

# BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Catalogue

2018-2019

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

Date: \_\_\_\_\_

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

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

## Year 1

Semester 1	Cr	Status	Semester 2	Cr	Status
ENGR 002 - Graphical Communications	2		EE 001 - EE Principles and Design <sup>5</sup>	2	
CHEM 031 - General Chemistry I	4		PHYS 031 - Physics for Engineers I	4	
FWIL <sup>1</sup> (ENGS 001 / HCOL 085 / TAP)	3		PHYS 030 - Prob. Solv. Session I [opt]	[1]	
MATH 021 - Calculus I	4		MATH 022 - Calculus II	4	
Diversity 1 <sup>3</sup> (D1 courses)	3		CS 020 - Programming for Engineers	3	
ENGR 050 - First Year Engineering Seminar <sup>5</sup>	1		Diversity 1 or 2 <sup>3</sup> (D1 or D2 courses)	3	
<i>Total credits</i>	17		<i>Total credits</i>	16-17	

## Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
EE 003 - Linear Circuit Analysis	3		EE 004 - Linear Circuit Analysis II	3	
EE 081 - Linear Circuits Lab	2		EE 082 - Linear Circuits Lab II	2	
MATH 121 - Calculus III	4		MATH 271 - Appl. Math. for Engr. & Sci.	3	
PHYS 125 - Physics for Engineers II	3		EE 134 - Microcontroller Systems	4	
PHYS 123 - Prob. Solv. Session II [opt]	[1]		MATH 122 - Applied Linear Algebra	3	
EE 131 - Fundamentals of Digital Design	3				
EE 106 - Embedded Programming in C	2				
<i>Total credits</i>	17-18		<i>Total credits</i>	15	

## Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
EE 120 - Electronics I	4		EE 110 / 113 / 121 / 174 <sup>7</sup>	4	
STAT 151 - Applied Probability	3		EE 110 / 113 / 121 / 174 <sup>7</sup>	4	
EE 171 - Signals & Systems	4		EE 110 / 113 / 121 / 174 <sup>7</sup>	4	
EE 183 - Electronics Laboratory	2		EE 184 - Electronics Design Project	3	
EE 141 - Electromagnetic Field Theory	4		EE 180 - Engineering Ethics/Leadership <sup>6</sup>	1	
<i>Total credits</i>	17		<i>Total credits</i>	16	

## Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
EE Elective <sup>4</sup>	3		EE Elective <sup>4</sup>	3	
EE Elective <sup>4</sup>	3		EE Elective <sup>4</sup>	3	
EE 187 - Capstone Design I	3		EE 188 - Capstone Design II	3	
Free Elective <sup>2</sup>	3		Free Elective <sup>2</sup>	3	
			Free Elective <sup>2</sup>	3	
<i>Total credits</i>	12		<i>Total credits</i>	15	

### Minimum Total Credits Required for Degree: 125

1. Foundational Writing and Information Literacy (FWIL) is a University requirement. Students must take either ENGS 001 or HCOL 085 (only for students enrolled in the Honors College). Students transferring from the College of Arts and Sciences can use a TAP class to fulfill this requirement.

2. Free Electives: Students may use free elective credits to pursue coursework germane to their interests. Students are encouraged to work with their advisor(s) to select courses that complement their curricula and support their academic and career goals. Students should select one course that meets the University Sustainability Requirement (SU) if they have not taken an SU engineering course.

3. Diversity courses are a University requirement. Students must take one three-credit D1 course and a second three-credit D1 or D2 course.

4. EE Electives: [EE 193](#); [EE 194](#); and all 200-level, 3-4 credit EE courses. At least 9 credits must be at the 200-level or above. (Four distinct 3-4 credit EE electives are required. EE Elective requirement may not be met by taking three 4 credit courses).

5. [ENGR 050](#) & [EE 001](#) are degree requirements designed for first-year students. Transfer students may substitute 100-level or higher engineering (BME, CE, EE, ENGR, ME) credits for these requirements.

6. [EE 180](#) meets the EE Ethics & Leadership Requirement. Students may pursue a documented, pre-approved substitution (to take ethics/leadership coursework in disciplines such as Philosophy, Business and Military Studies) or waiver (to satisfy this requirement through ethics/leadership-related non-course university activities).

7. A student must take 3 of the following courses - EE 110, EE 113, EE 121, EE 174. If a student takes all four courses, one course counts as an EE Elective.

N.B. The University's Quantitative Reasoning (QR) requirement is built into the Electrical Engineering curriculum.