Montana State University Billings
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www.msubillings.edu/advise/

GENERAL EDUCATION REQUIREMENTS – SEE ATTACHED PAGE FOR SPECIFIC COURSES

<table>
<thead>
<tr>
<th>General Education Category</th>
<th>Course #</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category I: Global Academic Skills (9 credits)</strong></td>
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<tr>
<td>A. Mathematics (3 credits)</td>
<td>M 171</td>
<td></td>
<td></td>
<td></td>
<td>WRIT 101</td>
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<tr>
<td>B. English (3 credits)</td>
<td>WRIT 101</td>
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<tr>
<td>C. Communication &amp; Information Literacy (3 credits)</td>
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<tr>
<td><strong>Category II: Natural Sciences (7 credits)</strong></td>
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<tr>
<td>2 lectures (6 credits) &amp; 1 lab (1 credit)</td>
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<tr>
<td>(1 life science &amp; 1 physical science &amp; 1 lab)</td>
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<tr>
<td><strong>Category III: Social Sciences and History (6 credits)</strong></td>
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<tr>
<td>A. Social Science (3 credits)</td>
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<tr>
<td>B. History (3 credits)</td>
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<tr>
<td><strong>Category IV: Cultural Diversity (3 credits)</strong></td>
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<tr>
<td><strong>Category V: Arts &amp; Humanities (6 credits)</strong></td>
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<tr>
<td>A. Fine Arts (3 credits)</td>
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<tr>
<td>B. Humanities (3 credits)</td>
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</table>

A minimum grade of “C-” required in all General Education courses.

*Note: Certain degrees may require a minimum grade of “C” in General Education courses.*
## GENERAL EDUCATION REQUIREMENTS

### CATEGORY I: GLOBAL ACADEMIC SKILLS 9 credits

**Students are required to take one course from each subcategory.**

**Subcategory A - Mathematics** 3 credits

- M 105 Contemporary Mathematics
- M 114 Extended Technical Mathematics
- M 121 College Algebra
- M 122 College Trigonometry
- M 131 Mathematics for Elementary Teachers II
- M 143 Finite Mathematics
- M 171 Calculus I
- STAT 141 Introduction to Statistical Concepts
- STAT 216 Introduction to Statistics

**Subcategory B - English** 3 credits

- WRIT 101 College Writing I
- WRIT 121 Introduction to Technical Writing
- WRIT 122 Introduction to Business Writing
- WRIT 201 College Writing II
- WRIT 220 Business & Professional Writing
- WRIT 221 Intermediate Technical Writing

**Subcategory C - Communication & Information Literacy** 3 credits

- COMX 111 Introduction to Public Speaking
- COMX 115 Introduction to Interpersonal Communication
- LS 125 Research in the Information Age
- BMIS 150 Computer Literacy

### CATEGORY II: NATURAL SCIENCES 6 cr. lecture & 1 cr. lab

**Students are required to take one course from each subcategory and at least one corresponding lab or SCIN 101, 102, 103 & 104.**

**Subcategory A – Life Sciences** 3-4 credits

- BIOB 101 Discover Biology
- BIOB 102 Discover Biology Lab
- BIOB 160 Principles of Living Systems
- BIOB 161 Principles of Living Systems Lab

**Subcategory B – Physical Sciences** 3-4 credits

- ASTR 110 Introduction to Astronomy
- ASTR 111 Introduction to Astronomy Lab
- CHMY 121 Introduction to General Chemistry
- CHMY 122 Introduction to General Chemistry Lab
- CHMY 141 College Chemistry I
- CHMY 142 College Chemistry Laboratory I
- GEO 101 Introduction to Physical Geology
- GEO 102 Introduction to Physical Geology Laboratory
- GPHY 111 Introduction to Physical Geography
- GPHY 112 Introduction to Physical Geography Lab
- PHSX 103 Our Physical World
- PHSX 104 Our Physical World Lab
- PHSX 205 College Physics I
- PHSX 206 College Physics I Lab
- PHSX 105 Fundamentals of Phys Sci
- PHSX 106 Fundamentals of Phys Sci Lab

**Subcategories A and B – Integrated Sciences** 7 credits

- SCIN 101, 102, 103 & 104 Integrated Sciences

### CATEGORY III: SOCIAL SCIENCES AND HISTORY 6 credits

**Students are required to take one course from each subcategory.**

**Subcategory A – Social Sciences** 3 credits

- ANTY 217 Physical Anthropology & Archeology
- BGEN 105 Introduction to Business
- COMX 106 Communicating in a Dynamic Workplace
- PSYX 231 Human Relations
- ECNS 201 Principles of Microeconomics
- ECNS 202 Principles of Macroeconomics
- EDU 105 Education and Democracy
- GPHY 141 Geography of World Regions
- HTH 110 Personal Health and Wellness
- PSCI 101 Introduction to Comparative Government
- PSCI 210 Introduction to American Government
- PSYX 100 Introduction to Psychology
- SOCI 101 Introduction to Sociology
- SOCI 201 Social Problems

**Subcategory B – History** 3 credits

- HSTA 101 American History I
- HSTR 101 Western Civilization I
- HSTR 102 Western Civilization II
- HSTR 103 Honors Western Civilization I
- HSTR 104 Honors Western Civilization II
- PSCI 230 Introduction to International Relations

### CATEGORY IV: CULTURAL DIVERSITY 3 credits

**Students are required to take one course from each subcategory.**

**Subcategory A – Fine Arts** 3 credits

- ARTZ 101 Art Fundamentals
- ARTZ 131 Ceramics for Non-majors
- ARTZ 105 Visual Language-Drawing
- FILM 160 Introduction to World Cinema
- CRWR 240 Introduction Creative Writing Workshop
- DSGN 248 Computer Presentation and Animation
- LIT 270 Film & Literature
- MUSI 101 Enjoyment of Music
- MUSI 114 Band: MSUB Symphonic
- MUSI 131 Jazz Ensemble I: MSUB
- MUSI 147 Choral Ensemble: University Chorus
- THTR 101 Introduction to Theatre
- THTR 120 Introduction to Acting I

**Subcategory B – Humanities** 3 credits

- ARTH 150 Introduction to Art History
- HONR 111 Perspectives and Understanding
- LIT 110 Introduction to Literature
- LIT 240 The Bible as Literature
- PHL 110 Introduction to Ethics
- PHL 111 Philosophies of Life

### CATEGORY V: ARTS & HUMANITIES 6 credits

**Students are required to take one course from each subcategory.**

**Subcategory A – Fine Arts** 3 credits

- ARTZ 101 Art Fundamentals
- ARTZ 131 Ceramics for Non-majors
- ARTZ 105 Visual Language-Drawing
- FILM 160 Introduction to World Cinema
- CRWR 240 Introduction Creative Writing Workshop
- DSGN 248 Computer Presentation and Animation
- LIT 270 Film & Literature
- MUSI 101 Enjoyment of Music
- MUSI 114 Band: MSUB Symphonic
- MUSI 131 Jazz Ensemble I: MSUB
- MUSI 147 Choral Ensemble: University Chorus
- THTR 101 Introduction to Theatre
- THTR 120 Introduction to Acting I

**Subcategory B – Humanities** 3 credits

- ARTH 150 Introduction to Art History
- HONR 111 Perspectives and Understanding
- LIT 110 Introduction to Literature
- LIT 240 The Bible as Literature
- PHL 110 Introduction to Ethics
- PHL 111 Philosophies of Life

**Total** 31
<table>
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<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Semester</th>
<th>Equivalent</th>
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<td>CSCI 111A</td>
<td>Programming with Java I</td>
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<td>*M 171</td>
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<td>M 110</td>
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<td>M 172</td>
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<td>Methods of Proof</td>
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<td>Discrete Structures I</td>
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<td>M 431</td>
<td>Abstract Algebra I</td>
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<td>M 471</td>
<td>Mathematical Analysis</td>
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<td>M 472</td>
<td>Introduction to Complex Analysis</td>
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<td>M 499</td>
<td>Capstone</td>
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<tr>
<td>STAT 341</td>
<td>Introduction to Probability and Statistics</td>
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*M May satisfy Academic Foundations/General Education requirements.

Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.

Electives
## BACHELOR OF SCIENCE DEGREE IN MATHEMATICS

<table>
<thead>
<tr>
<th>Categories</th>
<th>Credits</th>
<th>Earned</th>
<th>Remaining</th>
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<tr>
<td>General Education.</td>
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<tr>
<td>Mathematics Major</td>
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<tr>
<td>Minor (Optional)</td>
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<tr>
<td>Electives</td>
<td>V</td>
<td>______</td>
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<tr>
<td>Total</td>
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</tbody>
</table>

It is the student’s responsibility to know and meet the requirements for graduation. A minimum of 36 credits must be upper division classes (300 and above).

NOTES: