## **BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING**

Student:

ID #:

Date:

Catalogue 2015-2016

Advisor:

| Year 1<br>Semester 1                        | Cr | Status | Semester 2   | Cr    | Status |
|---|----|--------|--|-------|--------|
| ENGR 002 - Grphcl. Comm. (Solid Works)      | 2  |        | EE 001 - First Year Design Experience <sup>5</sup> | 2     |        |
| CHEM 031 - General Chemistry I <sup>1</sup> | 4  |        | PHYS 031 - Physics for Engineers I <sup>1</sup>    | 4     |        |
| ENGS 001 - Written Expression               | 3  |        | PHYS 030 - Prob. Solv. Session I [opt]             | [1]   |        |
| MATH 021 - Calculus I <sup>1</sup>          | 4  |        | MATH 022 - Calculus II <sup>1</sup>                | 4     |        |
| General Education Elective <sup>2</sup>     | 3  |        | CS 020 - Programming for Engineers <sup>1</sup>    | 3     |        |
|   |    |        | General Education Elective <sup>2</sup>            | 3     |        |
| Total credits                               | 16 |        | Total credits                                      | 16/17 |        |

1. Students must complete the Pre-Engineering Technical (PET) courses with C- or higher by the end of the first year of study. Students not completing the PET Requirement during their first year, will be put on NOTICE and must successfully complete the courses by the end of the fall term of their Sophomore year in order to take additional engineering courses. Student must have a cumulative GPA of at least 2.3 before taking sophomore level engineering courses.

| 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 - Fund. of Microcomp. Based Sys. | 4  |        |
| PHYS 123 - Prob. Solv. Session II [opt] | [1]   |        | MATH 122 - Applied Linear Algebra       | 3  |        |
| EE 131 - Fundamentals of Digital Design | 3     |        |   |    |        |
| CS 031 - Computer Programming           | 1     |        |   |    |        |
| Total credits                           | 16/17 |        | Total credits                           | 15 |        |

## Year 3

| Semester 1                              | Cr | Status | Semester 2                              | Cr | Status |
|---|----|--------|---|----|--------|
| EE 120 - Electronics I                  | 3  |        | EE 121 - Electronics II                 | 3  |        |
| STAT 151 - Applied Probability          | 3  |        | EE Technical Elective <sup>3</sup>      | 3  |        |
| EE 171 - Signals & Systems              | 4  |        | EE 174 - Intro. to Comm. Systems        | 4  |        |
| EE 183 - Electronics Lab I              | 2  |        | EE 184 - Electronics Lab II             | 2  |        |
| EE 141 - Electromagnetic Field Theory I | 4  |        | EE 163 - Solid State Phys Electronics I | 4  |        |
| Total credits                           | 16 |        | Total credits                           | 16 |        |

## Year 4

| Semester 1                              | Cr | Status | Semester 2                              | Cr | Status |
|---|----|--------|---|----|--------|
| EE Technical Elective <sup>3</sup>      | 3  |        | EE Technical Elective <sup>3</sup>      | 3  |        |
| 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  |        | General Education Elective <sup>2</sup> | 3  |        |
| General Education Elective <sup>2</sup> | 3  |        | EE 188 - Capstone Design II             | 3  |        |
| General Education Elective <sup>2</sup> | 3  |        |   |    |        |
| Total credits                           | 18 |        | Total credits                           | 15 |        |

2. Required General Education Electives (GenEd): fifteen credits of approved GenEd electives, including three credits of D1 and three credits of D1 or D2.

3.EE Technical Electives. All EE Electives<sup>4</sup> and <u>CS 064</u>, <u>CS 100</u>, <u>CS 110</u>, <u>CS 121</u>, <u>CS 123</u>, <u>CS 124</u>; <u>PHYS 128</u>; ME 014, ME 040; MATH 052; MATH 124; ANPS 019; ANPS 020; BSAD 180; CHEM 032, CHEM 042, CHEM 141, CHEM 142; all 200-level engineering, CS, MATH, STAT, CHEM, and PHYS courses except for practicum and seminar. (At least three of the twelve required technical elective credits must be from the following subject areas: MATH, STAT, CHEM or PHYS).

4. EE Electives: EE 113; EE 193; EE 194; and all 200-level, 3-4 credit EE courses. At least 9 credits must be at the 200level 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. Transfer students without applicable transfer credit have the option of either taking EE 001 or replacing the credits with engineering course work at the 100-level or higher.