

# CURRICULUM CHECK SHEET

August 2020

The program of courses listed below satisfies the ABET accreditation criteria of 32 credits of mathematics and basic sciences, and 48 credits of engineering sciences and engineering design. Any deviations must be approved by the student's advisor, department chair, and dean. The University General Education Core and graduation requirements for Engineering are included.

ALL COURSES MUST BE TAKEN FOR LETTER (A-F) GRADES

## LOWER DIVISION

### FRESHMAN

|                |   |  |                  |     |  |
|----------------|---|--|------------------|-----|--|
| Eng 100 (FW)   | 3 |  | EE 110 or EE 160 | 3/4 |  |
| Math 241 (FQ)  | 4 |  | Math 242         | 4   |  |
| Chem 161 (DP)  | 3 |  | Phys 170 (DP)    | 4   |  |
| Chem 161L (DY) | 1 |  | Phys 170L (DY)   | 1   |  |
| FG             | 3 |  | Chem 162 (DP)    | 3   |  |
|                |   |  |                  |     |  |
|                |   |  |                  |     |  |
| H Focus (1)    |   |  | E Focus (1)      |     |  |

### SOPHOMORE

|                |   |  |               |   |  |
|----------------|---|--|---------------|---|--|
| EE 211         | 4 |  | EE 213        | 4 |  |
| EE 260         | 4 |  | Math 244      | 3 |  |
| Math 243       | 3 |  | Phys 274      | 3 |  |
| Phys 272 (DP)  | 3 |  | EE 296        | 1 |  |
| Phys 272L (DY) | 1 |  | COMG 251 (DA) | 3 |  |
|                |   |  | FG            | 3 |  |
|                |   |  |               |   |  |
| O Focus (1)    |   |  | W Focus (5)   |   |  |

## UPPER DIVISION

|                    |     |  |          |   |  |          |   |  |                           |   |  |
|--------------------|-----|--|----------|---|--|----------|---|--|---------------------------|---|--|
| EE 315             | 3   |  | EE 323   | 3 |  | Major EE | 3 |  | EE 496                    | 3 |  |
| EE 324             | 3   |  | EE 323L  | 1 |  | (Lab) EE | 1 |  | EE 495                    | 1 |  |
| EE 371             | 3   |  | EE 342   | 3 |  | Major EE | 3 |  | Major EE                  | 3 |  |
| Math 307 or EE 345 | 3/4 |  | TE       | 3 |  | TE       | 3 |  | Major EE                  | 3 |  |
| EB                 | 3   |  | Major EE | 3 |  | (Lab) TE | 1 |  | Econ 120, 130 or 131 (DS) | 3 |  |
|                    |     |  | (Lab) EE | 1 |  | DH or DL | 3 |  | DS                        | 3 |  |
|                    |     |  | EE 396   | 2 |  |          |   |  |                           |   |  |
|                    |     |  |          |   |  |          |   |  |                           |   |  |

### Major Track (Major)

A minimum of 17 credits in one of the major tracks, which includes all track core courses in Group I and the remaining track elective courses from Group II.

### Electro-Physics (EP) Track

| Focus            | Group I (11 cr) | Group II (6 cr)                 |
|------------------|-----------------|---------------------------------|
| Circuits         | EE 326/326L     | EE 422/422L, 423, 425, 427      |
| Devices          | EE 327          | EE 328/328L, 426                |
| Electromagnetics | EE 372/372L     | EE 470, 471, 473, 474, 475, 477 |
| Energy           |                 | EE 435, 438                     |
| Biomedical       |                 | EE 480                          |

### Systems Track

| Focus             | Group I (11 cr) | Group II (6 cr)       |
|-------------------|-----------------|-----------------------|
| Communications    | EE 343/343L     | EE 344, 442, 446, 449 |
| Controls          | EE 351/351L     | EE 452, 453           |
| Signal Processing | EE 415          | EE 416, 417, 445      |
| Energy            |                 | EE 435                |

### Biomedical Concentration

All Group I courses in either the EP or Systems Track, plus two biomedical-related Group II courses and an EB course approved by the Department's Undergraduate Curriculum Committee and listed on the EE website. EE 496 will be a biomedical project approved by the concentration coordinator.

### Energy Concentration

All Group I courses in either the EP or Systems Track, plus two energy-related Group II courses and an EB course approved by the Department's Undergraduate Curriculum Committee and listed on the EE website. EE 496 will be an energy project approved by the concentration coordinator.

## NOTES

- Refer to General Education Core Requirements in UHM Catalog for Diversification (DH, DL, DS) and FG Foundation Courses.
- Math 251/252/253 may substitute for Math 241-244
- Chem 181/181L or Chem 171/171L may substitute for Chem 161/161L and Chem 162.
- Writing Intensive (W) required - 5 courses (minimum of 2 in upper division).
- One course each required for Hawaiian, Asian & Pacific Issues (H), Oral Communication (O) and Contemporary Ethical Issues (E).
- Enrollment in EE courses requires a grade of 'C' or better in all prerequisite courses.
- Engineering Breadth (EB) is satisfied by a CEE, ME, OE or BE course at the 300-level or higher, CEE 270; or a physical, biological, or computer science course at the 300-level or higher and approved by the Department's Undergraduate Curriculum Committee.
- Technical Electives (TE): EE course 300 or above - 7 additional credits from the track lists, of which 3 must be outside the major track and 1 must be a laboratory. The following courses may also be used as TEs: EE 205, 361/361L, 362, 366, 367/367L, 368, 369, 406, 461, 467, 468, 469. EE 491 can also be used as a TE, but the track designation is determined on a case-by-case basis.
- ENGR 196/296/396 may substitute for EE 196/296/396.
- A student along with a faculty member may propose an alternate track, which must be (1) equivalent in rigor & breadth to the above tracks; (2) endorsed by another faculty member; & (3) approved by the Department's Undergraduate Curriculum Committee.

APPROVAL FOR GRADUATION: Initial: \_\_\_\_\_ Date: \_\_\_\_\_