

# COMPUTER SCIENCE, PHD

**Campus:** Westchester

The PhD in Computer Science (<https://www.pace.edu/seidenberg/computer-science-phd/>) is a small and selective program at Pace University that aims to cultivate advanced computing research scholars and professionals who will excel in both industry and academia. During the program, you will work closely with faculty experts to conduct original research that will contribute to your chosen field. The program is aligned with the University's central mission to create thinking professionals who are highly sought after as innovators and successful leaders, and who will have a positive impact in the world.

Research areas include artificial intelligence, robotics, machine learning, cybersecurity, data science, healthcare technology, biometrics, business process modeling, and educational approaches using emerging computing technologies.

Code	Title	Credits
<b>Advanced Requirements</b>		
CS 801	Advanced Algorithms	4
CS 812	Advanced Concepts and Structures in Internet Computing	4
CS 816	Introduction to Big Data Analytics	4
CS 827	Advanced Artificial Intelligence	4
CS 837	Quantum Computing	4
CS 840	AdvanceAd Computer Vision	4
CS 855	Pattern Recognition and Machine Learning	4
CS 800	PhD Dissertation	2
<b>Research Seminars</b>		
CS 802	Research Seminar	2
CS 802	Research Seminar	2
CS 804	Independent Research	4
CS 804	Independent Research	4
<b>Dissertation</b>		
CS 806	Dissertation Preparation	4
CS 806	Dissertation Preparation	4
CS 806	Dissertation Preparation	4
CS 806	Dissertation Preparation	4
MM 803	Maintain Matriculation-CS PhD	0
<b>Total Credits:</b>		<b>44</b>

## QUALIFYING EXAM REQUIREMENT

Each student needs to pass three qualifying exams, and one of them should be in the area in which the student will write the dissertation. The student may take the qualifying exam embedded in a course without taking the course. If a student fails in a qualifying exam, he/she must retake it. If a student fails in a qualifying exam twice, he/she must leave the program. All qualifying exams must be passed by the end of the second year.