



# Eureka College 2019-2020 Catalog

## Major in Mathematics

Complete 120 semester hours of graduation-eligible credit.

| Mathematics Major |   | Gr | Cr        |
|-------------------|---|----|-----------|
| MAT131            | Intro to Mathematical Prgrmg                    |    | 3         |
| MAT171            | Calculus w/ Analytic Geometry I                 |    | 4         |
| MAT271            | Calculus w/ Analytic Geometry II                |    | 4         |
| MAT272            | Calculus w/ Analytic Geom III                   |    | 4         |
| MAT275            | Differential Equations <sup>(Alt Yrs)</sup>     |    | 3         |
| MAT280            | Discrete Mathematics                            |    | 3         |
| MAT310            | Probability and Statistics <sup>(Alt Yrs)</sup> |    | 3         |
| MAT315            | Linear Algebra                                  |    | 3         |
| MAT320            | Abstract Algebra <sup>(Alt Yrs)</sup>           |    | 3         |
| MAT340W           | Foundations of Geometry <sup>(Alt Yrs)</sup>    |    | 3         |
| MAT415            | Real Analysis <sup>(Alt Yrs)</sup>              |    | 3         |
| <b>TOTAL</b>      |   |    | <b>36</b> |

| Complete one of the following options:                         |    |    |
|--|----|----|
| <input type="radio"/> Completion of a second major:            |    |    |
| <input type="radio"/> Completion of a minor:                   |    |    |
| <input type="radio"/> 12 Credits Outside of Major at 200+Level | Gr | Cr |
|  |    |    |
|  |    |    |
|  |    |    |
|  |    |    |
| <b>TOTAL</b>   |    |    |

| General Education Capabilities                                   | Date Met  |
|--|-----------|
| <i>Justice and Civic Responsibility [JCR]</i>                    |           |
| <i>Aesthetic Sensibility [AS]</i>                                |           |
| <i>Analytical Inquiry &amp; Problem Solving [AIPS]</i>           |           |
| <i>Communication [CO]</i>  |           |
| <i>Health, Fitness, and Well-Being [HFWB]</i>                    |           |
| <i>Intercultural Understanding [IU]</i>                          |           |
| <i>Scientific Literacy [SL]</i>                                  |           |
| <i>Spiritual Engagement / Examined Life [SEEL]</i>               |           |
| <i>Sustainable Practices &amp; Environmental Conscience [SP]</i> |           |
| <i>Ethical Reasoning [ER]</i>                                    |           |
| ECC490 Ethical Reasoning Seminar                                 |           |
| <b>TOTAL CAPABILITIES COMPLETED (Not Credits)</b>                | <b>10</b> |

| Writing Requirement                   | Gr | Cr       |
|---------------------------------------|----|----------|
| ENG103W Academic Writing & Research   |    | 3        |
| ENG301W Adv. Academic Writing & Rsrch |    | 3        |
| MAT340W Foundations of Geometry       |    | -        |
| Elective <b>W</b> Course              |    | 3        |
| <b>TOTAL</b>                          |    | <b>9</b> |