HAWAI'I PACIFIC Sample 4-year Degree Plan for Bachelor of Science in Electrical Engineering Academic Catalog Requirements 2018-2019

This is <u>ONLY</u> a sample degree plan. Please meet with an academic advisor prior to registration to formulate your own plan, and for additional information refer to the <u>academic degree requirements</u>.

Year	Fall Semester		Spring Semester	
	MATH 2214 Calculus I (GE QA&SR)	3	GE H&P	3
	GE WC&IL 1	3	GE WC&IL 2	3
	GE SW	3	MATH 2215 Calculus II	3
	CSCI 2911 Computer Science I		CSCI 2912 Computer Science II	3
1st	CSCI 2916 Computer Science I Lab	1	MATH 3307 Differential Equations	3
	ENGE 1000 Introduction to Engineering	3		
	(GE CT&E)			
	Total Credits	16	Total Credits	15
		•		

Year	Fall Semester		Spring Semester	
	ENGE 2000 Linear Circuits and Systems	3	GE AE	3
	ENGE 2001 Linear Circuits and Systems	1	ENGE 2003 Signals and Systems	3
	Lab		ENGE 2004 Digital Hardware	3
	MATH 2216 Calculus III	3	ENGE 2005 Digital Hardware Lab	1
2nd	PHYS 2050 General Physics I	3	ENGE 2006 Electronics	3
	PHYS 2050 General Physics I Lab	1	ENGE 2007 Electronics Lab	1
	CHEM 2050 Chemistry I (GE NW)	3		
	CHEM 2051 Chemistry I Lab	1		
	Total Credits	15	Total Credits	14

Year	Fall Semester		Spring Semester	
	MATH 3305 Linear Algebra	3	GE T&I	3
	ENGE 3000 Communications	3	ENGE 3006 Electromagnetics	3
	ENGE 3001 Communications Lab	1	ENGE 3005 Engineering Design Project II	3
	ENGE 3002 Microcontroller Applications	3	ENGE 3007 Control Systems	3
3rd	ENGE 3003 Microcontroller Applications	1	ENGE 3008 Control Systems Lab	1
	Lab		Restricted Elective in Electrical	3
	ENGE 3004 Engineering Design Project	3	Engineering from approved list OR ENGE	
			4500 Research I	
	Total Credits	14	Total Credits	16

Year	Fall Semester		Spring Semester	
	GE GC&D	3	MATH 3470 Applied Statistics	3
	GE CA	3	GE T&M	3
	Major Elective – from Approved List	3	Major Elective – from Approved List	3
4th	Major Elective – from Approved List	3	Major Elective – from Approved List	3
	Major Elective – from Approved List OR	3	Major Elective – from Approved List OR	3
	ENGE 4600 Research II		ENGE 4700 Research III	
	Total Credits	15	Total Credits	15

^{**}This schedule is <u>only a suggestion</u>; make sure you understand the necessary prerequisites for each course and consult with your Academic Advisor. Course availability subject to change; actual degree audits may change depending on course availability in a given semester.

^{*}If you were placed into foundational Writing and Mathematics courses based on your placement and/or test scores, please consult with your academic advisor to develop a degree plan.

Baccalaureate Requirements

- Total Degree Credits Required = 120 credits of which a minimum of 36 are Upper-Division Credits (level 3000 and above)
- Completion of Major Requirements (as indicated above)
- Completion of General Education Requirements (as indicated above)
- Cumulative GPA of at least 2.0; Major GPA of at least 2.0
- Residency Requirements: 12 credits of major course work and the last 30 credits immediately preceding graduation (Service member's Opportunity College students please see your academic advisor)

Program-Specific Requirements

- The total Credit Point count for the Program complies with University requirements at HPU. The total for this Program is: 120.
- The General Education Credit Point count for the Program complies with University requirements at HPU. GE Total Credit Point for this program is: 27 (9 x 3), excluding (3 x 3); this number excludes 9 counted as core
- The Core Credit Point count for the Program complies with University requirements at HPU. The total for this Program is: 72
- The Elective Credit Point count for the Program complies with University requirements at HPU. The total for this Program is: 21
- 12 weeks of professional practice.
- There are no unrestricted electives for this Program in order to meet ABET accreditation requirements and enable required Core and Elective subject offerings specific to Electrical Engineering.

To qualify for a Concentration in Engineering Sustainability:

- Students must complete 15 Credit Point of Restricted and Major electives that are categorized as subjects in Engineering Sustainability, as denoted by an asterix (*) in the Approved List/s. Students must undertake Engineering Design Project I and II, courses ENGE3005 Engineering Design Project I and ENGE3005 Engineering Design Project topics including design aspects within Engineering Sustainability.
- Total Credit Point Count for all subjects undertaken with focus in Sustainability is: 21. Students must achieve a minimum GPA of 2.0 throughout the degree.

To qualify for graduation with a Bachelor of Science in Electrical Engineering with Honors:

- Students must complete ENGE 4500 Research I, ENGE 4600 Research II and ENGE 4700 Research III courses.
- Entry into ENGE 4600 Research II is subject to supervisor approval, completion of the ENGE 4500 Research I course and panel approval of the Thesis topic, in addition to academic performance; students may only undertake Honors studies if they achieve a minimum GPA of 3.0 throughout the degree up until but not including Honors courses. Students require minimum GPA of 3.4 throughout the degree to apply to graduate with a Bachelor of Science in Engineering with Honors degree from HPU in addition to an average B+ grade in Honors courses.



General Education Curriculum

This is a general education worksheet that illustrates our general education curriculum requirements for any of our Bachelor's degree programs. Please utilize this worksheet in addition to the Sample Degree Plans to identify the GE categories and their offerings.

	Hawaii & the Pacific (GE H&P)
AL 1050	Languages in the Pacific
ARTH 1001	Arts of Oceania
BIOL 2170	Ethno-biology: People and Plants
ENG 1101	Representations of Pacific Life
HAWN 1100	Beginning Hawaiian
PHIL 1001	Philosophies of Hawaii & the Pacific
	-

Quantitative Analysis & Symbolic Reasoning (GE QA&SR)		
CSCI 1534	Data, Financial Literacy, and its Visual Presentation	
MATH 1120	Mathematics in the Modern World	
MATH 1123	Statistics	
MATH 1130	Pre-Calculus I	
MATH 1150	Pre-Calculus I & II	
MATH 2214	Calculus I	
PHIL 2090	Principles of Logic	

Written Communication & Information Literacy I (GE WC&IL 1)		
WRI 1100	Analyzing & Writing Arguments	
WRI 1150	Literature & Argument	

Written Communication & Information Literacy II (GE WC&IL 2)		
WRI 1200	Research, Argument & Writing	
WRI 1250	Introduction to Research in the Humanities	

	American Experience (GE AE)
AMST 2000	Topics in American Studies
HIST 1401	American Stories: Themes in American Hist. to 1877

	Creative Arts (GE CA)
ARTH 2301	World Art History
ARTS 1000	Intro to Visual Arts

HIST 1402 HUM 1270	Introduction to American History since 1865 Intro. to Gender & Women's Studies	ARTS 2150 ENG 2000	Intro to Design The Art of Literature
PSCI 1400	American Politics	MUS 1000	Intro to Classical Music
		MUS 2101	Music in World Culture
		THEA 2320	Acting: Basic Acting for Stage & Screen
		WRI 2601	Intro to Creative Writing

Critical Thinking & Expression (GE CT&E)		
COM 1000	Intro to Communication Skills	
COM 2000	Public Speaking	
ECON 2010	Principles of Microeconomics	
GEOG 2000	Visual Human Geography	
HIST 1717	Reacting to the Past	
MATH 1116	Problem Solving	
PSY 1000	Intro to Psychology	

Global Crossroads & Diversification (GE GC&D)		
ANTH 2000	Cultural Anthropology	
BR 1020	The Cross-Cultural Experience	
GEOG 1500	World Regional Geography	
HIST 1002	Global Crossroads: 1500 to Present	
INTR 1000	The International System	
MULT 2000	Introduction to Cinema Studies	
REL 1000	Introduction to World Religions	

	Natural World (GE NW)
BIOL 1000	Introductory Biology
CHEM 1000	Introductory Chemistry
CHEM 2050	General Chemistry I
GEOG 1000	Intro to Physical Geography
GEOL 1000	The Dynamic Earth
MARS 1000	Introductory Oceanography
MARS 2110	Ocean Env. Of the Pacific Island (Summer/SE)
PHYS 1020	Astronomy

	Sustainable World (GE SW)
ARTS 1003	Sustainable Art & Design
BIOL 1500	Conservation Biology
ENVS 3000	Science & the Modern Prospect
HIST 3650	History of Oil in the Modern World
MARS 2100	Marine Resource Management
NSCI 2000	Lessons for Building Sustainable Communities
NSCI 3000	Building Sustainable Communities
SWRK 2010	Social Sustainability, Social Work & Entrepreneurship

Technology & Innovation (GE T&I)	
CSCI 1041	Digital Literacy in a Global Society
CSCI 1061	Mobile Technology for the 21st Century
CSCI 1555	Health Information Systems
CSCI 1611	A Gentle Intro. to Computer Programming
HIST 2630	The History of Science & Technology
MATH 1234	Intro to Cryptology
MIS 2000	Information Tools for Business
MULT 1100	Foundations of Multimedia Production

Traditions & Movements that Shape the World (GE T&M)		
AL 1100	Language, Power, and Identity	
CLST 1000	Great Books East and West	
ECON 2015	Principles of Macroeconomics	
ENG 2500	World Literature	
HIST 1001	Traditions & Encounters: World Cultures to 1500	
PSCI 2000	Introduction to Politics	
SOC 2600	Peace Studies	

For more information on our General Education curriculum please refer to our Academic Catalog or you may refer here: http://www.hpu.edu/FacultyAssembly/General Education Curriculum and Learning Assessment Committee.html