

# **Bachelor of Science in Civil Engineering**

2024-2025 Degree Completion Plan

**Important:** This degree plan is effective for those starting this degree program in fall 2024 through summer 2025. 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/

Course .		Hrs	Sem Grade	Course		Hrs	Sem	Grad
ammiinia	ation & Information Literacy (12 hou				dational Courses (4-15 hours)			
ENGL 101	Composition & Rhetoric	3		ENGR 270	Technical Communication <sup>4,5</sup>	3		
ANGE 101	Communications Elective	3		MATH 131	Calculus & Analytical Geometry I <sup>4,5</sup>	4		
		3		MATH 131	Calculus & Analytical Geometry II <sup>4,5</sup>	4		
		3		PHYS 231	University Physics I <sup>4,5,6</sup>	4		
Fachnalagi	cal Solutions & Quantitative Reasoni	na (5 <b>9</b>	hours)1	MAJOR				
JNIV 101	Foundational Skills	ng (3-0	nours)	MAJOR	Core (74-75 hours)			
MATH		4		BIOL 101	Principles of Biology <sup>5</sup>	3		
	Technology Competency <sup>2</sup>	0-3		CHEM 121	General Chemistry I <sup>5,6</sup>	4		
	reciniology competency	0.5		ENGI 220	Engineering Economy <sup>5</sup>	3		
ritical Thi	inking (5 hours) <sup>1</sup>			ENGR 110	Intro. to Engineering Fundamentals <sup>5</sup>	3		-
RLGN 105	Intr Bwww/Contemp Moral Issues <sup>3</sup>	2		ENGR 235	Statics <sup>5</sup>	3		
.2011 103	Critical Thinking Elective	3	<del></del>	ENGR 240	Dynamics <sup>5</sup>	3		
	Citical Timiking Diceave	5		ENGR 315	Fluid Dynamics	3		-
Sivie & Cle	obal Engagement (5 hours) <sup>1</sup>			ENGR 330	Mechanics of Materials	3		
EVAN 101	Evangelism & Christian Life <sup>3</sup>	2		ENGR 481	Engineering Design I	3		-
7711 101	Cultural Studies Elective	3		ENGR 482	Engineering Design II	3		
	Cultural Stadies Elective	3		ENGV 205	Computer Aided Design <sup>5</sup>	3		
ocial & Sc	ientific Inquiry (7 hours) <sup>1</sup>			ENGV 225	Surveying <sup>5</sup>	3		-
ociai & Sc	Natural Science Elective	4		ENGV 320	Civil Engineering Lab I	2		-
	Social Science Elective	3		ENGV 325	Structural Analysis	3		
	Social Science Licetive	3		ENGV 325 ENGV 336	Civil Engineering Materials	3		
'hrictianitı	y & Contexts (8 hours) <sup>1</sup>			ENGV 345	Soil Mechanics	3		-
SIBL 105	Old Testament Survey	2		ENGV 355	Civil Engineering Lab II	2		-
SIBL 110	New Testament Survey	2		ENGV 365	Hydraulic Engineering	3		
HEO 201	Theology Survey I <sup>3</sup>	2		ENGV 380	Project & Construction Management	3		-
HEO 202	Theology Survey II <sup>3</sup>	2		ENGV 395	Geotechnical Engineering	3		-
1120 202	Theology Survey II	-		ENGV 400	Structural Design	3		
				ENGV 410	Transportation Engineering	3		-
				ENGV 420	Professional Practice	3		-
				ENGV 435	Highway Engineering	3		-
				ENGV 493	FE Exam	0		-
				LING V 472	Science or Math Elective <sup>5,6,7</sup>	3-4		
					<u>Technical Electives</u> (3 hours) <sup>8</sup>			
						=		
				ENGR 210	Quantitative Studies (10 hours) Prob. & Statistical Methods for Engr. <sup>5</sup>	3		
					Calculus & Analytical Geometry III <sup>5</sup>			
				MATH 231 MATH 334	Differential Equations <sup>5</sup>	4		

#### Graduation Requirements

133 Total Hours

2.0 Overall grade point average

33.25 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, including technical electives and quantitative studies, taken through Liberty University

33.25 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 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="www.liberty.edu/computerassessment">www.liberty.edu/computerassessment</a> 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

Major Foundational Courses can also fulfill General Education/Core Competency requirements as applicable

Minimum grade of "C" is required

Lab Science courses require lab

<sup>7</sup>Choose from the following courses: CHEM 122, MATH 221, or PHYS 232

<sup>8</sup>Choose from the following courses: ENGV 415, 440, 455, or 460

Suggested Course Sequence on second page

## SUGGESTED COURSE SEQUENCE

### FRESHMAN YEAR

First Semester		Second Semester											
BIBL 105	2	BIBL 110		2									
ENGL 101	3	Communications Elective <sup>3</sup> [ENGR 270	<b>ո</b> 1դ	3									
MATH 131 <sup>1</sup>	4	Mathematics Elective [ENGR 276]	<i>)</i> ]	4									
RLGN 105	2	Natural Science Elective <sup>3</sup> [PHYS 231 <sup>1</sup> ]	1	4									
	1	ENGI 220 <sup>1</sup>	J	3									
UNIV 101	0-3	CSER											
Technology Competency <sup>2</sup> ENGR 110 <sup>1</sup>			7-4-1	0									
CSER	3	ı	otal	16									
CSER	<u>0</u>												
	Total 15-18												
SOPHOMORE YEAR													
ENGR 210 <sup>1</sup>	3	THEO 201		2									
ENGR 235 <sup>1</sup>	3	CHEM 121 <sup>1</sup>		4									
ENGV 2051	3	ENGR 240 <sup>1</sup>		3									
MATH 231 <sup>1</sup>	4	ENGR 330		3									
Science or Math Elective <sup>1,4</sup>	3-4	ENGV 225 <sup>1</sup>		3									
CSER	0	MATH 334 <sup>1</sup>		3									
	Total 16-17	CSER		0									
			otal	_									
	HINDON S	TA D											
JUNIOR YEAR													
ENGR 315	3	Information Literacy Elective <sup>3</sup>		3									
ENGV 325	3	ENGV 320		2									
ENGV 336	3	ENGV 380		3									
ENGV 345	3	ENGV 395		3									
ENGV 410	3	ENGV 400		3									
CSER	0	ENGV 435		3									
	Total 15	CSER		0									
		Т	otal	17									
	SENIOR Y	EAR											
EVAN 101	2	Critical Thinking Elective <sup>3</sup>		3									
THEO 202	2	Cultural Studies Elective <sup>3</sup>		3									
BIOL 101 <sup>1</sup>	3	Information Literacy Elective <sup>3</sup>		3									
ENGR 481	3	Social Science Elective <sup>3</sup>		3									
ENGV 355	2	ENGR 482		3									
ENGV 365	3	ENGV 492		0									
ENGV 420	3	Technical Elective <sup>5</sup>		3									
CSER	<u>0</u>	CSER		0									
	Total 18	Т	otal	18									

Revised: 05.02.2024 Effective: Catalog Term 2024-40

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

<sup>&</sup>lt;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>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 <sup>4</sup>Choose from the following courses: CHEM 122, MATH 221, or PHYS 232 <sup>5</sup>Choose from the following courses: ENGV 415, 440, 455, or 460