

COMPUTER ENGINEERING

BACHELOR OF SCIENCE

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE


HOWARD
UNIVERSITY

4-YEAR ADVISING SCHEME

Students seeking the Bachelor of Science in Computer Engineering must complete a minimum of 120 credit hours comprised of core courses in computer engineering (56 credits), science and mathematics courses (46 credits), and general curriculum courses (18 credits), including an African American Studies elective (3 credits).

FALL SEMESTER 1

Number	Course Title	Credits
MATH 156	Calculus I	4
EGPP 101	Intro to Engineering	2
CSCI 135	Computer Science I	4
CHEM 003	General Chemistry I Lecture	4
CHEM 005	General Chemistry I Lab	1
Total Credits		15

SPRING SEMESTER 1

Number	Course Title	Credits
MATH 157	Calculus II	4
EECE 102	Intro to EE and CpE	1
EECE 260	Engineering Programming and Application	3
PHYS 013	Physics I Lecture (Science and Engineering)	3
PHYS 023	Physics I Lab (Science and Engineering)	1
MATH 181	Discrete Structures	3
Total Credits		15

FALL SEMESTER 2

Number	Course Title	Credits
MATH 158	Calculus III	4
PHYS 014	Physics II Lecture (Science and Engineering)	3
PHYS 024	Physics II Lab (Science and Engineering)	1
EECE 212	Fundamentals of Digital Systems	4
EECE 218	Fundamentals of Digital Systems Lab	1
MATH 159	Differential Equations	4
Total Credits		17

SPRING SEMESTER 2

Number	Course Title	Credits
EECE 160	Engineering Mathematics	4
EECE 203	Fundamentals of Circuit Theory	4
EECE 209	Fundamentals of Circuit Theory Lab	1
EECE 406	Advanced Digital Systems	3
EECE 412	Advanced Digital Systems Lab	1
Total Credits		13

FALL SEMESTER 3

Number	Course Title	Credits
EECE 305	Fundamentals of Electromagnetics	4
EECE 306	Fundamentals of Electromagnetics Lab	1
EECE 309	Fun of Electronics and SS Devices	4
EECE 312	Fund of Electronics and SS Devices Lab	1
EECE 331	Probability and Statistics for Eng. Appl	3
ENGW--	English First-Year Writing (I)	3
Total Credits		16

SPRING SEMESTER 3

Number	Course Title	Credits
EECE 333	Fundamentals of Signals and Systems	4
EECE 416	Microcomputer Design	3
EECE 410	Intro to Computer Networks	3
--	African American Studies Elective	3
ENGW--	English First-Year Writing (2)	3
Total Credits		16

FALL SEMESTER 4

Number	Course Title	Credits
EECE 417	Computer System Architecture I	3
EECE 420	Introduction to VLSI Design	3
EECE 424	VLSI Design Lab	1
EECE 401	Senior Design I	3
--	Social Science Elective	3
Total Credits		13

SPRING SEMESTER 4

Number	Course Title	Credits
--	EE/CpE Elective	3
--	Humanities Elective	3
--	Math/Science Elective	3
EECE 404	Senior Design II	3
ECON 001	Principles of Economics	3
Total Credits		15

Total Credits: 120

More Information :

The 4-Year Advising Scheme is a guide for students to successfully complete the program in four years of study. It is not a substitution for academic advising. Students are expected to check-in with their academic advisor every semester.

The prerequisite structure for courses and technical elective options are available in the program handbook.

Courses may not be offered in semesters in which they do not appear listed on the scheme.