

# **Electrical Engineering and Business (Option B)**

**September 2019** (for students who entered first year in September 2018)

| Applied Mathematics for Engineering II                |
|---|
| Computer Science Fundamentals II                      |
| Electric Circuits I                                   |
| Electrical Laboratory                                 |
| Digital Logic Systems                                 |
| Accounting & Business Analysis                        |
|   |
|   |
| Applied Mathematics for Elec. & Mech. Engineering III |
| Introduction to Electronics                           |
| Circuits and Systems                                  |
| Magnetic Circuits and Transmission Lines              |
| Principles of Design in Electrical Engineering        |
| Accounting & Business Analysis                        |
|   |
|   |

## Year 3: HBA 1

# Year 4

## Term A

AM 3415A Applied Mathematics for Electrical Engineering II
ECE 3330A Control Systems
ECE 3332A Electric Machines
ECE 3337A Electronic Circuits
SS 2141A Applied Statistics and Data Analysis
BUS 4569 Ivey Field Project

## Term B

| ECE 3331B | Introduction to Signal Processing                        |
|-----------|--|
| ECE 3336B | Electromagnetic Theory                                   |
| ECE 3370B | Communication Electronics I                              |
| ECE 3375B | Microprocessors and Microcomputers                       |
| ECE 3399B | Principles and Practices of Design of Electronic Systems |
|           |  |

## Year 5

## Term A

ECE 4416 Electrical/Computer Engineering Project
ECE 4429A Advanced Digital Signal Processing
ECE 4437A Communications Theory

One 0.5-credit technical elective 1.5 HBA required courses\*\*

#### Term B

ECE 4416 Electrical/Computer Engineering Project

ES 4498G Engineering Ethics, Sustainable Development & the

Law

Three 0.5-credit Business electives from 4000 level Business courses

## **NOTES:**

### \*\*1.5 HBA required courses:

- International Perspective Requirement: Business 4505A/B.
- Corporations and Society Requirement: at least 0.5-credit from Business Administration – Corporations and Society designated electives offered during the academic year or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.
- Managerial Accounting Requirement: Business 4624A/B

### **Technical Electives**

Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.

| ECE 3349A/B | Introduction of VLSI                         |
|-------------|--|
| ECE 4430A/B | Selected Topics in Electrical Engineering I  |
| ECE 4431A/B | Selected Topics in Electrical Engineering II |
| ECE 4432A/B | Radiation and Propagation                    |
| ECE 4433A/B | Digital Communications Systems               |
| ECE 4436A/B | Networking: Principles, Protocols &          |
|             | Architecture                                 |
| ECE 4438A/B | Advanced Image Processing & Analysis         |
| ECE 4439A/B | Conventional, Renewable & Nuclear Energy     |
| ECE 4445A/B | Introduction to Digital Image Processing     |
| ECE 4451A/B | Advanced Topics in Wireless                  |
|             | Communications                               |
| ECE 4455A/B | Biomedical Systems Analysis                  |
| ECE 4456A/B | Power Systems Protection                     |
| ECE 4457A/B | Power Electronics                            |
| ECE 4460A/B | Real-Time and Embedded Systems               |
| ECE 4464A/B | Electric Power Systems II                    |
| ECE 4468A/B | Systems Optimization                         |
| ECE 4469A/B | Applied Control Systems                      |
| MME 4452A/B | Robotics and Manufacturing Automation        |
| MME 4473A/B | Computer Integrated Manufacturing            |
| MME 4482A/B | Fundamentals of MEMS                         |
| MME 4487A/B | Mechatronic System Design                    |