

Bachelor of Science in Mathematics -- 120 Credits

Actuarial Track
JMATH-BS/JMACTURIL (RG 390)
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

| | | |
|------------------------------------------------------------------|---|--|
| <i>Note - a student cannot test out of their QR requirement.</i> | | |
| | 3 | |

WORLDS OF KNOWLEDGE (RG 6825)

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

Societies & Civics (RQ 3150)

| Subject | Number | Course Title | CR | Satisfied/Term |
|-----------|--------|-------------------------|----|----------------|
| Econ 0105 | | Intro to Microeconomics | 3 | |
| | | | 3 | |

| Global History & Culture (RQ 3149) | | | | |
|------------------------------------|--------|-------------------------|----|----------------|
| Subject | Number | Course Title | CR | Satisfied/Term |
| Econ 0115 | | Intro to Macroeconomics | 3 | |
| | | | 3 | |

Science & Nature (RQ 3153)

| Subject | Number | Course Title | CR | Satisfied/Term |
|---------|--------|--------------|----|----------------|
| CS | 0100 | Persp. In CS | 3 | |
| | | | 3 | |

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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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 390)

| Required Math (RQ 3564) | | | 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 | | |

| Required Upper Level Math (RQ 3565) | | | CR | Satisfied/Term |
|-------------------------------------|------------------------------|-----------|----|----------------|
| Math 1153 | Intro to Probability Stats 1 | 3 | | |
| Math 1154 | Intro to Probability Stats 2 | 3 | | |
| Math 1163 | Mathematics Seminar 1 | 1 | | |
| Math 1164 | Mathematics Seminar 2 | 1 | | |
| Math 1181 | Linear Algebra 1 | 3 | | |
| Math 1271 | Ord Differential Equations | 3 | | |
| Requirement Satisfied | | 14 | | |

| Required Business Courses (RQ 3566) | | | CR | Satisfied/Term |
|-------------------------------------|-------------------------|-----------|----|----------------|
| Acct 0115 | Accounting Principles | 3 | | |
| Fin 0300 | Principles of Finance | 3 | | |
| Econ 0105 | Intro to Microeconomics | 3 | | |
| Econ 0115 | Intro to Macroeconomics | 3 | | |
| Requirement Satisfied | | 12 | | |

| CS Requirements (RQ 3567) | | | CR | Satisfied/Term |
|------------------------------|--------------------------|----------|----|----------------|
| CS 0100 | Persp in Comp Science | 3 | | |
| CS 0410 | Intro to CS Applications | 1 | | |
| CS 0411 | Intro to CS Programming | 3 | | |
| Requirement Satisfied | | 7 | | |

| Math Electives (RQ 1058) | | | CR | Satisfied/Term |
|---------------------------------------------|---------------------------|--------------|----|----------------|
| Select one of the following courses | | | | |
| Math 1125 | Abstract Algebra | 3 | | |
| Math 1531 | Advanced Calculus 1 | 3 | | |
| Math 1561 | Complex Vari & Apps | 3 | | |
| Math 1701 | Intro to Topology | 3 | | |
| Select one of the following courses | | | | |
| Math 1071 | Numerical Math Anal | 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 | | | | |
| Math | | 3 | | |
| Math | | 3 | | |
| Requirement Satisfied | | 12-13 | | |

| Business Electives (RQ 3569) | | | CR | Satisfied/Term |
|--------------------------------------------|--------------------------|----------|----|----------------|
| Select two of the following courses | | | | |
| Acct 1110 | Cost Accounting Concepts | 3 | | |
| Fin 1330 | Fin Statement Analysis | 3 | | |
| Econ 0281 | Intro to Money & Banking | 3 | | |
| Econ 1141 | Economic Forecasting | 3 | | |
| Econ 1151 | Financial Economics | 3 | | |
| Acct 1270 | Financial Reporting | 3 | | |
| Fin 1310 | Investments | 3 | | |
| Fin 1355 | Financial Modeling | 3 | | |
| Acct 1356 | Capital Budgeting | 3 | | |
| Requirement Satisfied | | 6 | | |

MGPA (RQ 1065)
Major 50% (RQ 2882)

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 4/11/2023