LIBERTY UNIVERSITY. ONLINE

Bachelor of Science in Civil Engineering

2023-2024 Degree Completion Plan

Important: This degree plan is effective for those starting this degree program in fall 2023 through summer 2024. 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 (41-44 hours)

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

Course		Hrs	Sem	Grade
Major Foundational Courses (4-15 hours)				
ENGR 270	Technical Communication[3]	3		
MATH 131	Calculus & Analytical Geometry I[3,4]	4		
MATH 132	Calculus & Analytical Geometry II[3,4]	4		
PHYS 231	University Physics I[3,4]	4		
MAJOR				
	Core (65 hours)			
CHEM 115	Essentials of General Chemistry	4		
ENGI 220	Engineering Economy	3		
ENGR 105	Introduction to Engineering I	2		
ENGR 115	Introduction to Engineering II	2		
ENGR 235	Statics	3		
ENGR 240	Dynamics	3		
ENGR 315	Fluid Dynamics	3		
ENGR 330	Mechanics of Materials	3		
ENGR 481	Engineering Design I	3		
ENGR 482	Engineering Design II	3		
ENGV 205	Computer Aided Design	1		
ENGV 225	Surveying	2		
ENGV 320	Civil Engineering Lab I[5]	2		
ENGV 325	Structural Analysis	3		
ENGV 345	Soil Mechanics	3		
ENGV 355	Civil Engineering Lab II[5]	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[6]	3		
	Technical Elective (6 hours)[7]			
_____	_____	3		
_____	_____	3		
	Quantitative Studies (14 hours)			
ENGR 133	Calculus with MATLAB	1		
ENGR 210	Prob. & Statistical Methods for Engr.	3		
MATH 430	Multivariable Calculus	3		
MATH 432	Applied Differential Equations	3		
PHYS 232	University Physics II	4		

Graduation Requirements

130	Total Hours
2.0	Overall grade point average
32.5	Hours must be upper-level courses (300-400 level)
Grade of 'C'	Minimum required for **all** courses in the major, quantitative studies, and technical electives
25%	Of major taken through Liberty University
32.5	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

Notes

All applicable prerequisites must be met

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

[2]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

[3]Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at www.liberty.edu/gened

[4]Minimum grade of 'C' required

[5]Required On-campus Intensive course

[6]Choose from the following approved Science Courses: BIOL 101, ENVR 215, or ENVR 220

[7]Choose from the following courses: ENGR 381, ENGV 415, 440, 455, or 460

Suggested Course Sequence on second page

SUGGESTED COURSE SEQUENCE

FRESHMAN YEAR

First Semester		Second Semester	
ENGL 101	3	MATH 132[2]	4
RLGN 104	4	Information Literature Elective[1]	3
UNIV 104	0-3	Natural Science Elective[1] [PHYS 231][2]	4
Math Elective[1] [MATH 131][2]	4	ENGI 220	3
ENGR 105	2	ENGR 115	2
ENGR 133	1	Total	16
Total	14-17		

SOPHOMORE YEAR

Communications Elective[1] [ENGR 270]	3	CHEM 115	4
ENGR 210	3	ENGR 240	3
ENGR 235	3	ENGR 330	3
ENGV 205	1	ENGV 225	2
MATH 430	3	MATH 432	3
PHYS 232	4	Total	15
Total	17		

JUNIOR YEAR

Critical Thinking Elective[1]	3	BIBL 104	4
Social Sciences Elective[1]	3	ENGV 320[3]	2
ENGR 315	3	ENGV 380	3
ENGV 325	3	ENGV 390	3
ENGV 345	3	ENGV 395	3
ENGV 410	3	Technical Elective[4]	3
Total	18	Total	18

SENIOR YEAR

ENGR 481	3	THEO 104	4
ENGV 355[3]	2	Cultural Studies Elective[1]	3
ENGV 365	3	Information Literature Elective[1]	3
ENGV 420	2	ENGR 482	3
ENGV 425	3	ENGV 492	0
Science Elective[5]	3	Technical Elective[4]	3
Total	16	Total	16

Notes

[1]Refer to the list of approved general education electives at www.liberty.edu/gened before enrolling in foundational skills requirements
[2]Minimum grade of 'C' required
[3]Required On-campus Intensive course
[4]Choose from the following courses: ENGR 381, ENGV 415, 440, 455, 460
[5]Choose from the following approved Science Courses: BIOL 101, ENVR 215, or ENVR 220