

**Important:** This degree plan is effective for those starting this degree program in fall 2019 through summer 2020. 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 (46-49 hours)

Course		Hrs	Sem	Grade
<b>Communication &amp; Information Literacy (13 hours)<sup>1</sup></b>				
ENGL 101	Composition & Rhetoric	3	_____	_____
INQR 101	Inquiry 101	1	_____	_____
_____	Communications Elective	3	_____	_____
_____	Information Literacy Elective	3	_____	_____
_____	Information Literacy Elective	3	_____	_____

#### Technological Solutions & Quantitative Reasoning (5-8 hours)<sup>1</sup>

UNIV 101	University Core Competencies	1	_____	_____
MATH _____	Math Elective (MATH 114 or higher)	4	_____	_____
_____	Technology Competency <sup>2</sup>	0-3	_____	_____

#### Critical Thinking (8 hours)<sup>1</sup>

RLGN 105	Intr Bwvw/Contemp Moral Issues <sup>3</sup>	2	_____	_____
RSCH 201	Research 201	3	_____	_____
_____	Critical Thinking Elective	3	_____	_____

#### Civic & Global Engagement (5 hours)<sup>1</sup>

EVAN 101	Evangelism & Christian Life <sup>3</sup>	2	_____	_____
_____	Cultural Studies Elective	3	_____	_____

#### Social & Scientific Inquiry (7 hours)<sup>1</sup>

_____	Natural Science Elective	4	_____	_____
_____	Social Science Elective	3	_____	_____

#### 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	_____	_____

Course		Hrs	Sem	Grade
<b>Major Foundational Courses (4-15 hours)</b>				
ENGR 270	Technical Communication <sup>4</sup>	3	_____	_____
MATH 131	Calculus & Analytical Geometry I <sup>4,5</sup>	4	_____	_____
MATH 132	Calculus & Analytical Geometry II <sup>4,5</sup>	4	_____	_____
PHYS 231	University Physics I <sup>4,5</sup>	4	_____	_____

#### MAJOR

<b>Core (68 hours)</b>				
CHEM 121	General Chemistry I	4	_____	_____
ENGI 220	Engineering Economy	3	_____	_____
ENGR 102	Introduction to Engineering	1	_____	_____
ENGR 110	Introduction to Engineering Fundamentals	3	_____	_____
ENGR 235	Statics	3	_____	_____
ENGR 240	Dynamics	3	_____	_____
ENGR 315	Fluid Dynamics	3	_____	_____
ENGR 381	Engineering Design Introduction	3	_____	_____
ENGR 481	Engineering Design I	3	_____	_____
ENGR 482	Engineering Design II	3	_____	_____
ENGV 205	Computer Aided Design	1	_____	_____
ENGV 225	Surveying	2	_____	_____
ENGV 250	Strength of Materials	3	_____	_____
ENGV 320	Civil Engineering Lab I	2	_____	_____
ENGV 325	Structural Analysis	3	_____	_____
ENGV 345	Soil Mechanics	3	_____	_____
ENGV 355	Civil Engineering Lab II	2	_____	_____
ENGV 365	Hydraulic Engineering	3	_____	_____
ENGV 380	Project & Construction Management	3	_____	_____
ENGV 390	Steel Structure Design	3	_____	_____
ENGV 395	Geotechnical Engineering	3	_____	_____
ENGV 410	Transportation Engineering	3	_____	_____
ENGV 420	Professional Practice	2	_____	_____
ENGV 425	Concrete Structure Design	3	_____	_____
ENGV 492	FE Exam	0	_____	_____
_____	Science Elective <sup>6</sup>	3	_____	_____

#### Technical Electives (3 hours)<sup>7</sup>

_____	_____	_____	_____	_____
<b>Quantitative Studies (15 hours)</b>				
ENGR 133	Calculus with MATLAB	1	_____	_____
ENGR 210	Prob. & Statistical Methods for Engr.	3	_____	_____
MATH 231	Calculus & Analytical Geometry III	4	_____	_____
MATH 334	Differential Equations	3	_____	_____
PHYS 232	University Physics II	4	_____	_____

#### 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>All students must pass the Computer Assessment OR complete applicable INFT course; refer to [www.liberty.edu/computerassessment](http://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 & THEO 202 waived

<sup>4</sup>Major Foundational Courses can also fulfill General Education/Core Competency requirements as applicable

<sup>5</sup>Minimum grade of "C" is required

<sup>6</sup>Choose from the following approved Science Courses: BIOL 101, ENVR 215, or ENVR 220

<sup>7</sup>Choose from the following courses: ENGV 415, 440, 455, 460

*Suggested Course Sequence on second page*

#### Graduation Requirements

136 Total Hours

2.0 Overall grade point average

34 Hours must be upper-level courses (300-400 level)

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

50% Of major, including technical electives and quantitative studies, taken through Liberty University

34 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

## SUGGESTED COURSE SEQUENCE

### FRESHMAN YEAR

First Semester		Second Semester	
ENGL 101	3	BIBL 105	2
MATH 131 <sup>1</sup>	4	INQR 101	1
RLGN 105	2	Communications Elective <sup>3</sup> [ENGR 270]	3
UNIV 101	1	Mathematics Elective <sup>3</sup> [MATH 132 <sup>1</sup> ]	4
Technology Competency <sup>2</sup>	0-3	Natural Science Elective <sup>3</sup> [PHYS 231 <sup>1</sup> ]	4
ENGR 102	1	ENGI 220	3
ENGR 110	3	CSER	<u>0</u>
ENGR 133	1		Total 17
CSER	<u>0</u>		
Total 15-18			

### SOPHOMORE YEAR

RSCH 201	3	Information Literacy Elective <sup>3</sup>	3
ENGR 210	3	CHEM 121	4
ENGR 235	3	ENGR 240	3
ENGV 205	1	ENGV 225	2
MATH 231 <sup>1</sup>	4	ENGV 250	3
PHYS 232	4	MATH 334	3
CSER	<u>0</u>	CSER	<u>0</u>
Total 18		Total 18	

### JUNIOR YEAR

Cultural Studies Elective <sup>3</sup>	3	ENGR 381	3
Social Science Elective <sup>3</sup>	3	ENGV 355	2
ENGR 315	3	ENGV 365	3
ENGV 320	2	ENGV 380	3
ENGV 325	3	ENGV 390	3
ENGV 345	3	ENGV 395	3
CSER	<u>0</u>	CSER	<u>0</u>
Total 17		Total 17	

### SENIOR YEAR

BIBL 110	2	EVAN 101	2
THEO 201	2	THEO 202	2
ENGR 481	3	Information Literacy Elective <sup>3</sup>	3
ENGV 410	3	Critical Thinking Elective <sup>3</sup>	3
ENGV 420	2	ENGR 482	3
ENGV 425	3	ENGV 492	0
Science Elective <sup>4</sup>	3	Technical Elective <sup>5</sup>	3
CSER	<u>0</u>	CSER	<u>0</u>
Total 18		Total 16	

#### Notes

<sup>1</sup>Minimum grade of "C" is required

<sup>2</sup>All students must pass the Computer Assessment OR complete applicable INFT course; refer to [www.liberty.edu/computerassessment](http://www.liberty.edu/computerassessment) for more information

<sup>3</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>4</sup>Choose from the following Approved Science Elective Courses: BIOL 101, ENVR 215, or ENVR 220

<sup>5</sup>Choose from the following courses: ENGV 415, 440, 455, 460