 Topics in Mathematics Education (Fall, even yrs.)
- MTH 3153 Foundations of Geometry (Spring, ODD)
- MTH 3173 Math. Modeling & Simulation (Upon request)
- MTH 4113 Selected Topics (Upon request)
- MTH 4220-3 Mathematics Research (Every)
- MTH 4310 Mathematics Internship (Every)

Revised: 2/19/2019 F. Blume
# Bachelor of Science (B.S.) Degree with Major in Mathematics

## Sample Four-Year Plan Starting in Even Year

### First Year Fall (Even Year)
- **BBL 1013** Old Testament Survey
- **COR 1002** Gateway Seminar
- **EGL 1013** English I: Composition
- **MTH 1134** Calculus I
  - __3__ Elective
  - Total Hours 15

### Second Year Fall (Odd Year)
- **HST 2013** Integrated Humanities I
- **MTH 2114** Linear Algebra & Differential Eq.
  - __3__ Social/Behavioral Sci. (SBS) Elective
  - __3__ Elective
  - __3__ Elective
  - Total Hours 16

### Third Year Fall (Even Year)
- **CS 1113** Introduction to Computing
- **MTH 2111** Problem-Solving Seminar
- **MTH 3103** Foundations of Mathematics
- **PHY 2114** General Physics I (Nat.Sci.(NS)Elective)
  - __3__ Arts & Humanities (AH) Elective
  - Total Hours 14

### Fourth Year Fall (Odd Year)
- **BBL 2022** Essentials of Christian Formation
- **MTH 4143** Real Analysis†
- **MTH 3113** Selected Topics
  - __3__ SBS or AH Elective (see above)
  - __3__ Elective
  - Total Hours 14

### First Year Spring (Odd Year)
- **BBL 1023** New Testament Survey
- **EGL 1023** English II: Literary Analysis/Research
- **MTH 1144** Calculus II
  - __2__ Whole Person Wellness Elective
  - __3__ Elective
  - Total Hours 15

### Second Year Spring (Even Year)
- **HST 2023** Integrated Humanities II
- **MTH 2123** Vector Calculus
  - __3__ Elective
  - __3__ Elective
  - __3__ Elective
  - Total Hours 15

### Third Year Spring (Odd Year)
- **BBL 2013** Essentials of Evangelical Theology
- **MTH 3183** Probability & Statistics (or MTH 3173)
- **PHY 2124** General Physics II (NS Elective/lab)
- **MTH 3153** Foundations of Geometry
  - __3__ Elective
  - Total Hours 16

### Fourth Year Spring (Even Year)
- **GSC 4133** Faith and Science
- **MTH 4123** Abstract Algebra
  - __3__ Intercultural Engagement Elective
  - __3__ Elective
  - __3__ Elective
  - Total Hours 15

### Total Hours for Four Years: 120

† Note: The order of alternate year courses will differ depending on whether a student begins his/her studies at JBU in an even/odd year.

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**Mathematics Electives**
- MTH 3101 Mathematics Teaching Practicum (Upon request)
- MTH 3113 Selected Topics (Upon request)
- MTH 3143 Topics in Mathematics Education (Fall, even yrs.)
- MTH 3153 Foundations of Geometry (Spring, ODD)

- MTH 3173 Math. Modeling & Simulation (Upon request)
- MTH 4113 Selected Topics (Upon request)
- MTH 4220-3 Mathematics Research (Every)
- MTH 4310 Mathematics Internship (Every)
# Bachelor of Science in Mathematics (B.S.) Degree with an Emphasis in Actuarial Science

## Sample Four-Year Plan Starting in Odd Year

### First Year Fall (Odd Year)
- **BBL** 1013  Old Testament Survey
- **COR** 1002  Gateway Seminar
- **EGL** 1013  English I: Composition
- **MTH** 1134  Calculus I
- **ECN** 2113  MicroEcon. Social Behavioral Science(SBS)Elective

Total Hours 15

### First Year Spring (Even Year)
- **BBL** 1023  New Testament Survey
- **EGL** 1023  English II: Literary Analysis/Research
- **MTH** 1144  Calculus II
- **ECN** 2123  MacroEconomics AH or SBS Elective

Total Hours 15

### Second Year Fall (Even Year)
- **BBL** 2022  Essentials of Christian Formation
- **HST** 2013  Integrated Humanities I
- **ATG** 2173  Principles of Financial Accounting
- **MTH** 2114  Linear Algebra & Differential Eq.
- **MTH** 3103  Foundations of Mathematics

Total Hours 15

### Second Year Spring (Odd Year)
- **HST** 2023  Integrated Humanities II
- **MTH** 2123  Vector Calculus
- **MTH** 3153  Foundations of Geometry
- **BUS** 2193  Business Statistics
- **FIN** 3003  Principles of Finance

Total Hours 15

### Third Year Fall (Odd Year)
- **MTH** 4143  Real Analysis†
- **PHY** 2114  General Physics I (Nat.Sci.(NS)Elective)
- **MTH** 3113  Selected Topics
- **FIN** 4283  Intermediate Corporate Finance
- **BUS** 3113  Spreadsheet Analytics

Total Hours 16

### Third Year Spring (Even Year)
- **BBL** 2013  Essentials of Evangelical Theology
- **MTH** 3183  Probability & Statistics (or MTH 3173)
- **MTH** 4123  Abstract Algebra†
- **PHY** 2124  General Physics II (NS Elective/lab)
- **ECN** 3133  Money and Banking

Total Hours 16

### Fourth Year Fall (Even Year)
- **MTH** 2111  Problem-Solving Seminar
- **CS** 1113  Introduction to Computing
- **FIN** 3063  Investments
  - **3** SBS or AH Elective (see above)
  - **4** Elective

Total Hours 14

### Fourth Year Spring (Odd Year)
- **GSC** 4133  Faith and Science
  - **3** Intercultural Engagement Elective
  - **4** Elective
  - **4** Elective

Total Hours 14

**Total Hours for Four Years: 120**

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## Mathematics Electives
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- **MTH 3113** Selected Topics (Upon request)
- **MTH 3143** Topics in Mathematics Education (Fall, even yrs.)
- **MTH 3153** Foundations of Geometry (Spring, ODD)

- **MTH 3173** Math. Modeling & Simulation (Upon request)
- **MTH 4113** Selected Topics (Upon request)
- **MTH 4220-3** Mathematics Research (Every)
- **MTH 4310** Mathematics Internship (Every)
# Bachelor of Science in Mathematics (B.S.) Degree with an Emphasis in Actuarial Science

## Sample Four-Year Plan Starting in Even Year

### First Year Fall (Even Year)
- **BBL 1013** Old Testament Survey  
- **COR 1002** Gateway Seminar  
- **EGL 1013** English I: Composition  
- **MTH 1134** Calculus I  
- **ECN 2113** MicroEcon. Social Behavioral Science(SBS)Elective  

Total Hours 15

### Second Year Fall (Odd Year)
- **HST 2013** Integrated Humanities I  
- **MTH 2114** Linear Algebra & Differential Eq.  
- **ATG 2173** Principles of Financial Accounting  

  - ___3 Elective  
  - ___3 Elective  

Total Hours 16

### Third Year Fall (Even Year)
- **CS 1113** Introduction to Computing  
- **MTH 2111** Problem-Solving Seminar  
- **MTH 3103** Foundations of Mathematics  
- **PHY 2114** General Physics I (Nat.Sci.(NS)Elective)  
- **FIN 3063** Investments  

Total Hours 14

### Fourth Year Fall (Odd Year)
- **BBL 2022** Essentials of Christian Formation  
- **MTH 4143** Real Analysis†  
- **MTH 3113** Selected Topics  
- **FIN 4283** Intermediate Corporate Finance  

  - ___3 SBS or AH Elective (see above)  

Total Hours 14

### First Year Spring (Odd Year)
- **BBL 1023** New Testament Survey  
- **EGL 1023** English II: Literary Analysis/Research  
- **MTH 1144** Calculus II  
- **ECN 2123** MacroEconomics AH or SBS Elective  

  - ___2 Whole Person Wellness Elective  

Total Hours 15

### Second Year Spring (Even Year)
- **HST 2023** Integrated Humanities II  
- **MTH 2123** Vector Calculus  
- **BUS 2193** Business Statistics  
- **FIN 3003** Principles of Finance  

  - ___3 Elective  

Total Hours 15

### Third Year Spring (Odd Year)
- **BBL 2013** Essentials of Evangelical Theology  
- **MTH 3183** Probability & Statistics (or MTH 3173)  
- **PHY 2124** General Physics II (NS Elective/lab)  
- **MTH 3153** Foundations of Geometry  
- **BUS 3113** Spreadsheet Analytics  

Total Hours 16

### Fourth Year Spring (Even Year)
- **GSC 4133** Faith and Science  
- **MTH 4123** Abstract Algebra†  
- **ECN 3133** Money and Banking  

  - ___3 Intercultural Engagement Elective  
  - ___3 Elective  

Total Hours 15

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**Total Hours for Four Years: 120**

† Note: The order of alternate year courses will differ depending on whether a student begins his/her studies at JBU in an even/odd year.

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- **MTH 3153** Foundations of Geometry (Spring, ODD)  
- **MTH 3173** Math. Modeling & Simulation (Upon request)  
- **MTH 4113** Selected Topics (Upon request)  
- **MTH 4220-3** Mathematics Research (Every)  
- **MTH 4310** Mathematics Internship (Every)

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