LIBERTY UNIVERSITY

Bachelor of Science in Computer Engineering

2020-2021 Degree Completion Plan

Important: This degree plan is effective for those starting this degree program in fall 2020 through summer 2021. 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 (46-49 hours)

Course		Hrs	Sem	Grade
Communication & Information Literacy (13 hours)[1]				
ENGL 101	Composition & Rhetoric	3		
INQR 101	Inquiry 101	1		
_____	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 (8 hours)[1]				
RLGN 105	Intr Bwvw/Contemp Moral Issues[3]	2		
RSCH 201	Research 201	3		
_____	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 (4-15 hours)				
ENGR 270	Technical Communication[4]	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]	4		
MAJOR				
	Core (61 hours)			
CSIS 111	Introduction to Programming	3		
CSIS 112	Advanced Programming	3		
CSIS 215	Algorithms & Data Structures	3		
ENGC 301	Introduction to Embedded Systems	3		
ENGC 361	Computer Architecture	3		
ENGC 371	Embedded & Real-Time System Design	3		
ENGC 401	Advanced Embedded Systems Design	3		
ENGC 465	Introduction to Computer Networks	3		
ENGE 201	Introduction to Logic Design	3		
ENGE 211	Intro. to Electrical & Electronic Circuits	4		
ENGE 212	AC Circuit Analysis	4		
ENGE 311	Signals & Systems	3		
ENGE 321	Electronics	4		
ENGE 341	Communication Systems	3		
ENGI 220	Engineering Economy	3		
ENGR 102	Introduction to Engineering	1		
ENGR 110	Introduction to Engineering Fundamentals	3		
ENGR 381	Engineering Design Introduction	3		
ENGR 481	Engineering Design I	3		
ENGR 482	Engineering Design II	3		
	Technical Elective Courses (3 hours)[6,7]			
_____	_____	_		
	Quantitative Studies Courses (21 hours)			
ENGR 133	Calculus with MATLAB	1		
ENGR 210	Prob. & Statistical Methods for Engr.	3		
MATH 221	Applied Linear Algebra	3		
MATH 231	Calculus & Analytical Geometry III	4		
MATH 250	Introduction to Discrete Mathematics	3		
MATH 334	Differential Equations	3		
PHYS 232	University Physics II	4		

Graduation Requirements

- **135** Total Hours
- **2.0** Overall grade point average
- **33.75** 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
- **33.75** 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

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]Select from the list of Approved Engineering Technical Elective Courses

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

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]	3
UNIV 101	1	Mathematics Elective[3] [MATH 132[1]]	4
Technology Competency[2]	0-3	Natural Science Elective[3] [PHYS 231[1]]	4
ENGR 102	1	ENGI 220	3
ENGR 110	3	CSER	0
ENGR 133	1	Total	17
CSER	0		
Total	15-18		

SOPHOMORE YEAR

RSCH 201	3	CSIS 112	3
CSIS 111	3	ENGE 201	3
ENGE 211	4	ENGE 212	4
MATH 231	4	MATH 221	3
MATH 250	3	PHYS 232	4
CSER	0	CSER	0
Total	17	Total	17

JUNIOR YEAR

EVAN 101	2	THEO 201	2
ENGC 301	3	Information Literacy Elective[3]	3
ENGE 311	3	CSIS 215	3
ENGE 321	4	ENGC 371	3
ENGR 210	3	ENGE 341	3
MATH 334	3	ENGR 381	3
CSER	0	CSER	0
Total	18	Total	17

SENIOR YEAR

THEO 202	2	BIBL 110	2
Critical Thinking Elective[3]	3	Cultural Studies Elective[3]	3
ENGC 361	3	Information Literacy Elective[3]	3
ENGC 465	3	Social Science Elective[3]	3
ENGR 481	3	ENGC 401	3
Technical Elective[4,5]	3	ENGR 482	3
CSER	0	CSER	0
Total	17	Total	17

Notes

[1]Minimum grade of "C" is required

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

[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]ENGR 495 (Directed Research) is strongly recommended