2014 – 2015 Electrical Engineering Course Flow Chart
Example 4 year program

Year 1
Term 1
- CHEM 1300 (3) Structure & Modelling in Chemistry
- PHYS 1050 (3) Physics 1: Mechanics
- MATH 1510 (3) Applied Calculus 1

Term 2
- ENGL 1400 (3) Thematic Approaches to Literature
- ENGL 1430 (3) Design in Engineering
- MATH 1710 (3) Applied Calculus 2

Year 2
Term 1
- ENGL 2010 (3) Technical Comm.
- MATH 2130 (3) Eng. Math. Analysis 1

Term 2
- PHYS 2152 (3) Modern Physics for Engineers
- MATH 2132 (3) Eng. Math. Analysis 2

Year 3
Term 1
- ECE 3590 (4) Foundations of E.M.
- ECE 3595 (4) E.M. Theory
- ECE 3560 (4) Physical Electronics

Term 2
- ENGL 2010, ECE 3580, ECE 3760, ECE 3780, ECE 3785
- ECE 3800 (3) Signal Processing 1
- ECE 4600 (6) Group Design Project

Year 4
Term 1
- Technical Elective *
- Technical Elective *
- Technical Elective *

Term 2
- Technical Elective *
- Technical Elective *
- Technical Elective *

Additional required elective courses which can be taken any term.

Technical Electives taught by ECE Department (Fall term)
- ECE 4240 (4) Microprocessor Interfacing (ECE 3610)
- ECE 4270 (4) Antennas (ECE 3590)
- ECE 4290 (4) Microwave Engineering (ECE 3590)
- ECE 4300 (4) Electrical Energy Systems 1 (ECE 3650)
- ECE 4370 (4) Power Electronics (ECE 2160, ECE 3720)
- ECE 4530 (4) Parallel Processing (COMP 2140, ECE 3700)
- ECE 4540 (4) Wireless Networks (ECE 3700, ECE 3780)
- ECE 4580 (4) Optoelectronics (ECE 3600)
- ECE 4610 (4) Biomedical Instrumentation & Signal Processing (ECE 2160, ECE 3780)
- ECE 4740 (4) Digital System Implementation (ECE 4240)
- ECE 4850-T01 (4) Stochastic Processes (STAT 2220)
- ECE 4850-T02 (4) Modern Computing Systems (ECE 3610)

Technical Electives taught by ECE Department (Winter term)
- ECE 3650 (5) Electric Machines (ECE 3720)
- ECE 3700 (4) Telecommunication Network Engineering (COMP 2140)
- ECE 3760 (4) Digital System Design 1 (ECE 4240)
- ECE 4100 (4) Microelectronic Fabrication (ECE 3670)
- ECE 4290 (4) Engineering Electromagnetics (ECE 3590)
- ECE 4310 (4) Electrical Energy Systems 2 (ECE 4300)
- ECE 4390 (4) High Voltage Engineering (ECE 3580, 3720)
- ECE 4420 (4) Digital Control (ECE 4150, ECE 4830)
- ECE 4440 (4) Computer Vision (ECE 3780)
- ECE 4520 (4) Simulation & Modelling (STAT 2220, (COMP 2140 or permission of the Department) )
- ECE 4830 (4) Signal Processing 2 (ECE 3780)
- ECE 4860-T01 (4) Design of RF Devices and Wireless Systems (ECE 3590)
- ECE 4860-T02 (4) Biomedical Optics (ECE 3590, ECE 3780)

* Technical Electives:
- 7 technical electives are required. They are divided into Group A and Group B lists.
- At least 4 technical electives must be taken from Group A technical elective courses.

This flow chart is a guideline, and only applies for the current calendar year. It should not be used as a guideline for subsequent years. Errors may be present in this document. Students should reference information in the University Calendar.

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