

**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/

#### FOUNDATIONAL SKILLS REQUIREMENTS (39-42 hours)

Course		Hrs	Sem	Grade
<b>Communication &amp; Information Literacy (12 hours)<sup>1</sup></b>				
ENGL 101	Composition & Rhetoric	3	_____	_____
_____	Communications Elective	3	_____	_____
_____	Information Literacy Elective	3	_____	_____
_____	Information Literacy Elective	3	_____	_____
<b>Technological Solutions &amp; Quantitative Reasoning (3-6 hours)<sup>1</sup></b>				
UNIV 104	Instructional Tech. for Online Learning	0-3	_____	_____
MATH _____	Math Elective (MATH 114 or higher)	3	_____	_____
<b>Critical Thinking (7 hours)<sup>1</sup></b>				
RLGN 104	Christian Life & Biblical Worldview <sup>2</sup>	4	_____	_____
_____	Critical Thinking Elective	3	_____	_____
<b>Civic &amp; Global Engagement (3 hours)<sup>1</sup></b>				
_____	Cultural Studies Elective	3	_____	_____
<b>Social &amp; Scientific Inquiry (6 hours)<sup>1</sup></b>				
_____	Natural Science Elective	3	_____	_____
_____	Social Science Elective	3	_____	_____
<b>Christianity &amp; Contexts (8 hours)<sup>1</sup></b>				
BIBL 104	Survey of Old & New Testament	4	_____	_____
THEO 104	Introduction to Theology Survey <sup>2</sup>	4	_____	_____

#### **Major Foundational Courses (0-7 hours)**

Course		Hrs	Sem	Grade
CSIS 110	Introduction to Computing Sciences <sup>3</sup>	3	_____	_____
MATH 131	Calculus & Analytic Geometry I <sup>3</sup>	4	_____	_____

#### **MAJOR**

<u>Core (40 hours)</u>				
INDS 400	Knowledge Synth. For Prof. & Pers. Dev. <sup>4</sup>	3	_____	_____
MATH 132	Calculus & Analytic Geometry II	4	_____	_____
MATH 211	Introduction to Statistical Analysis	3	_____	_____
MATH 250	Introduction to Discrete Mathematics	3	_____	_____
MATH 410	Matrix & Linear Algebra	3	_____	_____
MATH 423	Abstract Algebraic Structures	3	_____	_____
MATH 430	Multivariable Calculus	3	_____	_____
MATH 432	Applied Differential Equations	3	_____	_____
MATH 441	Probability I	3	_____	_____
MATH 460	Mathematical Modeling & Simulation	3	_____	_____
_____	Natural Science Elective <sup>5,6</sup>	-	_____	_____
_____	Natural Science Elective <sup>5,6</sup>	-	_____	_____
_____	Natural Science Elective <sup>5,6</sup>	-	_____	_____
<u>Cognate (15 hours)</u>				
_____	Engineering Elective <sup>7,8</sup>	-	_____	_____
_____	Engineering Elective <sup>7,8</sup>	-	_____	_____
_____	Engineering Elective <sup>7,8</sup>	-	_____	_____
_____	Engineering Elective <sup>7,8</sup>	-	_____	_____
_____	Engineering Elective <sup>7,8</sup>	-	_____	_____

#### **FREE ELECTIVES (16-26 hours)<sup>9</sup>**

_____	_____	-	_____	_____
_____	_____	-	_____	_____
_____	_____	-	_____	_____
_____	_____	-	_____	_____

**Notes**  
*All applicable prerequisites must be met*  
<sup>1</sup>Refer to the list of approved general education electives at [www.liberty.edu/gened](http://www.liberty.edu/gened) before enrolling in foundational skills requirements  
<sup>2</sup>Students transferring in 45 or more UG credit hours will have the requirement of RLGN 104 waived; Students transferring in 60 or more UG credit hours will also have the requirement of THEO 104 waived  
<sup>3</sup>Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at [www.liberty.edu/gened](http://www.liberty.edu/gened)  
<sup>4</sup>INDS 400 should be taken in the final semester.  
<sup>5</sup>Choose a 200-400 level BIOL, CHEM, PHSC, or PHYS course not already required in the degree: a minimum of 9 hours total required<sup>6</sup>  
<sup>6</sup>**Important:** The Natural Science Electives required in the Major must be chosen from the same discipline (BIOL, CHEM, PHSC, or PHYS)  
<sup>7</sup>Choose a course not already applying to the degree from one of the following disciplines: ENGI, ENGR, or ENGV.  
<sup>8</sup>A minimum of 15 hours total is required for the Cognate.  
<sup>9</sup>May need up to 9 hours of 300-400 level electives to fulfill upper-level requirement; this is dependent upon courses chosen for the Natural Science Electives and the Cognate Electives. Student should contact academic advisor for more information  
*Suggested Course Sequence on second page*

#### **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 major foundational courses and 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

## SUGGESTED COURSE SEQUENCE

### FIRST YEAR

First Semester		Second Semester	
BIBL 104	4	RLGN 104	4
ENGL 101	3	Critical Thinking Elective <sup>1</sup>	3
UNIV 104	0-3	Information Literacy Elective <sup>1</sup> [CSIS 110]	3
Communications Elective <sup>1</sup>	3	Social Science Elective <sup>1</sup>	3
Math Elective <sup>1</sup> [MATH 131]	<u>4</u>	MATH 132	<u>4</u>
	Total 14-17		Total 17

### SECOND YEAR

Information Literacy Elective <sup>1</sup>	3	THEO 104	4
Natural Science Elective <sup>1</sup>	3	Cultural Studies Elective <sup>1</sup>	3
MATH 211	3	MATH 250	3
Elective	3	Natural Science Elective <sup>2,3</sup>	3
Elective	<u>3</u>	Elective	<u>3</u>
	Total 15		Total 16

### THIRD YEAR

MATH 410	3	MATH 423	3
Engineering Elective <sup>4,5</sup>	3	MATH 430	3
Natural Science Elective <sup>2,3</sup>	3	Engineering Elective <sup>4,5</sup>	3
Elective <sup>6</sup>	3	Natural Science Elective <sup>2,3</sup>	3
Elective	<u>3</u>	Elective <sup>6</sup>	<u>3</u>
	Total 15		Total 15

### FOURTH YEAR

MATH 432	3	INDS 400	3
MATH 441	3	MATH 460	3
Engineering Elective <sup>4,5</sup>	3	Engineering Elective <sup>4,5</sup>	3
Engineering Elective <sup>4,5</sup>	3	Elective	3
Elective	<u>1</u>	Elective	<u>3</u>
	Total 13		Total 15

#### Notes

<sup>1</sup>Refer to the list of approved general education electives at [www.liberty.edu/gened](http://www.liberty.edu/gened) before enrolling in foundational skills requirements

<sup>2</sup>Choose a 200-400 level BIOL, CHEM, PHSC, or PHYS course not already required in the degree

<sup>3</sup>**Important:** The Natural Science Electives required in the Major must be chosen from the same discipline (BIOL, CHEM, PHSC, or PHYS)

<sup>7</sup>Chose a course not already applying to the degree from one of the following disciplines: ENGI, ENGR, or ENGV.

<sup>8</sup>A minimum of 15 hours total is required for the Cognate.

<sup>6</sup>May need up to 9 hours of 300-400 level electives to fulfill upper-level requirement; this is dependent upon courses chosen for the Natural Science Electives. Student should contact academic advisor for more information