University of Hawai'i at Mānoa
College of Engineering Program Sheet 2015-2016
Bachelor of Science (BS) in Electrical Engineering
Admissions: Freshmen = Open / Transfer = Min. Criteria   Process: Declaration
Min. Total Credits: 122 (122 in core & major + 0 in electives)

UHM General Education Core Requirements

Foundations
- ❑ FW ENG 100, 100A, 190, or ESL 100
- ❑ FS MATH 241, 242
- ❑ FG (A / B / C)
- ❑ FG (A / B / C)

Diversification
- ❑ DA COMG 251
- ❑ DH / DL
- ❑ DB *not* required for EE students.
- ❑ DP CHEM 161, 162, PHYS 170, 272
- ❑ DY CHEM 161L, 162L, PHYS 170L, 272L
- ❑ DS ECON 120, 130, 131
- ❑ DS

* See degree, college and major requirements for courses that can also fulfill these.

UHM Graduation Requirements

Focus
- ❑ H
- ❑ E (300+)
- ❑ O (300+)

- ❑ W
- ❑ W
- ❑ W
- ❑ W (300+)
- ❑ W (300+)

Hawaiian / Second Language
- The Hawaiian or Second Language requirement is **not** required for students admitted to the College of Engineering.

Credit Minimums
- 120 total applicable
- 30 in residence at UHM
- 45 upper division (300+ level) credits

Grade Point Average
- 2.0 cumulative or higher *(Note: Other GPAs may be required)*
- Good academic standing

Degree Requirements

Bachelor of Science Requirements
- Calculus I & II
- General Chemistry I with lab & II
- General Physics I & II with labs

College Requirements

Admission Requirements for Transfer Students
- 3.0 cumulative GPA
- Completion of the following courses:
  - ENG 100*[FW]
  - MATH 241*[FS]
  - MATH 242
  - CHEM 161*[DP] / 161L*[DY]
  - CHEM 162*[DP]
  - PHYS 170*[DP] / 170L*[DY]

Math Requirements
- ❑ MATH 241*[FS]
- ❑ MATH 242
- ❑ MATH 243
- ❑ MATH 244

Natural Sciences Requirements
- ❑ CHEM 161*[DP] / ❑ 161L*[DY]
- ❑ CHEM 162*[DP]
- ❑ PHYS 170*[DP] / ❑ 170L*[DY]
- ❑ PHYS 272*[DP] / ❑ 272L*[DY]

Grade Point Average
- 2.0 GPA for all upper division (300+) mathematics, sciences, and engineering courses.

This program sheet was prepared to provide information and does not constitute a contract. See back for major requirements.
Meet regularly with your major advisor. Advising is mandatory every semester for Engineering students.

Major Requirements for BS in Electrical Engineering

Admission: Open

Application: Required for students who do not apply straight into the program.

Min. major credits: 71

Min. exit GPA: 2.0 overall and 2.0 in upper division technical coursework.

Enrollment in EE courses requires a C- grade, or better, in all prerequisites.

Requirements

Electrical Engineering Core Courses (38 credits)
- ❑ EE 110   *(EE 160 may be substituted for EE 110)*
- ❑ EE 211
- ❑ EE 213
- ❑ EE 260
- ❑ EE 315
- ❑ EE 323 / ❑ 323L
- ❑ EE 324
- ❑ EE 342
- ❑ EE 371
- ❑ EE 495
- ❑ PHYS 274
- ❑ MATH 307

Electrical Engineering Projects (6 credits)
- ❑ EE 296 (Sophomore standing)
- ❑ EE 396 (Junior standing)
- ❑ EE 496

Electrical Engineering Major Track (17 credits; choose one track below)

17 credits in one major track, which includes all courses in Group I and remaining courses from Group II.

	Group I (11 credits)	Group II (6 credits)
❑ **Electro-Physics Track**	❑ EE 326 / ❑ 326L ❑ EE 327 ❑ EE 372 / ❑ 372L	EE 422/422L, 423, 425, 427 EE 328/328L, 426 EE 470, 471, 473, 474, 475, 477 EE 435, 438 EE 480
❑ **Systems Track**	❑ EE 343 / ❑ 343L ❑ EE 351 / ❑ 351L ❑ EE 415	EE 344, 442, 446, 449 EE 452, 453 EE 416, 417 EE 435

Electrical Engineering Technical Electives (7 credits)

7 additional credits from track lists, including 3 credits outside the major track and a 1 credit laboratory:
- ❑ Technical Elective
- ❑ Technical Elective
- ❑ Technical Elective Lab

List of possible Computer Engineering Technical Electives: EE 205, 361/361L, 366, 367/367L, 406, 461, 467, 468, 469

EE 491 can also be used as a Technical Elective, but the track designation is determined on a case-by-case basis.

❑ Engineering Breadth (3 credits; one of the following options)
- CEE 270, ME 311, or a 300+ level course from CEE, ME, OE, or BE.
- 300+ physical, biological, or computer science courses (with department's undergraduate curriculum committee approval).

Notes