

INDUSTRIAL ENGINEERING TECHNOLOGY (B.S.) - ONLINE

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

Code	Title	Hours
Communication & Information Literacy ¹		
ENGL 101	Composition and Rhetoric	3
	Communications Elective	3
	Information Literacy Elective	3
	Information Literacy Elective	3
Technological Solutions & Quantitative Reasoning ¹		
UNIV 104	Instructional Technology for Successful Online Learning	0-3
	Math Elective MATH 114 or higher	4
Critical Thinking ¹		
RLGN 104	Christian Life and Biblical Worldview ²	4
	Critical Thinking Elective	3
Civic & Global Engagement ¹		
	Cultural Studies Elective	3
Social & Scientific Inquiry ¹		
	Natural Science Elective	4
	Social Science Elective	3
Christianity & Contexts ¹		
BIBL 104	Survey of Old and New Testament	4
THEO 104	Introduction to Theology Survey ²	4
Total Hours		41-44

¹ Refer to the list of approved general education electives before enrolling in foundational skill requirements

² Students transferring in 45 or more UG credit hours will have the requirement of RLGN 104 Christian Life and Biblical Worldview (4 c.h.) waived; Students transferring in 60 or more UG credit hours will also have the requirement of THEO 104 Introduction to Theology Survey (4 c.h.) waived

Major Requirements

Code	Title	Hours
Major Foundational Courses		
CSIS 111	Introduction to Programming Using C++ ¹	3
ECON 110	Survey of Economics ¹	3
ENGR 270	Technical Communication ¹	3
MATH 131	Calculus and Analytic Geometry I ^{1,2}	4
MATH 132	Calculus and Analytic Geometry II ^{1,2}	4
PHYS 231	University Physics I ^{1,2}	4
Total Hours		21

¹ Course may fulfill select general education requirements

² Minimum grade of "C" required

Code	Title	Hours
Major Core		
ACCT 209	Survey of Accounting and Finance	3
BUSI 240	Organizational Behavior & Management	3
BUSI 310	Principles of Management	3
CHEM 115	Essentials of General Chemistry	4
ENGE 205	Electrical Systems	3
ENGI 220	Engineering Economy	3
ENGI 230	Production Systems	3
ENGI 307	Data Analysis and Machine Learning	3
ENGI 310	Operations and Research Logistics	3
ENGI 330	Facilities Design	3
ENGI 371	Six Sigma, Lean and Kaizen	3
ENGI 428	CNC and Programming Logic Chips	3
ENGI 450	Human Factors and Ergonomics	3
ENGI 461	Engineering Technology Capstone I	3
ENGI 462	Engineering Technology Capstone II	3
ENGR 105	Introduction to Engineering I	2
ENGR 115	Introduction to Engineering II	2
ENGR 210	Probability and Statistical Methods for Engineering	3
ENGR 235	Statics	3
ENGR 370	Quality Assurance	3
ENGV 205	Computer Aided Design	1
ENGV 380	Project and Construction Management	3
MATH 128	Elementary Functions and Coordinate Geometry	4
Total Hours		67

Code	Title	Hours
Free Electives		
	Choose 0-8 credit hours of Free Electives	0-8
Total Hours		0-8

All applicable prerequisites must be met

Graduation Requirements

- 120 Total hours
- 2.0 Overall grade point average
- 30 Hours must be upper-level courses (300-400 level)
- **Grade of 'C'** Minimum required for **all** courses in the major
- 25% Of major taken through Liberty University
- 30 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

Course Sequence

Course	Title	Hours
Freshman Year		
First Semester		
ENGL 101	Composition and Rhetoric	3

Course	Title	Hours
UNIV 104	Instructional Technology for Successful Online Learning	0-3
Social Sciences Elective	^{ECON 110 1}	3
ENGR 105	Introduction to Engineering I	2
ENGR 115	Introduction to Engineering II	2
MATH 128	Precalculus with Trigonometry	4
Hours		14-17

Second Semester

MATH 131	Calculus and Analytic Geometry I	4
RLGN 104	Christian Life and Biblical Worldview	4
Cultural Studies Elective	¹	3
Information Literature Elective	^{CSIS 111 1}	3
ENGV 205	Computer Aided Design	1
Hours		15

Sophomore Year**First Semester**

Math Elective	^{MATH 132 1}	4
ACCT 209	Survey of Accounting and Finance	3
CHEM 115	Essentials of General Chemistry	4
ENGI 220	Engineering Economy	3
ENGI 230	Production Systems	3
Hours		17

Second Semester

Natural Science Elective	^{PHYS 231 1}	4
BUSI 310	Principles of Management	3
ENGE 205	Electrical Systems	3
ENGR 210	Probability and Statistical Methods for Engineering	3
ENGR 235	Statics	3
Hours		16

Junior Year**First Semester**

BIBL 104	Survey of Old and New Testament	4
Information Literature Elective	¹	3
BUSI 240	Organizational Behavior and Management	3
ENGI 330	Facilities Design	3
ENGR 370	Quality Assurance	3
Hours		16

Second Semester

Communications Elective	^{ENGR 270 1}	3
ENGI 371	Six Sigma, Lean and Kaizen	3
ENGV 380	Project and Construction Management	3
Elective		3
Elective		2
Hours		14

Senior Year**First Semester**

Critical Thinking Elective	¹	3
ENGI 307	Data Analysis and Machine Learning	3
ENGI 310	Operations and Research Logistics	3

Course	Title	Hours
ENGI 428	CNC and Programming Logic Chips	3
Hours		12
Second Semester		
THEO 104	Introduction to Theology Survey	4
ENGI 450	Human Factors and Ergonomics	3
ENGI 461	Engineering Technology Capstone I ²	3
ENGI 462	Engineering Technology Capstone II ²	3
Elective		3
Hours		16
Total Hours		120-123

¹ Refer to the list of approved general education electives here before enrolling in foundational skills requirements

² ENGI 461 is a prerequisite for ENGI 462