



## COMPUTER ENGINEERING PROGRAM (2019 - 2020)

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| <b>Fall of First Year (15 credits)</b>  |   |   | <b>Spring of First Year (16 credits)</b>  |   |   |
| MATH 1210                               | Calculus I (May require pre-requisite)            | 5 | MATH 1220                                 | Calculus II                                 | 5 |
| CS 1400                                 | Fundamentals of Programming                       | 3 | PHYS 2210                                 | Physics for Scientists and Engineers        | 4 |
| ECE 1020                                | CE Problem Solving with Matlab & Labview          | 1 | PHYS 2215                                 | Physics for Scientists and Engineers Lab    | 1 |
| ENGL 1010                               | Introduction to Writing                           | 3 | CS 1410                                   | Object-Oriented Programming                 | 3 |
| Am. Inst.                               | Choose from GE approved American Institution list | 3 | CS 2810                                   | Computer Organization and Architecture      | 3 |
| <b>Fall of Second Year (15 credits)</b> |   |   | <b>Spring of Second Year (15 credits)</b> |   |   |
| CS 2420                                 | Intro. to Algorithms and Data Structures          | 3 | CHEM 1210                                 | Principles of Chemistry                     | 4 |
| PHYS 2220                               | Physics for Scientists and Engineers II           | 4 | CHEM 1215                                 | Principles of Chemistry Lab                 | 1 |
| PHYS 2225                               | Physics for Scientists and Engineers II Lab       | 1 | ECE 2250                                  | Circuit Theory                              | 3 |
| ECE 2700                                | Digital Design I                                  | 3 | ECE 2255                                  | Circuit Theory Lab                          | 1 |
| ECE 2705                                | Digital Design I Lab                              | 1 | ECE 3740                                  | Digital Design II                           | 3 |
| ECE 3750                                | Engineering Analysis                              | 3 | ECE 3770                                  | Signals and Systems                         | 3 |
| <b>Fall of Third Year (16 credits)</b>  |   |   | <b>Spring of Third Year (16 credits)</b>  |   |   |
| ECE 3710                                | Applied Engineering Probability & Statistics      | 3 | ECE 3760                                  | Electronic Systems                          | 3 |
| ECE 3730                                | Embedded Systems I                                | 3 | ECE 3765                                  | Electronic Systems Lab                      | 1 |
| ENGL 2010                               | Intermediate Writing                              | 3 | ECE 4730                                  | Embedded Systems II                         | 3 |
| COMP 301R                               | Digital Lecture Series                            | 1 | CS 3060                                   | Operating Systems Theory                    | 3 |
| CS 2300                                 | Discrete Structures I                             | 3 | Biology                                   | Choose from the GE approved Biology List    | 3 |
| CS 2600                                 | Computer Networks I                               | 3 | COMM 1020                                 | Public Speaking                             | 3 |
| <b>Fall of Fourth Year (15 credits)</b> |   |   | <b>Spring of Fourth Year (18 credits)</b> |   |   |
| ECE 4750                                | Digital Signal Processing                         | 3 | CS 2450                                   | Software Engineering                        | 3 |
| ECE 4760                                | VLSI Design                                       | 3 | CE Elective                               | Choose from the CE approved Electives       | 3 |
| ECE 4765                                | VLSI Design Lab                                   | 1 | ECE 4800                                  | CE Senior Design Project                    | 3 |
| CS 4380                                 | Advanced/High-Performance Computer Architecture   | 3 | CS 305G                                   | Global Social & Ethical Issues in Computing | 3 |
| Health                                  | HLTH 1100 or PES 1097                             | 2 | COMM 2110                                 | Interpersonal Communications                | 3 |
| Fine Arts                               | Choose from the GE approved Fine Arts List        | 3 | PHIL 2050                                 | Ethics and Values                           | 3 |