Sample 4-year Guided Pathway for **Bachelor of Science in Electrical Engineering**
Academic Catalog Requirements **2019-2020**
This is __ONLY__ a sample degree pathway. Please meet with an academic advisor prior to registration to formulate your own plan, and for additional information refer to the academic degree requirements.

Year	Fall Semester		Spring Semester	
1st	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**	3	CSCI 2912 Computer Science II	3
	CSCI 2916 Computer Science I Lab	1	MATH 3307 Differential Equations	3
	ENGE 1000 Introduction to Engineering (GE I&T)	3		
	Total Credits	16	**Total Credits**	15

Year	Fall Semester		Spring Semester	
2nd	ENGE 2000 Linear Circuits & Systems	3	MATH 3305 Linear Algebra	3
	ENGE 2001 Linear Circuits & Systems Lab	1	ENGE 2004 Dig. Hardware & Mic. Cont.	3
	MATH 2216 Calculus III	3	ENGE 2005 Dig. Hard. & Mic. Cont. Lab	1
	PHYS 2050 General Physics I	3	ENGE 2006 Electronics	3
	PHYS 2051 General Physics I Lab	1	ENGE 2007 Electronics Lab	1
	CHEM 2050 General Chemistry I (GE NW)	3	Technical Elective	3
	CHEM 2051 General Chemistry I Lab	1	Technical Elective Lab	1
	Total Credits	15	**Total Credits**	15

Year	Fall Semester		Spring Semester	
3rd	GE AE	3	GE CT&E	3
	ENGE 3000 Comms, Signals & Systems	3	ENGE 3006 Electromagnetics	3
	ENGE 3001 Comms Sig. & Systems Lab	1	ENGE 3007 Control Systems	3
	Unrestricted Elective	3	ENGE 3008 Control Systems Lab	1
	ENGE 3004 Engineering Design Project I	3	ENGE 3005 Engineering Design Project II	3
			ENGE 4500 Research Project I	3
	Total Credits	13	**Total Credits**	16

Year	Fall Semester		Spring Semester	
4th	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
	Major Elective – from Approved List	3	Major Elective – from Approved List	3
	ENGE 4600 Research Project II	3	ENGE 4700 Research Project III	3
	Total Credits	15	**Total Credits**	15

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 Credit count for Basic Math & Science for the Program complies with ABET Accreditation requirements of 1 out of 4 years (equivalent to 30 credits). The total is: **30**
- The Credit count for Engineering (including Computer Science) for the Program complies with ABET Accreditation requirements of 1.5 out of 4 years (equivalent to 45 credits). The total is: **60**
- There is one unrestricted elective for this Program. The total is: **3**
- Credit count and course classification is done in order to meet ABET accreditation requirements and enable required Core and Elective course offerings specific to Electrical Engineering.
- Research series (I, II, & III) can be either an extension of the Design Project, or relevant industry work such an internship or a supervised project work under a CNCS faculty.

- **To qualify for a Concentration in Engineering Sustainability:**
- Students must complete 21 credit of Restricted and Major electives that are categorized as courses in Engineering Sustainability from the Approved List/s (refer Catalog), including Research I, II and III topics in Engineering Sustainability. Students must undertake Engineering Design Project I and II, courses ENGE3005 Engineering Design Project I and ENGE3005 Engineering Design Project II, with 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.
- Entry into ENGE 4600 Research II is subject to supervisor approval and completion of the ENGE 4500 Research I course in addition to panel approval of the Thesis topic.

General Education Curriculum
Academic Catalog 2018-2019

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 Guided Pathways to identify the GE categories and their offerings.

Hawaii & the Pacific (GE H&P)

AL 1050	Languages in the Pacific
ANTH 1500	Contemporary Social Activism in Hawaii
ARTH 1001	Arts of Oceania
BIOL 2170	Ethnobotany: People and Plants
ENG 1101	Representations of Pacific Life
HAWN 1100	Beginning Hawaiian I
HIST 1558	Living History of Hawaii
PHIL 1001	Philosophies of Hawaii & the Pacific

Quantitative Analysis & Symbolic Reasoning (GE QA&SR)

CSCI 1534	Data Analysis and Visualization
MATH 1120	How Numbers Shape Our Lives
MATH 1123	Statistics
MATH 1130	Pre-Calculus I
MATH 1150	Pre-Calculus I & II
MATH 2214	Calculus I
PHIL 2090	Principles of Logic
PSY 1100	Probabilistic Thinking

Written Communication & Information Literacy I (GE WC&IL 1)

WRI 1100	Writing and Analyzing 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
HIST 1402	The American Experience: 1865 to Present
HUM 1270	Intro. to Gender & Women's Studies
PADM 1000	Intro. to Leadership in America
PHIL 2500	Ethics in America
PSCI 1400	The American Political System
SOC 1000	Introduction to Sociology

Creative Arts (GE CA)

ARTH 2301	World Art History
ARTS 1000	Intro. to Visual Arts
ARTS 2150	Intro. to Design
ENG 2000	The Art of Literature
MUS 1000	Intro. to Classical Music
MUS 2101	Music in World Culture
THEA 2320	Acting I: 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
ENG 2100	Ways of Reading: Film, Literature & Culture
GEOG 2000	Visual Human Geography
HIST 1717	Reacting to the Past
PH 1300	Public Health Ethics
PSY 1000	Intro. to Psychology

Global Crossroads & Diversification (GE GC&D)

AL 2000	Intro. to Linguistics
ANTH 2000	Cultural Anthropology
GEOG 1500	World Regional Geography
HIST 1002	Global Crossroads: 1500 to Present
INTR 1000	The International System
MULT 2000	Global Cinema Studies
PH 2060	Comparative Healthcare Systems
REL 1000	Intro. to World Religions

Natural World (GE NW)

BIOL 1000	Intro. Biology
BIOL 1300	Nutrition: Eat Smarter
CHEM 1000	Intro. Chemistry
CHEM 2050	General Chemistry
GEOG 1000	Intro to Physical Geography
GEOL 1000	The Dynamic Earth
MARS 1000	Intro. Oceanography
PHYS 1020	Astronomy

Sustainable World (GE SW)

AQUA 1200	Global Aquaculture for Food Security & Conservation
ARTS 1003	Sustainable Art & Design
BIOL 1500	Conservation Biology
ENVS 1000	The Sustainability Challenge
ENVS 1030	Tropical Ecology & Sustainability
MARS 1500	Marine Biology and the Global Ocean
SWRK 2010	Social Sustainability, Social Work & Entrepreneurship

Technology & Innovation (**GE T&I**)	
CSCI 1041	Digital Literacy in a Global Society
CSCI 1061	Mobile Technologies for the 21st Century
CSCI 1611	A Gentle Intro. to Programming
ENGE 1000	Intro. to Engineering Syst. & Pro. Practice
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
PH 1200	Intro. to Public Health Professions
PSCI 2000	Intro. 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