LIBERTY UNIVERSITY

Bachelor of Science in Electrical 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/ FOUNDATIONAL SKILLS REQUIREMENTS (42-45 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 (5-8 hours)[1]				
UNIV 101	Foundational Skills	1		
MATH ____	Math Elective (MATH 114 or higher)	4		
_____	Technology Competency[2]	0-3		
Critical Thinking (5 hours)[1]				
RLGN 105	Intr Bwvw/Contemp Moral Issues[3]	2		
_____	Critical Thinking Elective	3		
Civic & Global Engagement (5 hours)[1]				
EVAN 101	Evangelism & Christian Life[3]	2		
_____	Cultural Studies Elective	3		
Social & Scientific Inquiry (7 hours)[1]				
_____	Natural Science Elective	4		
_____	Social Science Elective	3		
Christianity & Contexts (8 hours)[1]				
BIBL 105	Old Testament Survey	2		
BIBL 110	New Testament Survey	2		
THEO 201	Theology Survey I[3]	2		
THEO 202	Theology Survey II[3]	2		

Course		Hrs	Sem	Grade
Major Foundational Courses (4-18 hours)				
CSCN 111	Introduction to Programming[4,5]	3		
ENGR 270	Technical Communication[4,5]	3		
MATH 131	Calculus & Analytical Geometry I[4,5]	4		
MATH 132	Calculus & Analytical Geometry II[4,5]	4		
PHYS 231	University Physics I[4,5,6]	4		
MAJOR				
	Core (52 hours)			
ENGC 361	Computer Architecture	3		
ENGE 201	Introduction to Logic Design[5]	3		
ENGE 211	Intro. to Electrical & Electronic Circuits[5]	4		
ENGE 212	AC Circuit Analysis[5]	4		
ENGE 311	Signals & Systems	3		
ENGE 312	Digital Signal Processing	3		
ENGE 321	Electronics	4		
ENGE 331	Electromagnetic Fields	4		
ENGE 341	Communication Systems	3		
ENGE 411	Control Systems	3		
ENGE 421	Advanced Electronics	3		
ENGI 220	Engineering Economy[5]	3		
ENGR 110	Intro. to Engineering Fundamentals[5]	3		
ENGR 481	Engineering Design I	3		
ENGR 482	Engineering Design II	3		
_____	Electrical Engineering Elective[7]	3		
	Technical Electives (6 hours)[5,8,9]			
_____	_____	_		
_____	_____	_		
	Quantitative Studies (20 hours)			
ENGR 210	Prob. & Statistical Analysis for Engr.[5]	3		
MATH 221	Applied Linear Algebra[5]	3		
MATH 231	Calculus & Applied Geometry III[5]	4		
MATH 250	Introduction to Discrete Mathematics[5]	3		
MATH 334	Differential Equations[5]	3		
PHYS 232	University Physics II[5,6]	4		

Graduation Requirements

- **124** Total Hours
- **2.0** Overall grade point average
- **31** 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
- **31** 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

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

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

[3]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

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

[5]Minimum grade of "C" is required

[6]Lab Science courses require labs

[7]Choose from: ENGC 465, ENGE 351, 431, or 496

[8]Select from the list of Approved Engineering Technical Elective Courses

[9]ENGR 495 (Directed Research) is strongly recommended

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[3] [ENGR 270[1]]	3
MATH 131[1]	4	Mathematics Elective[3] [MATH 132[1]]	4
RLGN 105	2	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	0		
Total	15-18		

SOPHOMORE YEAR

Information Literacy Elect.[3] [CSCN 111[1]]	3	ENGE 201[1]	3
ENGE 211[1]	4	ENGE 212[1]	4
MATH 231[1]	4	MATH 221[1]	3
MATH 250[1]	3	MATH 334[1]	3
CSER	0	PHYS 232[1]	4
Total	14	CSER	0
		Total	17

JUNIOR YEAR

THEO 201	2	THEO 202	2
ENGE 311	3	ENGE 312	3
ENGE 321	4	ENGE 341	3
ENGE 331	4	ENGE 421	3
ENGR 210[1]	3	Technical Elective[1,4]	3
CSER	0	CSER	0
Total	16	Total	14

SENIOR YEAR

EVAN 101	2	Cultural Studies Elective[3]	3
Critical Thinking Elective[3]	3	Information Literacy Elective[3]	3
ENGC 361	3	Social Science Elective[3]	3
ENGE 411	3	ENGR 482	3
ENGR 481	3	Technical Elective[1,4,6]	3
Electrical Engineering Elective[5]	3	CSER	0
CSER	0	Total	15
Total	17		

Notes

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

[4]Select from the list of Approved Engineering Technical Elective Courses

[5]Choose from: ENGC 465, ENGE 351, 431, or 496

[6]ENGR 495 (Directed Research) is strongly recommended