National UNIVERSITY

Bachelor of Science in Electrical and Computer Engineering Pathway
HOUSTON COMMUNITY COLLEGE

To earn a bachelor's degree from National University students must complete a minimum of 180 quarter units. Requirements include but are not limited to the university's general education program (to include upper division and cultural diversity), the preparatory courses listed below, major core coursework and any additional courses necessary to fulfill overall program requirements.

The table below maps National University's Foundation of Electric & Computer Eng. courses to equivalencies identified at **HOUSTON COMMUNITY COLLEGE.**

HOUSTON COMMUNITY COLLEGE	NATIONAL UNIVERSITY
Equivalent Transfer Course	**Preparatory Courses Required**
MATH2412 PRECALCULUS	MTH215* College Algebra & Trigonometry
PHYS1305 INTRODUCTORY PHYSICS I	PHS104* Introductory Physics
No Equivalent at Houston Community College	PHS130A Physics Lab for Engineering
MATH2413 Calculus I	CSC208 Calculus for Comp Science I
No equivalent course at Houston Community College	CSC209 Calculus for Comp Science II
No equivalent course at Houston Community College	CSC220 Applied Probability & Statistics
COSC1436 Programming Fundamentals I	CSC242 Intro to Programming Concepts
COSC1437 Programming Fundamentals II	CSC252 Programming in C++
REQUIREMENTS FOR THE MAJOR (24 courses; 93 quarter units)	
HCC Equivalent Courses	**National University**
PHYS 2325 University Physics I	PHS 231 Calculus-based Physics 1
PHYS 2326 University Physics II	PHS 232 Calculus-based Physics 2
CORE REQUIREMENTS	
CSC 300 Object Oriented Design	CEE 420L Microelectronics Lab (1.5 quarter units)
CSC 350 Computer Ethics	CSC 436 Comp. Communication Networks
CEE 300 Engineering Numerical Methods	CEE 324 Linear Systems and Signals
CSC 310 Linear Algebra and Matrix Comp	CEE 324L Linear Systems and Signals Lab (1.5 quarter units)
CSC 331 Discrete Structures and Logic	CEE 430 Digital Signal Processing
CEE 310 Circuit Analysis	CEE 340 Embedded Systems
CEE 310L Circuit Analysis Lab (1.5 quarter units)	CEE 340L Embedded Systems Lab (1.5 quarter units)
CSC 340 Digital Logic Design	CEE 440 VLSI Design
CSC 340L Digital Logic Design Lab (1.5 quarter units)	CEE 498 Capstone Design Project I
CSC 342 Computer Architecture	CEE 499A Capstone Design Project II
CEE 420 Microelectronics	CEE 499B Capstone Design Project III

Note: These requirements are subject to change. Please see National University's Online General Catalog for official record of requirements for the year you are admitted.

* May be used to meet a General Education requirement.

March 2024