# Providence College - Mathematics B.S.
## Class of 2029

| Core Requirements | Credits |
|---|---|
| Development of Western Civilization (4) | 16 |
| Ethics | 3 |
| Philosophy | 3 |
| Fine Arts | 3 |
| Quantitative Reasoning | *MTH 131* (4) |
| Natural Science | 3 |
| Social Science | 3 |
| Theology 200 Level | 3 |
| MTH 131 (4) | 3 |
| Intensive Writing I Proficiency | 3 |
| Intensive Writing II Proficiency | 3 |
| Oral Communication Proficiency | 3 |
| Diversity Proficiency | 3 |
| Civic Engagement Proficiency | 3 |
| Free Electives | |

| Major Requirements | Credits |
|---|---|
| **MTH 131 -** Calc & Analytical Geometry I | 4 |
| **MTH 132 -** Calc & Analytical Geometry II | 4 |
| **MTH 215 -** Linear Algebra | 3 |
| **MTH 223 -** Calculus III | 4 |
| **MTH 290 -** Foundations of Higher Mathematics | 3 |
| **MTH 315 -** Abstract Algebra I | 3 |
| **MTH 323 -** Real Analysis I | 3 |
| **MTH 324 or 316 or 330 -** Real Analysis II ***or*** Abstract Algebra ***or*** Complex Variables | 3 |
| **MTH Electives** (6 courses, 300-level or higher) | 18 |
| **CSC 103 or 104 -** Introduction to Computer Science or Software Development | 3 |

| Graduation Requirements / Degree Notes |
|---|
| - Students at Providence College must complete 120 credits, which includes both their core and major requirements. |
| - Students at PC need a minimum GPA of 2.0 to graduate. |
| **-** Currently, MTH majors fulfill the Quantitative Reasoning Core. |
| **-** MTH 131 requirement is waived for majors placed into MTH 132. |

### FRESHMAN YEAR

**FALL**

| Course # | Class | Credits |
|---|---|---|
| DWC 101 | Development of Western Civilization I | 4 |
| MTH 131 | Calc & Analytical Geometry I **(Quantitative Reasoning)** | 4 |
| CSC 103 **or** 104 | Introduction to Computer Science ***or*** Software Development | 4 |
| MTH 103 | First Year Mathematics Seminar | 1 |
| | Core or Elective | 3 |
| TOTAL | | 16 |

**SPRING**

| Course # | Class | Credits | Total Year Credits |
|---|---|---|---|
| DWC 102 | Development of Western Civilization II | 4 | |
| MTH 132 | Calc & Analytical Geometry II | 4 | |
| | *FREE ELECTIVE* | 3 | |
| | *CORE* | 3 | |
| | | | |
| TOTAL | | 14 | 30 |

### SOPHOMORE YEAR

**FALL**

| Course # | Class | Credits |
|---|---|---|
| DWC 201 | Development of Western Civilization III | 4 |
| MTH 223 | Calculus III | 4 |
| MTH 215 | Linear Algebra | 3 |
| | *FREE ELECTIVE* | 3 |
| | *CORE* | 3 |
| TOTAL | | 17 |

**SPRING**

| Course # | Class | Credits | Total Year Credits |
|---|---|---|---|
| DWC 202 | Development of Western Civilization IV | 4 | |
| MTH 290 | Foundations of Higher Mathematics | 3 | |
| | *FREE ELECTIVE* | 3 | |
| | *CORE* | 3 | |
| | *CORE* | 3 | |
| TOTAL | | 16 | 33 |

### JUNIOR YEAR

**FALL**

| Course # | Class | Credits |
|---|---|---|
| MTH 323 | Real Analysis I | 3 |
| MTH 315 | Abstract Algebra I | 3 |
| | *FREE ELECTIVE* | 3 |
| | *CORE* | 3 |
| | *CORE* | 3 |
| TOTAL | | 15 |

**SPRING**

| Course # | Class | Credits | Total Year Credits |
|---|---|---|---|
| MTH 324 ***or*** 316 ***or*** 330 | Real Analysis II ***or*** Abstract Algebra ***or*** Complex Variables | 3 | |
| | MTH Elective | 3 | |
| | FREE ELECTIVE | 3 | |
| | CORE | 3 | |
| | CORE | 3 | |
| TOTAL | | 15 | 30 |

### SENIOR YEAR

**FALL**

| Course # | Class | Credits |
|---|---|---|
| | MTH Elective | 3 |
| | MTH Elective | 3 |
| | CORE | 3 |
| | CORE | 3 |
| | FREE ELECTIVE | 3 |
| TOTAL | | 15 |

**SPRING**

| Course # | Class | Credits | Total Year Credits |
|---|---|---|---|
| | MTH Elective | 3 | |
| | MTH Elective | 3 | |
| | MTH Elective | 3 | |
| | FREE ELECTIVE | 3 | |
| | FREE ELECTIVE | 3 | |
| | | 15 | 30 |
| **TOTAL PROGRAM OF STUDY CREDITS** | | | **123** |