

COMPUTER ENGINEERING, BS

Campus: NYC, Westchester

Major Completion Summary

Requirement	Credits
University Core Requirements	44-55
Major Requirements	52
Open Electives	1-13
Total Credits	120

University Core Requirements (44-55 credits)

See complete University Core (<https://catalog.pace.edu/undergraduate/university-core-curriculum/>) requirements.

*Students pursuing a BS in Computer Engineering are required to complete CS 121, MAT 131 and PHY 111 from the Foundation Requirements.

Major Requirements (52 credits)

Code	Title	Credits
CS 113	Mathematical Structures for Computer Science	4
CS 121	Introduction to Computer Science	4
CS 122	Object-Oriented Programming	4
CS 232	Computer Organization	4
CS 241	Data Structures and Algorithms	4
CS 272	Introduction to Unix and C Programming	4
CS 371	Operating Systems and Architecture	4
Computer Engineering		
CE 201	Fundamentals of Circuits and Electronics	4
CE 202	Digital Circuit Design	4
CE 304	Embedded Software Development	4
CE 405	Embedded Systems: Hardware/Software Co-design	4
Computer Engineering Capstone		
CE 489	Computer Engineering Capstone I	3
CE 499	Computer Engineering Capstone II	3
Advanced Major Electives - Choose three:		
CE/CS Elective		4
CE/CS Elective		4
CE/CS Elective		4
Total Credits		52

Open Electives (1-13 Credits)

Code	Title	Credits
Select 1-13 credits		1-13
Course		
First Year		
Fall		
UNV 101	First-Year Seminar: Introduction to University Community	1
CS 121	Introduction to Computer Science	4
CS 113	Mathematical Structures for Computer Science	4
ENG 110	Composition	3
Learning Community		6
Credits		18

Spring

CS 122	Object-Oriented Programming	4
CS 272	Introduction to Unix and C Programming	4
ENG 120	Critical Writing	4
MAT 131	Calculus I	4
Credits		16

Second Year**Fall**

CS 241	Data Structures and Algorithms	4
CE 201	Fundamentals of Circuits and Electronics	4
PHY 111	General Physics I	4
MAT 132	Calculus II	4
Credits		16

Spring

CE 202	Digital Circuit Design	4
CS 232	Computer Organization	4
MAT 234	Introduction to Probability and Statistical Analysis	4
PHY 112	General Physics II	4
Credits		16

Third Year**Fall**

CS 371	Operating Systems and Architecture	4
CE 304	Embedded Software Development	4
ENG 201	Writing in the Disciplines	3
MAT 238	Linear Algebra	4
Language 1		3
Credits		18

Spring

CE 405	Embedded Systems: Hardware/Software Co-design	4
COM 200	Public Speaking	3
Language 2		3
Civic Engagement		3
Credits		13

Fourth Year**Fall**

CE 489	Computer Engineering Capstone I	3
CE/CS Elective		4
CE/CS Elective		4
General Core		3
Credits		14

Spring

CE 499	Computer Engineering Capstone II	3
CE/CS Elective		4
General Core (2 Courses)		6
Credits		13
Total Credits		124