

## **Bachelor of Science in Mathematics**

2020-2021 Degree Completion Plan

**Important:** This degree plan is effective for those starting this degree program in fall 2020 through summer 2021. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations or cognates.

### **GENERAL EDUCATION/**

| FOUNDAT   | IONAL SKILLS REQUIREMENTS                   | (44-47 | hours)     | 1     |   |  |            |            |       |  |
|---|---|--------|------------|-------|---|--|------------|------------|-------|--|
| Course  |   | Hrs    | <u>Sem</u> | Grade | Course                                  |  | <u>Hrs</u> | <u>Sem</u> | Grade |  |
| Communication & Information Literacy (13 hours) <sup>1</sup>              |   |        |            |       | Major Foundational Courses (0-17 hours) |  |            |            |       |  |
| ENGL 101  | Composition & Rhetoric                      | 3      |            |       | CSIS 110                                | Introduction to Computer Sciences <sup>4</sup> | 3          |            |       |  |
| INQR 101  | Inquiry 101                                 | 1      |            |       | CSIS 111                                | Introduction to Programming <sup>4</sup>       | 3          |            |       |  |
|   | Communications Elective                     | 3      |            |       | ENGR 270                                | Technical Communication <sup>4</sup>           | 3          |            |       |  |
|   | Information Literacy Elective               | 3      |            |       | MATH 131                                | Calculus & Analytic Geometry I <sup>4</sup>    | 4          |            |       |  |
|   | Information Literacy Elective               | 3      |            |       | PHYS 231                                | University Physics I <sup>4</sup>              | 4          |            |       |  |
| Technological Solutions & Quantitative Reasoning (4-7 hours) <sup>1</sup> |   |        |            |       | <b>MAJOR</b>                            |  |            |            |       |  |
| UNIV 101  | Foundational Skills                         | 1      |            |       |   | Core (41 hours)                                |            |            |       |  |
| MATH  | Math Elective (MATH 114 or higher)          | 3      |            |       | MATH 132                                | Calculus & Analytic Geometry II                | 4          |            |       |  |
|   | Technology Competency <sup>2</sup>          | 0-3    |            |       | MATH 133                                | Calculus with Mathematica Lab                  | 1          |            |       |  |
|   |   |        |            |       | MATH 200                                | Introduction to Mathematical Reasoning         | 3          |            |       |  |
| Critical Thi  | nking (8 hours) <sup>1</sup>                |        |            |       | MATH 221                                | Applied Linear Algebra                         | 3          |            |       |  |
| RLGN 105  | Intr Bwvw/Contemp Moral Issues <sup>3</sup> | 2      |            |       | MATH 231                                | Calculus & Analytic Geometry III               | 4          |            |       |  |
| RSCH 201  | Research 201                                | 3      |            |       | MATH 311                                | Probability & Statistics I                     | 3          |            |       |  |
|   | Critical Thinking Elective                  | 3      |            |       | MATH 321                                | Linear Algebra                                 | 3          |            |       |  |
|   |   |        |            |       | MATH 331                                | Complex Variables                              | 3          |            |       |  |
| Civic & Global Engagement (5 hours) <sup>1</sup>                          |   |        |            |       | MATH 421                                | Elementary & Abstract Algebra I                | 3          |            |       |  |
| EVAN 101  | Evangelism & Christian Life <sup>3</sup>    | 2      |            |       | MATH 431                                | Real Analysis                                  | 3          |            |       |  |
|   | Cultural Studies Elective                   | 3      |            |       | MATH 450                                | Mathematics Capstone Seminar                   | 2          |            |       |  |
|   |   |        |            |       | MATH                                    | Math Elective <sup>5</sup>                     | 3          |            |       |  |
| Social & Scientific Inquiry (6 hours) <sup>1</sup>                        |   |        |            | MATH  | Math Elective <sup>6</sup>              | 3  |            |            |       |  |
|   | Natural Science Elective                    | 3      |            |       | MATH                                    | Math Elective <sup>7</sup>                     | 3          |            |       |  |
|   | Social Science Elective                     | 3      |            |       |   |  |            |            |       |  |
|   |   |        |            |       | FREE ELEC                               | CTIVES (15-35 hours) <sup>8</sup>              |            |            |       |  |
| Christianity  | & Contexts (8 hours) <sup>1</sup>           |        |            |       |   | ·  | _          |            |       |  |
| BIBL 105  | Old Testament Survey                        | 2      |            |       |   |  | _          |            |       |  |
| BIBL 110  | New Testament Survey                        | 2      |            |       |   | ·  | _          |            |       |  |
| THEO 201  | Theology Survey I <sup>3</sup>              | 2      |            |       |   |  | _          |            |       |  |
| THEO 202  | Theology Survey II <sup>3</sup>             | 2      |            |       |   |  | _          |            |       |  |
|   |   |        |            |       |   |  | _          |            |       |  |
|   |   |        |            |       |   |  | _          |            |       |  |
|   |   |        |            |       |   |  | _          |            |       |  |
|   |   |        |            |       |   |  | _          |            |       |  |

### **Graduation Requirements**

120 Total Hours

2.0 Overall grade point average

**30** Hours must be upper-level courses (300-400 level)

Grade of 'C' Minimum required for all upper-level courses in the major

25% Of major taken through Liberty University

30 Hours must be completed through Liberty University

**Grad App** Submission of Degree Completion Application must be completed within the last semester of a student's anticipated graduation date

**CSER** All requirements must be satisfied before a degree will be awarded

#### Notes

All applicable prerequisites must be met

<sup>1</sup>Refer to the list of approved general education electives at <a href="www.liberty.edu/gened">www.liberty.edu/gened</a> before enrolling in foundational skills requirements

All students must pass the Computer Assessment OR complete applicable INFT course; refer to  $\underline{www.liberty.edu/computerassessment} \ for \ more \ information$ 

<sup>3</sup>Students transferring in 45 or more UG credit hours will have the requirements of RLGN 105 & EVAN 101 waived; Students transferring in 60 or more UG credit hours will also have the requirements of THEO 201 and THEO 202 waived

Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at <a href="www.liberty.edu/gened">www.liberty.edu/gened</a>

<sup>5</sup>Choose course from the following: MATH 305 or 307

Choose course from the following: MATH 411 or 422

<sup>7</sup>Choose course from the following: MATH 301, 302, 332, 334, or 352

8May need 4 hours of upper-level electives

Suggested Course Sequence on second page

Revised: 08.17.2020 Effective: Catalog Term 2020-40

# SUGGESTED COURSE SEQUENCE

### FRESHMAN YEAR

| First Semester                                 |           | Second Semester                                  |          |  |  |  |  |  |  |  |  |
|--|-----------|--|----------|--|--|--|--|--|--|--|--|
| BIBL 105                                       | 2         | BIBL 110   | 2        |  |  |  |  |  |  |  |  |
| ENGL 101                                       | 3         | INQR 101   | 1        |  |  |  |  |  |  |  |  |
| RLGN 105                                       | 2         | Communications Elect. <sup>1</sup> [ENGR 270]    | 3        |  |  |  |  |  |  |  |  |
| UNIV 101                                       | 1         | Info Literacy Elective <sup>1</sup> [CSIS 110]   | 3        |  |  |  |  |  |  |  |  |
| MATH Elective <sup>1</sup> [MATH 131]          | 4         | Natural Science Elective <sup>1</sup> [PHYS 231] | 4        |  |  |  |  |  |  |  |  |
| Technology Competency <sup>2</sup>             | 0-3       | MATH 132   | 4        |  |  |  |  |  |  |  |  |
| MATH 133                                       | 1         | CSER   | <u>0</u> |  |  |  |  |  |  |  |  |
| CSER   | <u>0</u>  | Tota   | 1 17     |  |  |  |  |  |  |  |  |
| To   | tal 13-16 |  |          |  |  |  |  |  |  |  |  |
| SOPHOMORE YEAR                                 |           |  |          |  |  |  |  |  |  |  |  |
| EVAN 101                                       | 2         | THEO 201   | 2        |  |  |  |  |  |  |  |  |
| RSCH 201                                       | 3         | Critical Thinking Elective <sup>1</sup>          | 3        |  |  |  |  |  |  |  |  |
| MATH 200                                       | 3         | Cultural Studies Elective <sup>1</sup>           | 3        |  |  |  |  |  |  |  |  |
| MATH 221                                       | 3         | MATH 311   | 3        |  |  |  |  |  |  |  |  |
| MATH 231                                       | 4         | MATH 321   | 3        |  |  |  |  |  |  |  |  |
| CSER   | <u>0</u>  | CSER   | 0        |  |  |  |  |  |  |  |  |
| То   |           | Tota   |          |  |  |  |  |  |  |  |  |
| JUNIOR YEAR                                    |           |  |          |  |  |  |  |  |  |  |  |
| THEO 202                                       | 2         | Social Science Elective <sup>1</sup>             | 3        |  |  |  |  |  |  |  |  |
| Info Literacy Elective <sup>1</sup> [CSIS 111] | 3         | MATH Elective <sup>4</sup>                       | 3        |  |  |  |  |  |  |  |  |
| MATH 331                                       | 3         | Elective   | 3        |  |  |  |  |  |  |  |  |
| Elective <sup>3</sup>                          | 3         | Elective   | 3        |  |  |  |  |  |  |  |  |
| Elective <sup>3</sup>                          | 3         | Elective   | 3        |  |  |  |  |  |  |  |  |
| Elective                                       | 3         | CSER   | 0        |  |  |  |  |  |  |  |  |
| CSER   | <u>0</u>  | Tota   | 1 15     |  |  |  |  |  |  |  |  |
| То   | tal 17    |  |          |  |  |  |  |  |  |  |  |
| SENIOR YEAR                                    |           |  |          |  |  |  |  |  |  |  |  |
| MATH 421                                       | 3         | MATH 431   | 3        |  |  |  |  |  |  |  |  |
| MATH Elective <sup>5</sup>                     | 3         | MATH 450   | 2        |  |  |  |  |  |  |  |  |
| Elective                                       | 3         | MATH Elective <sup>6</sup>                       | 3        |  |  |  |  |  |  |  |  |
| Elective                                       | 3         | Elective   | 3        |  |  |  |  |  |  |  |  |
| Elective                                       | 3         | Elective   | 3        |  |  |  |  |  |  |  |  |
| CSER   | <u>0</u>  | CSER   | 0        |  |  |  |  |  |  |  |  |
| То   | tal 15    | Tota   |          |  |  |  |  |  |  |  |  |

## Notes

All applicable prerequisites must be met

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<sup>&</sup>lt;sup>1</sup>Refer to the list of approved general education electives at <a href="https://www.liberty.edu/gened">www.liberty.edu/gened</a> before enrolling in foundational skills requirements <sup>2</sup>All students must pass the Computer Assessment OR complete applicable INFT course; refer to <a href="https://www.liberty.edu/computerassessment">www.liberty.edu/computerassessment</a> for more information

<sup>&</sup>lt;sup>3</sup>May need 4 hours of upper-level electives <sup>4</sup>Choose from MATH 305 or 307

<sup>&</sup>lt;sup>5</sup>Choose from MATH 411 or 422

<sup>&</sup>lt;sup>6</sup>Choose from MATH 301, 302, 332, 334, or 352