# Bachelor of Science in Mathematics -- 120 Credits

## Applied Track

**JMATH-BS/JMAPPLIED (RG 389)**

**Effective August 2023**

## Required Courses (RG 6813)

### Foundational Courses
- **Engcmp 0005**: Composition I
  - CR: 3
- **Engcmp 0006**: Composition II
  - CR: 3
- **CommRc 0052**: Public Speaking
  - CR: 3

### Basic Algebra or Placement Test
- **Math 0001**: Algebra I
  - CR: 3

### Quantitative Reasoning (QR) - 1 Course
- Note: a student cannot test out of the QR requirement.

### FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

### REQUIRED COURSES (RG 6813)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number</th>
<th>Course Title</th>
<th>CR</th>
<th>Satisfied/Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORLDS OF KNOWLEDGE (RG 6825)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aesthetic and Creative Expression (RQ 3148)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>Number</td>
<td>Course Title</td>
<td>CR</td>
<td>Satisfied/Term</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>--------------</td>
<td>----</td>
<td>----------------</td>
</tr>
<tr>
<td>Global History &amp; Culture (RQ 3149)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>Number</td>
<td>Course Title</td>
<td>CR</td>
<td>Satisfied/Term</td>
</tr>
</tbody>
</table>

### FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

### MAJOR REQUIREMENTS (RG 389)

#### Required Math Courses (RG 3560)
- **Math 0221**: Analytic Geom & Calc 1
  - CR: 4
- **Math 0231**: Analytic Geom & Calc 2
  - CR: 4
- **Math 0241**: Analytic Geom & Calc 3
  - CR: 4
- **Math 0401**: Discrete Math Structures
  - CR: 3
- **Math 1012**: Intro Theoretical Math
  - CR: 3

### Required Upper Level Math Courses
- **Math 1153**: Intro Probability Stats 1
  - CR: 3
- **Math 1154**: Intro Probability Stats 2
  - CR: 3
- **Math 1163**: Mathematics Seminar
  - CR: 1
- **Math 1181**: Linear Algebra 1
  - CR: 3
- **Math 1271**: Ordinary Diff Equations 1
  - CR: 3

### Required Comp Sci Courses (RG 3562)
- **CS 0100**: Perspectives in Comp Science
  - CR: 3
- **CS 0410**: Intro to CS Applications
  - CR: 1
- **CS 0411**: Intro to CS Programming
  - CR: 3

### Math Electives (RG 1056)
- **Select one of the following courses**
  - **Math 1125**: Abstract Algebra
    - CR: 3
  - **Math 1531**: Advanced Calculus 1
    - CR: 3
  - **Math 1561**: Complex Variables & Apps
    - CR: 3
  - **Math 1701**: Intro to Topology
    - CR: 3

### Required Comp Sci Courses (RG 3562)
- **Select any 2 Math 1000 level courses (Except Math 1035)**
  - CR: 6

### Minor or Certificate Requirement (18-21 Credits)
- Select a minor or certificate program from outside Mathematics. (RG 3563)

### MAJOR REQUIREMENTS (RG 389)

#### Requirement Satisfied

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number</th>
<th>Course Title</th>
<th>CR</th>
<th>Satisfied/Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORLDS OF KNOWLEDGE (RG 6825)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Societies &amp; Civics (RQ 3150)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>Number</td>
<td>Course Title</td>
<td>CR</td>
<td>Satisfied/Term</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>--------------</td>
<td>----</td>
<td>----------------</td>
</tr>
<tr>
<td>Science &amp; Nature (RQ 3153)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>Number</td>
<td>Course Title</td>
<td>CR</td>
<td>Satisfied/Term</td>
</tr>
</tbody>
</table>

### FREE ELECTIVES

Free electives are the balance of credits required for graduation (120) that are not used to satisfy competencies, knowledge areas, major requirements, electives, or any related area required by the department.

### MAJOR REQUIREMENTS (RG 389)

#### Requirement Satisfied

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number</th>
<th>Course Title</th>
<th>CR</th>
<th>Satisfied/Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORLDS OF KNOWLEDGE (RG 6825)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Follow-Up Courses (RG 3154)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>Number</td>
<td>Course Title</td>
<td>CR</td>
<td>Satisfied/Term</td>
</tr>
</tbody>
</table>

### IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.

---

Updated 04/11/2023