

CURRICULUM CHECK SHEET

August 2025

The program of courses listed below satisfies the ABET accreditation criteria of 30 credits of mathematics and basic sciences, and 45 credits of engineering topics. 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						SOPHOMORE					
Eng 100 (FW)	3		Math 242	4		ECE 211	4		ECE 213	4	
Math 241 (FQ)	4		Phys 170 (DP)	4		ECE 260	4		Math 244	3	
Chem 161 (DP)	3		Phys 170L (DY)	1		Math 243	3		Phys 274	3	
Chem 161L (DY)	1		Chem 162 (DP)	3		Phys 272 (DP)	3		ECE 296	1	
ECE 160 or ECE 110	4/3		FG	3		Phys 272L (DY)	1		COMG 251 (DA)	3	
									FG	3	
H Focus (1)			E Focus (1)			O Focus (1)			W Focus (5)		
UPPER DIVISION											
JUNIOR						SENIOR					
ECE 315	3		ECE 323	3		Major ECE	3		ECE 496	3	
ECE 324	3		ECE 323L	1		(Lab) ECE	1		ECE 495	1	
ECE 371	3		ECE 342	3		Major ECE	3		Major ECE	3	
ECE 345 or Math 307	4/3		TE ECE	3		TE ECE	3		Major ECE	3	
EB	3		Major ECE	3		(Lab) TE ECE	1		Econ 120, 130 or 131 (DS)	3	
			(Lab) ECE	1		DH or DL	3		DS	3	
			ECE 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	ECE 326/326L	ECE 422/422L, 423, 425, 427
Devices	ECE 327	ECE 328/328L, 426
Electromagnetics	ECE 372/372L	ECE 470, 471, 473, 474, 475, 477
Energy		ECE 435, 438
Biomedical		ECE 480

Systems & Data Sciences (SDS) Track

Focus	Group I (12 cr)	Group II (6 cr)
Communications	ECE 343/343L	ECE 344, 442, 446, 449
Controls	ECE 351/351L	ECE 452, 453
Signal Processing	ECE 415	ECE 416, 417, 445
Energy		ECE 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 ECE website. ECE 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 ECE website. ECE 496 will be an energy project approved by the concentration coordinator.

NOTES

1. Refer to General Education Core Requirements in UHM Catalog for Diversification (DH, DL, DS) Courses and Foundation (FG) Courses.
2. Math 251A/252A/253A may substitute for Math 241-244
3. Chem 181/181L or Chem 171/171L may substitute for Chem 161/161L and 162
4. Writing Intensive (W/WI) required - 5 courses (minimum of 2 in upper division).
5. One course each required for Hawaiian, Asian & Pacific Issues (H/HAP), Oral Communication (O/OC) and Contemporary Ethical Issues (E/ETH).
6. H/HAP (Hawaiian, Asian Pacific Issues) Focus not included in engineering courses. Students may look for an H/HAP focus that double counts with the DH/DL or DS requirement or take one standalone.
7. Enrollment in ECE courses requires a grade of 'C' or better in all prerequisite courses.
8. 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.
9. Technical Electives (TE): ECE 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: ECE 205, 361/361L, 362, 366, 367/367L, 368, 369, 406, 461, 467, 468, 469. ECE 491 can also be used as a TE, but the track designation is determined on a case-by-case basis.
10. ENGR 196/296/396 may substitute for ECE 196/296/396.
11. 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: _____