

Bachelor of Science in Mathematics -- 120 Credits

Applied Track
JMATH-BS/JMAPPLIED (RG 389)
Effective August 2023

GENERAL EDUCATION REQUIREMENTS

REQUIRED COURSES (RG 6813)

| Foundational Courses | | CR | Satisfied/Term |
|----------------------|-----------------|----|----------------|
| Engcmp 0005 | Composition I | 3 | |
| Engcmp 0006 | Composition II | 3 | |
| CommRc 0052 | Public Speaking | 3 | |

Basic Algebra or Placement Test

| | | | |
|-----------|-----------|---|--|
| Math 0001 | Algebra 1 | 3 | |
|-----------|-----------|---|--|

Quantitative Reasoning (QR) - 1 Course

Note - a student cannot test out of their QR requirement.

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|--|--|---|--|
| | | 3 | |
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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.

| | CR | Satisfied/Term |
|--|----|----------------|
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WORLDS OF KNOWLEDGE (RG 6825)

| Aesthetic and Creative Expression (RQ 3148) | | | | |
|---|--------|--------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| | | | 3 | |
| | | | 3 | |

| Global History & Culture (RQ 3149) | | | | |
|------------------------------------|--------|--------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| | | | 3 | |
| | | | 3 | |

| Societies & Civics (RQ 3150) | | | | |
|------------------------------|--------|--------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| | | | 3 | |
| | | | 3 | |

| Science & Nature (RQ 3153) | | | | |
|----------------------------|--------|--------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| CS | 0100 | Persp. in CS | 3 | |
| | | | 3 | |

| Follow-Up Courses (RQ 3154) | | | | |
|-----------------------------|--------|--------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| | | | 3 | |
| | | | 3 | |

Each student must take 2 courses in each World of Knowledge. The two courses taken within each World must be from different subjects. A student must take two additional "Follow-Up" courses from any World.

>The minimum number of courses taken in the Worlds must be 10.

>The Follow-Up courses may repeat a subject previously taken in a World.

>A student cannot use a major required Subject course in one of the Worlds.

>For example: A Biology student cannot use BIOL 0110 to fulfill a requirement in the Science and Nature World.

>Students cannot use a course to count both in their QR requirement and one of the Worlds.

>Students can choose QR and Worlds of Knowledge courses from published course lists.

MAJOR REQUIREMENTS (RG 389)

| Required Math Courses (RQ 3560) | | CR | Satisfied/Term |
|---------------------------------|--------------------------|-----------|----------------|
| Math 0221 | Analytic Geom & Calc 1 | 4 | |
| Math 0231 | Analytic Geom & Calc 2 | 4 | |
| Math 0241 | Analytic Geom & Calc 3 | 4 | |
| Math 0401 | Discrete Math Structures | 3 | |
| Math 1012 | Intro Theoretical Math | 3 | |
| Requirement Satisfied | | 18 | |

(RQ 3561)

| Required Upper Level Math Courses | | CR | Satisfied/Term |
|-----------------------------------|---------------------------|-----------|----------------|
| Math 1153 | Intro Probability Stats 1 | 3 | |
| Math 1154 | Intro Probability Stats 2 | 3 | |
| Math 1163 | Mathematics Seminar | 1 | |
| Math 1181 | Linear Algebra 1 | 3 | |
| Math 1271 | Ordinary Diff Equations 1 | 3 | |
| Requirement Satisfied | | 16 | |

| Math Electives (RQ 1056) | | CR | Satisfied/Term |
|--|---------------------------|--------------|----------------|
| Select one of the following courses | | | |
| Math 1125 | Abstract Algebra | 3 | |
| Math 1531 | Advanced Calculus 1 | 3 | |
| Math 1561 | Complex Variables & Apps | 3 | |
| Math 1701 | Intro to Topology | 3 | |
| Select one of the following courses | | | |
| Math 1071 | Numerical Math Analysis | 3 | |
| Math 1175 | Topics in Applied Math | 3 | |
| Math 1178 | Operations Research | 4 | |
| Math 1296 | Topics in Applied Stats 1 | 3 | |
| Select any 2 Math 1000 level courses (Except Math 1035) | | | |
| | | CR | Satisfied/Term |
| Math | | 3 | |
| Math | | 3 | |
| Requirement Satisfied | | 12-13 | |

| Minor or Certificate Requirement (18-21 Credits) | | CR | Satisfied/Term |
|--|--|--------------|----------------|
| Select a minor or certificate program from outside Mathematics. (RQ 3563) | | | |
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| Requirement Satisfied | | 18-21 | |

M GPA (RQ 1064)
Major 50% (RQ 2880)

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