

Bachelor of Science in Civil Engineering

2022-2023 Degree Completion Plan

Important: This degree plan is effective for those starting this degree program in fall 2022 through summer 2023. 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	Gra
Communica	tion & Information Literacy (13 hou	$(rs)^1$			Major Foun	dational Courses (4-15 hours)			
ENGL 101	Composition & Rhetoric	3			ENGR 270	Technical Communication ⁴	3		
INQR 101	Inquiry 101	1			MATH 131	Calculus & Analytical Geometry I ^{4,5}	4		
	Communications Elective	3			MATH 132	Calculus & Analytical Geometry II ^{4,5}	4		
	Information Literacy Elective	3			PHYS 231	University Physics I ^{4,5}	4		
	Information Literacy Elective	3							
	·				MAJOR				
Fechnologic	cal Solutions & Quantitative Reasoni	ng (5-8	hours)	1		Core (68 hours)			
JNIV 101	Foundational Skills	1			CHEM 121	General Chemistry I	4		
MATH	Math Elective (MATH 114 or higher)	4			ENGI 220	Engineering Economy	3		
	Technology Competency ²	0-3			ENGR 102	Introduction to Engineering	1		
					ENGR 110	Introduction to Engineering Fundamentals	3		
Critical Thi	nking (8 hours) ¹				ENGR 235	Statics	3		_
RLGN 105	Intr Bwww/Contemp Moral Issues ³	2			ENGR 240	Dynamics	3		
RSCH 201	Research 201	3			ENGR 315	Fluid Dynamics	3		
	Critical Thinking Elective	3			ENGR 330	Mechanics of Materials	3		
	-				ENGR 381	Engineering Design Introduction	3		
Civic & Glo	obal Engagement (5 hours) ¹				ENGR 481	Engineering Design I	3		
EVAN 101	Evangelism & Christian Life ³	2			ENGR 482	Engineering Design II	3		
	Cultural Studies Elective	3			ENGV 205	Computer Aided Design	1		
					ENGV 225	Surveying	2		
Social & Scientific Inquiry (7 hours) ¹					ENGV 320	Civil Engineering Lab I	2		
	Natural Science Elective	4			ENGV 325	Structural Analysis	3		
	Social Science Elective	3			ENGV 345	Soil Mechanics	3		
					ENGV 355	Civil Engineering Lab II	2		
Christianity	& Contexts (8 hours) ¹				ENGV 365	Hydraulic Engineering	3		
BIBL 105	Old Testament Survey	2			ENGV 380	Project & Construction Management	3		
BIBL 110	New Testament Survey	2			ENGV 390	Steel Structure Design	3		
THEO 201	Theology Survey I ³	2			ENGV 395	Geotechnical Engineering	3		
THEO 202	Theology Survey II ³	2			ENGV 410	Transportation Engineering	3		
					ENGV 420	Professional Practice	2		
					ENGV 425	Concrete Structure Design	3		
					ENGV 492	FE Exam	0		
						Science Elective ⁶	3		
						<u>Technical Electives</u> (3 hours) ⁷			
						Quantitative Studies (15 hours)	-		_
					ENGR 133	Calculus with MATLAB	1		_
					ENCD 010	D 1 0 0 4 4 4 1 1 1 C F	2		

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
 - 25% 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

Notes All applicable prerequisites must be met

ENGR 210

MATH 231

MATH 334

PHYS 232

¹Refer to the list of approved general education electives at www.liberty.edu/gened before before enrolling in foundational skills requirements

Prob. & Statistical Methods for Engr.

Calculus & Analytical Geometry III

Differential Equations

University Physics II

²All students must pass the Computer Assessment OR complete applicable INFT course; refer to www.liberty.edu/computerassessment for more information

³Students 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

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

5Minimum grade of "C" is required

6Choose from the following approved Science Courses: BIOL 101, ENVR 215, or ENVR 220 7Choose 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											
ENGL 101		3	BIBL 105		2									
MATH 131 ¹		4	INQR 101		1									
RLGN 105		2	Communications Elective ³ [ENGR 270]	1	3									
UNIV 101		1	Mathematics Elective [ENGR 270]	']	4									
Technology Competency ²		0-3	Natural Science Elective ³ [PHYS 231 ¹]	1	4									
ENGR 102		1	ENGI 220	J	3									
ENGR 102 ENGR 110		3	CSER		0									
ENGR 133		1		otal	_									
CSER		0	10	otai	1 /									
CSER	Total	_												
10th 13 10														
SOPHOMORE YEAR														
RSCH 201		3	Information Literacy Elective ³		3									
ENGR 210		3	CHEM 121		4									
ENGR 235		3	ENGR 240		3									
ENGV 205		1	ENGR 330		3									
MATH 231 ¹		4	ENGV 225		2									
PHYS 232		4	MATH 334		3									
CSER		0	CSER		0									
	Total	18	To	otal	18									
JUNIOR YEAR														
Cultural Studies Elective ³		3	BIBL 110		2									
Social Science Elective ³		3	ENGR 381		3									
ENGR 315		3	ENGV 320		2									
ENGV 325		3	ENGV 380		3									
ENGV 345		3	ENGV 390		3									
ENGV 410		3	ENGV 395		3									
CSER		0	CSER		0									
	Total	_		otal	_									
	C.	ENIOD VEA	n.											
	3.	ENIOR YEA	ıĸ											
THEO 201		2	EVAN 101		2									
ENGR 481		3	THEO 202		2									
		2	Information Literacy Elective ³		3									
ENGV 365		3	Critical Thinking Elective ³		3									
ENGV 420		2	ENGR 482		3									
ENGV 425		3	ENGV 492		0									
Science Elective ⁴		3	Technical Elective ⁵		3									
CSER		<u>0</u>	CSER		0									
	Total	18	To	otal	16									

Revised: 03.09.2022 Effective: Catalog Term 2022-40

Minimum grade of "C" is required

2All students must pass the Computer Assessment OR complete applicable INFT course; refer to www.liberty.edu/computerassessment
for more information

³Refer to the list of approved general education electives at www.liberty.edu/gened before enrolling in foundational skills requirements ⁴Choose from the following Approved Science Elective Courses: BIOL 101, ENVR 215, or ENVR 220 ⁵Choose from the following courses: ENGV 415, 440, 455, or 460