

Student: \_\_\_\_\_

ID#: \_\_\_\_\_

Advisor: \_\_\_\_\_

# Bachelor of Science in Electrical Engineering

2021-2022 Catalog

DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

### Overall Requirements to Graduate

- 120+ semester hours
- Completion of core curriculum
- Completion of a major
- 36 upper division credit hours
- GPA above 2.0
- Major GPA above 2.0
- Minor/Program complete (optional)



**UNIVERSITY OF  
ST. THOMAS**

Credit Hour Breakdown	
Hours completed	
Hours in progress	
Core hours needed	
Major hours needed	
(Minor hours needed)	
(Other hours needed)	
Elective hours needed	
TOTAL HOURS (120+)	

<b>Core Curriculum (43 hours)</b>	Complete	Needed
Adapted for the Electrical Engineering Program		
<b>Theology (9 credit hours)</b> Must take in order. (Pre-req: Phil 1311 or 1315/3315)		
<input type="checkbox"/> THEO 1301/3301 Intro to Sacred Scriptures <input type="checkbox"/> THEO 2301/3311 Teachings of the Catholic Church <input type="checkbox"/> THEO 3349 Christ and the Moral Life (Phil 2314 or 2316/3316)		
<b>Philosophy (9 credit hours)</b>		
<input type="checkbox"/> PHIL 1311 Philosophy of the Human Person <input type="checkbox"/> PHIL 2314 Ethics <input type="checkbox"/> PHIL 3333 Logic		
<b>English (9 credit hours)</b> Must take in order.		
<input type="checkbox"/> ENGL 1341 - The Classical Tradition: Literature & Composition I <input type="checkbox"/> ENGL 1342 - The Middle Ages: Literature & Composition II <input type="checkbox"/> ENGL 4393 - Technical Writing		
<b>History (6 credit hours)</b>		
<input type="checkbox"/> HIST 2333 – United States to 1877 <input type="checkbox"/> HIST 2334 – United States since 1877		
<b>Social and Behavioral Sciences (6 credit hours)</b>		
<input type="checkbox"/> POSC 2331 – American Federal Government <input type="checkbox"/> Choose 3 hours from Social & Behavioral Science list		
<b>Natural Sciences (8-10 Credit Hours)</b>		
(Included in cooperative engineering major requirements)	Included in Major	
<b>Mathematics (3 credit hours)</b>		
(Included in cooperative engineering major requirements)	Included in Major	
<b>Fine Arts (3 credit hours)</b>		
<input type="checkbox"/> ARTHS 2352 – Survey of Art II (recommended; consult with Department Chair)		
<b>Freshman Symposium (1 credit hour)</b> Required for all incoming freshmen.		
<input type="checkbox"/> UNIV 1111 Freshman Symposium		

Last updated on February 14, 2021

# Bachelor of Science in Electrical Engineering

2021-2022 Catalog

<b>Major Requirements (83 credit hours)</b>	<b>Completed</b>	<b>Needed</b>
<b>Major Coursework (62 credit hours)</b>		
<input type="checkbox"/> ENGR 1300/1100 – Introduction to Engineering w/lab <input type="checkbox"/> PHYS 2333/2111 – University Physics I w/ lab (MATH 1431 co or pre) <input type="checkbox"/> PHYS 2334/2112 – University Physics II w/ lab (PHYS 2333/2111, MATH 1432 co or pre) <input type="checkbox"/> PHYS 3337/3137 – Modern Physics with Lab (PHYS 2334/2112) <input type="checkbox"/> ENGR 3333/3133 – Electrical Circuits with Laboratory (ENG 3343, PHYS 2334/2112) <input type="checkbox"/> ENGR/PHYS 3343 – Mathematical Methods for Physics and Engineering <input type="checkbox"/> ENGR/PHYS 3130 – Junior/Senior Seminar <input type="checkbox"/> ENGR2100 – Intro to Engineering Design <input type="checkbox"/> ENGR 2410 – Digital Design <input type="checkbox"/> ENGR 3330 – Electronics I <input type="checkbox"/> ENGR 3331 – Electronics II /3131 Advanced Electronics Lab <input type="checkbox"/> ENGR3334 – Microprocessors <input type="checkbox"/> ENGR 3336 – Robotics <input type="checkbox"/> ENGR 3340 – Signals and Systems <input type="checkbox"/> PHYS 4333 – Electromagnetism (PHYS 3337, ENG 3343 and either PHYS3342 or PHYS 3338) <input type="checkbox"/> ENGR4342 – Electromagnetic Fields and Waves <input type="checkbox"/> ENGR/PHYS 4364 – Materials Science <input type="checkbox"/> ENGR 4446 – Control Systems and Automation <input type="checkbox"/> ENGR 4344/4144 – Electrical Engineering Capstone w/ Lab		
<b>ENGR/PHYS Electives (9 hours)</b>		
Choose from ENGR/PHYS options. Consult with Academic Advisor for options		
<b>Mathematics (12 credit hours) Must take in order.</b>		
<input type="checkbox"/> MATH 1431 – Calculus I <input type="checkbox"/> MATH 1432 – Calculus II <input type="checkbox"/> MATH 2431 – Calculus III		

<b>Totals</b>	<b>Completed</b>	<b>Needed</b>
<b>Total undergraduate hours (120 minimum)</b>		

MINIMUM TOTAL: 126