

Bachelor of Science in Computer 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.

Course	YONAL SKILLS REQUIREMENTS	Hrs	Sem	Grade	Course		Hrs	Sem	Grade
Communic	ation & Information Literacy (12 ho	urs) ¹			Major Foun	dational Courses (4-18 hours)			
ENGL 101	Composition & Rhetoric	3			CSCN 111	Introduction to Programming ^{4,5}	3		
	Communications Elective	3			ENGR 270	Technical Communication ^{4,5}	3		
	Information Literacy Elective	3			MATH 131	Calculus & Analytical Geometry I4,5	4		
	Information Literacy Elective	3			MATH 132	Calculus & Analytical Geometry II ^{4,5}	4		
					PHYS 231	University Physics I ^{4,5,6}	4		
Technologi	cal Solutions & Quantitative Reasoni	ing (5-8	hours	$)^1$					
UNIV 101	Foundational Skills	1			MAJOR				
MATH	Math Elective (MATH 114 or higher)	4			·	<u>Core</u> (51-54 hours)			
	Technology Competency ²	0-3				Computer Engineering Elective ^{5,7}	3-6		
					ENGC 301	Introduction to Embedded Systems	3		
Critical Th	munication & Information Literacy (12 hours) ¹ L 101 Composition & Rhetoric 3			ENGC 361	Computer Architecture	3			
RLGN 105	Intr Bwvw/Contemp Moral Issues ³	2			ENGC 371	Embedded & Real-Time System Design	3		
	Critical Thinking Elective	3			ENGC 401	Advanced Embedded Systems Design	3		
					ENGC 465	Introduction to Computer Networks	3		
<u> </u>				ENGE 201	Introduction to Logic Design ⁵	3			
	Evangelism & Christian Life ³	2			ENGE 211	Intro. to Electrical & Electronic Circuits ⁵	4		
	Cultural Studies Elective	3			ENGE 212	AC Circuit Analysis ⁵	4		
					ENGE 311	Signals & Systems	3		
Social & Scientific Inquiry (7 hours) ¹				ENGE 321	Electronics	4			
		4			ENGE 341	Communication Systems	3		
	Social Science Elective	3			ENGI 220	Engineering Economy ⁵	3		
					ENGR 110	Intro. to Engineering Fundamentals ⁵	3		
Christianit	y & Contexts (8 hours) ¹				ENGR 481	Engineering Design I	3		
BIBL 105	Old Testament Survey	2			ENGR 482	Engineering Design II	3		
BIBL 110		2							
THEO 201		2				Technical Elective Courses (6 hours)5,6,8,9			
THEO 202	Theology Survey II ³	2					_		
							_		
						Quantitative Studies Courses (20 hours)			
					ENGR 210	Prob. & Statistical Methods for Engr. ⁵	3		
					MATH 221	Applied Linear Algebra ⁵	3		
					MATH 231	Calculus & Analytical Geometry III ⁵	4		
					MATH 250	Introduction to Discrete Mathematics ⁵	3		
					MATH 334	Differential Equations ⁵	3		

Graduation Requirements

123 Total Hours

2.0 Overall grade point average

30.75 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

30.75 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

PHYS 232

All applicable prerequisites must be met

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

University Physics II^{5,6}

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

⁴Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at www.liberty.edu/gened

⁵Minimum grade of "C" is required

⁶Lab Sciences courses require lab

⁷Choose one of the following options: CSCN 112 <u>and</u> CSCN 215; or ENGC 227¹⁰

⁸Select from the list of Approved <u>Engineering Technical Elective Courses</u>

⁹ENGR 495 (Directed Research) is strongly recommended

10ENGC 227 will not satisfy the Computer Science Minor if chosen.

Suggested Course Sequence on second page

Revised: 05.02.2024 Effective: Catalog Term 2024-40

SUGGESTED COURSE SEQUENCE

FRESHMAN YEAR

First Semester		Second Semester									
BIBL 105		BIBL 110	2								
ENGL 101		Communications Elective ³ [ENGR 270 ¹]	3								
MATH 131 ¹		Mathematics Elective ³ [MATH 132 ¹]	4								
RLGN 105		Natural Science Elective ³ [PHYS 231 ¹]	4								
UNIV 101	1	ENGI 220 ¹	3								
Technology Competency ²	0-3	CSER	0								
ENGR 110 ¹	3	Total	16								
CSER	<u>0</u>										
To	otal 15-18										
SOPHOMORE YEAR											
Information Literacy Elect. ³ [CSCN 11	1 ¹] 3	CSCN 112 ¹ or ENGC 227 ^{1,4}	3								
ENGE 211 ¹	4	ENGE 201 ¹	3								
MATH 231 ¹	4	ENGE 212 ¹	4								
MATH 250 ¹	3	MATH 221 ¹	3								
CSER	<u>0</u>	PHYS 232 ¹	4								
To	otal 14	CSER	0								
		Total	17								
	JUNIO	OR YEAR									
ENGC 301	3	EVAN 101	2								
ENGE 311	3	Information Literacy Elective ³	3								
ENGE 321	4	CSCN 215 (if applicable)	0-3								
ENGR 210 ¹	3	ENGC 371	3								
MATH 334 ¹	3	ENGE 341	3								
CSER	<u>0</u>	Technical Elective ^{1,5}	3								
Te	otal 16	CSER	0								
		Total	14-17								
	SENIO	OR YEAR									
THEO 201	2	THEO 202	2								
Critical Thinking Elective ³	3	Cultural Studies Elective ³	3								
ENGC 361	3	Social Science Elective ³	3								
ENGC 465	3	ENGC 401	3								
ENGR 481	3	ENGR 482	3								
Technical Elective ^{1,5,6}	3	CSER	0								
CSER	<u>0</u>	Total	14								
To	otal 17										

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³Refer to the list of approved general education electives at www.liberty.edu/gened before enrolling in foundational skills requirements

⁴ENGC 227 will not satisfy the Computer Science Minor if chosen.

⁵Select from the list of Approved Engineering Technical Elective Courses

⁶ENGR 495 (Directed Research) is strongly recommended