

# Department of Electrical and Computer Engineering

## Computer Engineering Program

### Possible 4 Year Course Plan

| FRESHMAN   |           |             | SOPHOMORE                |        |         | JUNIOR             |        |        | SENIOR  |        |         |
|--|-----------|-------------|--------------------------|--------|---------|--------------------|--------|--------|---------|--------|---------|
| FALL   | WINTER    | SPRING      | FALL                     | WINTER | SPRING  | FALL               | WINTER | SPRING | FALL    | WINTER | SPRING  |
| <b>Math / Science Requirements</b>                       |           |             |                          |        |         |                    |        |        |         |        |         |
| <b>CALCULUS</b>  |           |             | <b>LIN</b>               | DIF    |         |                    |        |        | APPL    |        |         |
| MTH  | MTH       | MTH         | ALG                      | EQ I   |         |                    |        |        | STATS   |        |         |
| 251  | 252       | 253         | MTH                      | MTH    |         |                    |        |        | STAT    |        |         |
|  |           |             | 261                      | 256    |         |                    |        |        | 451     |        |         |
| <b>PHYSICS</b>   |           |             | <b>CHEM</b>              |        |         | SOLID              |        |        |         |        |         |
| PH   | PH        | PH          |                          |        |         | STATE              |        |        |         |        |         |
| 211/221  | 212/222   | 213/223     | CH                       |        |         | PH                 |        |        |         |        |         |
| PH 214   | PH 215    | PH 216      | 221                      |        |         | 319                |        |        |         |        |         |
|  |           |             | CH 227                   |        |         |                    |        |        |         |        |         |
| <b>Engineering / Computer Science Requirements</b>       |           |             |                          |        |         |                    |        |        |         |        |         |
|  |           |             | <b>INTRO</b>             | DATA   |         | PROG               |        |        | INTRO   | B      | DISCR   |
|  |           |             | TO CS                    | STRUC  |         | SYS                |        |        | OPER    |        | STRUC   |
|  |           |             | II                       |        |         |                    |        |        | SYS     |        |         |
|  |           |             | CS 162                   | CS 163 |         | CS 202             |        |        | CS 333  |        | CS 340  |
| <b>DIG</b>   | <b>CS</b> | <b>ENGR</b> | <b>ELECT</b>             | SIG    | SIG     | <b>ELECTRONICS</b> |        |        |         | MICRO  |         |
| CIRC   | INTRO     | PROB        | CIRC                     | SYST I | SYST II | I                  | II     | III    | A       | SYST   | A       |
| ECE  |           | SOLV        | ECE                      | ECE    | ECE     | ECE                | ECE    | ECE    |         | ECE    |         |
| 171  | CS 161    | EAS 101     | 221 &                    | 222 &  | 223 &   | 321 &              | 322 &  | 323 &  |         | 485    |         |
|  |           |             | 201                      | 202    | 203     | 301                | 302    | 303    | DESIGN  | DESIGN | DESIGN  |
|  |           |             |                          | DIGI   |         | MICRO              | MICRO  | HDL    | ECE 411 | PROJ   | ECE 413 |
|  |           |             |                          | SYST   |         | PROC               | INTER  |        |         | ECE    |         |
|  |           |             |                          | ECE    |         | ECE                | FACE   | ECE    |         | 412    |         |
|  |           |             |                          | 271    |         | 371                | ECE    | 351    |         |        |         |
|  |           |             |                          |        |         |                    | 372    |        |         |        |         |
| <b>General Education Requirements (see reverse side)</b> |           |             |                          |        |         |                    |        |        |         |        |         |
|  |           |             |                          |        |         |                    |        |        |         |        |         |
| <b>FRESHMAN INQUIRY</b>                                  |           |             | <b>SOPHOMORE INQUIRY</b> |        |         |                    | TECH   |        | PRIV    | UNST   | UNST    |
| UNST   | UNST      | UNST        | UNST                     | UNST   | UNST    |                    | WR     |        | PUBLIC  | UP DIV | UP DIV  |
| 101  | 102       | 103         | 299                      | 299    | 299     |                    | WR 227 |        | INVEST  | CLUST  | CLUST   |
|  |           |             |                          |        |         |                    |        |        | EC314U  |        |         |

### EXPLANATION

#### CREDIT HOURS

|   |                                 |   |           |
|---|---------------------------------|---|-----------|
| 1 | A—APPROVED SENIOR ECE ELECTIVE  | STUDENTS MAY SUBSTITUTE PHYSICS 211-213 FOR | 2007-2008 |
| 2 | B—APPROVED CS UD ELECTIVE       | PHYSICS 221-223                             |           |
| 3 | SHADED AREA = CORE REQUIREMENTS | ECE 411 & 412 FULFILL UNST CAPST            |           |
| 4 |                                 | REFER TO BACK PAGE FOR GEN. ED. REQ         |           |

# Undergraduate Engineering Programs

## *General Education Requirements*

There are **two** (2) separate sets of general education requirements:

1. University Requirements
2. Maseeh College of Engineering and Computer Science (MCECS) Requirements

You must satisfy **BOTH** sets of requirements.

### University Requirements

- A. Freshman entering with 29 or fewer prior university/college credits must complete all University Studies Requirements, including freshman and sophomore inquiry sequences and upper division cluster courses.
- B. Continuing and transfer students with 30-44 prior university/college credits must complete the following program:
  - Transfer Transition Course UnSt 201-210
  - University Studies beginning with Sophomore Inquiry
- C. Continuing and transfer students with 45-89 prior university/college credits must complete the following program:
  - Sophomore Inquiry: 45-59 credits, three courses; 60-74 credits, two courses; 75-89 credits, one course. The upper division cluster must be linked with one of these Sophomore Inquiry courses.
- D. Continuing and transfer students with 90 or more prior university/college credits must complete the following program:
  - University Studies requirements beginning with Upper Division Cluster courses. It is strongly recommended that students also take the single Sophomore Inquiry course that is linked to the chosen Upper Division Cluster.
- E. Bachelor of Science degree requires a minimum of 12 credits of Arts & Letters or Social Science distribution areas. See the *PSU Bulletin* for complete University Requirements for BS degrees.

**Complete details of University Studies program can be found in the Schedule of Classes.**

### Maseeh College of Engineering and Computer Science General Education Requirements

- a) Freshmen satisfy the PSU general education requirement with the University Studies Program.
- b) Transfer students must have a minimum of 39 credits of University Studies courses and/or arts and letters/social science courses at their previous college or at PSU prior to graduation. 12 of these credits are upper division cluster courses that must be taken at PSU.
- c) Transfer students who have not taken Freshman Inquiry must have completed SP 100 (or equivalent) and WR 121 as part of the 39 credits of arts and letters/social sciences.
- d) All engineering students must complete EC 314U Public and Private Investment. Students may use EC 314U as a University Studies course in the Community Studies Cluster, the Knowledge, Rationality, and Understanding Cluster, or the Professions and Power Cluster.
- e) Technical Writing (WR 227) is a separate requirement in addition to the 39 credits of University Studies courses and/or Liberal Arts/Social Science courses.

**Students should consult with the undergraduate advisor regarding these requirements.**

Last updated: 12/2007