

Important: This degree plan is effective for those starting this degree program in fall 2018 through summer 2019. 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/

CORE COMPETENCY REQUIREMENTS (46-49 hours)

Course		Hrs	Sem	Grade
Communication (6 hours)¹				
ENGL 101	Composition & Rhetoric	3	_____	_____
_____	Communications Elective	3	_____	_____
Math, Science & Technology (9-12 hours)¹				
MATH _____	Math Elective (MATH 114 or higher)	4	_____	_____
_____	Natural Science Elective	4	_____	_____
_____	Technology Competency ²	0-3	_____	_____
UNIV 101	University Core Competencies	1	_____	_____
Information Literacy (7 hours)¹				
INQR 101	Inquiry 101	1	_____	_____
_____	Composition Elective	3	_____	_____
_____	Information Literacy Elective	3	_____	_____
Critical Thinking (12 hours)¹				
RSCH 201	Research 201	3	_____	_____
_____	Literature OR Philosophy Elective	3	_____	_____
_____	Social Science Elective	3	_____	_____
_____	Cultural Studies Elective	3	_____	_____
Christian Life & Thought (12 hours)^{1,3}				
BIBL 105	Old Testament Survey	2	_____	_____
BIBL 110	New Testament Survey	2	_____	_____
EVAN 101	Evangelism & Christian Life	2	_____	_____
RLGN 105	Intr Bwww/Contemp Moral Issues	2	_____	_____
THEO 201	Theology Survey I	2	_____	_____
THEO 202	Theology Survey II	2	_____	_____

Major Foundational Courses (4-15 hours)⁴

Course		Hrs	Sem	Grade
ENGR 270	Technical Communication	3	_____	_____
MATH 131	Calculus & Analytical Geometry I ⁵	4	_____	_____
MATH 132	Calculus & Analytical Geometry II ⁵	4	_____	_____
PHYS 231	University Physics I ⁵	4	_____	_____

MAJOR

Course		Hrs	Sem	Grade
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	_____	_____

Notes

All applicable prerequisites must be met

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

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

⁶Select from the list of Approved Engineering Technical Elective Courses

⁷ENGR 495 (Directed Research) is strongly recommended

Suggested Course Sequence on second page

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

50% 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 Graduation 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

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	<u>0</u>
ENGR 133	1	Total	17
CSER	<u>0</u>		
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 ¹	4	MATH 221	3
MATH 250	3	PHYS 232	4
CSER	<u>0</u>	CSER	<u>0</u>
Total	17	Total	17

JUNIOR YEAR

EVAN 101	2	THEO 201	2
ENGC 301	3	Composition 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	<u>0</u>	CSER	<u>0</u>
Total	18	Total	17

SENIOR YEAR

THEO 202	2	BIBL 110	2
Literature OR Philosophy 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	3	ENGR 482	3
CSER	<u>0</u>	CSER	<u>0</u>
Total	17	Total	17

Notes

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