

## FALL

## SPRING

| Course Number | Course Title | USP | CR | Min Grade | Grade | Course Number | Course Title | USP | CR | Min Grade | Grade |
|---------------|--------------|-----|----|-----------|-------|---------------|--------------|-----|----|-----------|-------|
|---------------|--------------|-----|----|-----------|-------|---------------|--------------|-----|----|-----------|-------|

### FRESHMAN YEAR

|              |                                                                                               |     |   |   |  |              |                                                                  |  |   |   |  |
|--------------|-----------------------------------------------------------------------------------------------|-----|---|---|--|--------------|------------------------------------------------------------------|--|---|---|--|
| CHEM 1020    | General Chemistry I<br><i>Prerequisite: ACT Math 23 or concurrent MATH 1400, 1405 or 1450</i> | PN  | 4 | D |  | COSC 1030    | Computer Science I<br><i>Prerequisite: C in COSC 1010</i>        |  | 4 | C |  |
| COSC 1010    | Intro to Computer Science                                                                     |     | 4 | C |  | MATH 2205    | Calculus II<br><i>Prerequisite: C in Math 2200</i>               |  | 4 | C |  |
|              | USP: First Year Seminar                                                                       | FYS | 3 | C |  | EE/ES > 2000 | Any ES, EE, BE course (2000 or higher) or COSC 3011 or COSC 3750 |  | 3 | D |  |
|              | USP: Communications I                                                                         | C1  | 3 | C |  | PHYS 1210    | Engr Physics I<br><i>Prerequisite: Concurrent in Math 2205</i>   |  | 4 | D |  |
| MATH 2200    | Calculus I<br><i>Prerequisite: C in Math 1405 or 1450, MPE 5, Math ACT 27, Math SAT 640</i>   | Q   | 4 | C |  |              |                                                                  |  |   |   |  |
| <b>Total</b> |                                                                                               |     |   |   |  | <b>Total</b> |                                                                  |  |   |   |  |
| 18           |                                                                                               |     |   |   |  | 15           |                                                                  |  |   |   |  |

### SOPHOMORE YEAR

|              |                                                                           |  |   |   |  |              |                                                                                                       |  |   |   |  |
|--------------|---------------------------------------------------------------------------|--|---|---|--|--------------|-------------------------------------------------------------------------------------------------------|--|---|---|--|
| COSC 2030    | Computer Science II<br><i>Prerequisite: C in COSC 1030</i>                |  | 4 | C |  | COSC 2150    | Computer Organization<br><i>Prerequisite: C in COSC 1030</i>                                          |  | 3 | D |  |
| EE/ES > 2000 | Any ES, EE, BE course (2000 or higher) or COSC 3011 or COSC 3750          |  | 3 | D |  | EE 2220      | Circuits and Signals<br><i>Prerequisite: C in ES 2210</i>                                             |  | 4 | C |  |
| ES 2210      | Electric Circuit Analysis<br><i>Prerequisite: Concurrent in MATH 2205</i> |  | 3 | C |  | EE 2390      | Digital Systems Design<br><i>Prerequisite: C in MATH 2205 and ES 1060 (or COSC 1010 or COSC 1030)</i> |  | 4 | C |  |
| MATH 2210    | Calculus III<br><i>Prerequisite: C in Math 2205</i>                       |  | 4 | C |  | MATH 2310    | Applied Differential Eqns I<br><i>Prerequisite: C in MATH 2205</i>                                    |  | 3 | C |  |
| PHYS 1220    | Engr Physics II<br><i>Prerequisite: Concurrent in MATH 2210</i>           |  | 4 | C |  | MATH 2300    | Discrete Structures<br><i>Prerequisite: C in MATH 2200 and COSC 1030</i>                              |  | 3 | C |  |
| <b>Total</b> |                                                                           |  |   |   |  | <b>Total</b> |                                                                                                       |  |   |   |  |
| 18           |                                                                           |  |   |   |  | 17           |                                                                                                       |  |   |   |  |

### JUNIOR YEAR

|              |                                                                                                |    |   |   |  |              |                                                                                            |   |   |   |  |
|--------------|------------------------------------------------------------------------------------------------|----|---|---|--|--------------|--------------------------------------------------------------------------------------------|---|---|---|--|
| EE 3220      | Signals and Systems<br><i>Prerequisite: C in EE 2220</i>                                       |    | 3 | C |  | EE 3330      | Electronics II<br><i>Prerequisite: C in EE 2220 and EE 3310</i>                            |   | 4 | D |  |
| EE 3310      | Electronics I<br><i>Prerequisite: Concurrent in EE 2220 and C in PHYS 1220 or C in EE 3150</i> |    | 4 | C |  | EE 4220      | Probabilistic Signals and<br><i>Prerequisite: C in MATH 2210 and concurrent in EE 3220</i> |   | 3 |   |  |
| EE 4490      | HDL Digital Design<br><i>Prerequisite: C in EE 2390</i>                                        |    | 3 | D |  | EE 4390      | Microprocessors<br><i>Prerequisite: C in EE 2390</i>                                       |   | 3 |   |  |
|              | USP: Communications II<br><i>Prerequisite: C in C1</i>                                         | C2 | 3 | C |  |              | Math/ Science Elective                                                                     |   | 3 |   |  |
|              | USP: Human Culture                                                                             | H  | 3 | D |  |              | USP: Human Culture                                                                         | H | 3 | D |  |
| <b>Total</b> |                                                                                                |    |   |   |  | <b>Total</b> |                                                                                            |   |   |   |  |
| 16           |                                                                                                |    |   |   |  | 16           |                                                                                            |   |   |   |  |

### SENIOR YEAR

|              |                                                                                                                                        |   |   |   |  |              |                                                                                     |    |   |   |  |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------|---|---|---|--|--------------|-------------------------------------------------------------------------------------|----|---|---|--|
| One of       | COSC 4760 (3) OR EE 4870 (4)<br><i>Prerequisite: Varies</i>                                                                            |   | 3 |   |  | EE 4830      | Senior Design II<br><i>Prerequisite: C in EE 4820, concurrent in design courses</i> | C3 | 2 | C |  |
| EE 3150      | Electromagnetics<br><i>Prerequisite: C in ES 2210, MATH 2210, and concurrent in PHYS 1220</i>                                          |   | 3 | C |  |              | CPEN Elective                                                                       |    | 3 |   |  |
| EE 4820      | Senior Design I<br><i>Prerequisite: C in EE 2220, EE 2390, and C2; Concurrent in EE 3310 and 6 credits of 4000-level EE/BE courses</i> |   | 2 | C |  |              | CPEN Elective                                                                       |    | 3 |   |  |
|              | EE or BE Elective (>4000)                                                                                                              |   | 3 | D |  |              | CPEN Elective                                                                       |    | 3 |   |  |
|              | USP: US & Wyo Const.                                                                                                                   | V | 3 | D |  |              | CPEN Elective                                                                       |    | 3 |   |  |
| <b>Total</b> |                                                                                                                                        |   |   |   |  | <b>Total</b> |                                                                                     |    |   |   |  |
| 14           |                                                                                                                                        |   |   |   |  | 14           |                                                                                     |    |   |   |  |

Fall only or spring only course

**Total Program Credits: 128**

- A minimum of 128 hours is required. • A minimum of 42 hours must be upper division.
- Math/Science, CPEN and BE/EE Electives must be selected with advisor's approval from Department list. • A maximum of 2 CPEN electives can be from the computer science department. •EE 4075 is not allowed as a CPEN Elective.
- Degree candidates must meet the academic requirements of the university, and must have a minimum GPA of 2.0 in all engineering courses.
- Students may not take a course for S/U credit to satisfy any requirement, unless the course is offered for S/U credit only.
- PHYS 1210 must be taken prior to or concurrently with ES 2120. PHYS 1220 should be taken prior to or concurrently with ES 2210.
- Grades of C or better are required for all courses that are prerequisites for courses within the students course of study and all required MATH courses.
- EE 1101 is recommended for EE and CPEN majors for their FYS requirement.