

Doctor of Philosophy in Data Science & Analytics

Updated 10/11/2024

Catalog Year: 2024

Total Degree Credit Hours: 78

Kennesaw State University's Ph.D. with a major in Data Science and Analytics is an advanced degree, which trains individuals to translate large, structured and unstructured, complex data into information to improve decision-making, and become independent researchers. This highly interdisciplinary curriculum includes heavy emphasis on programming, machine learning, artificial intelligence, data mining, statistical modeling, the mathematical foundations to support these concepts and more.

For admissions requirements and important dates/deadlines, please visit www.kennesaw.edu/admissions/graduate/

Course Number/Title	Prerequisite	Credits	D
CS 8265: Advanced Big Data Analytics	Admission to Program		
CS 8267: Advanced Machine Learning	Admission to Program	3	
MATH 8020: Graph Theory	Admission to Program	3	

			1-6	D
DS 9700: Doctoral Internship or Research PhD Dissertation				
			1-9	

Students can take up to 9 credit hours for 6000 or 7000 level courses in DS, STAT, or CS with permission of the program director.
Students can take any 8000 or 9000 level course in DS, STAT, MATH, CS, or IT (other disciplines by permission of the director).

CS 8041: Advanced Theory of Computation	Admission to Program	3	
CS 8045: Advanced Design and Analysis of Algorithms	Admission to Program	3	
CS 8050: Principles of Software Design & Programming Languages	Admission to Program	3	
CS 8125: Advanced Cloud Computing	Admission to program	3	
CS 8172: Advanced Parallel and Distributed Computing	CS 8025 (may take concurrent)	3	
CS 8253: Advanced Graph Algorithms	CS 8045 (may take concurrent)	3	
CS 8260 : Advanced Database Systems and Applications	Admission to program	3	
CS 8263: Advanced Information Retrieval	CS 8045 (may take concurrent)	3	
CS 8265: Advanced Big Data Analytics	Admission to program	3	
CS 8267: Advanced Machine Learning	Admission to program	3	
CS 8347 : Advanced Natural Language Processing	CS 8041 (may take concurrent)	3	
CS 8357: Advanced Neural Networks and Deep Learning	CS 8045 (may take concurrent)	3	
CS 8367: Advanced Computer Vision	CS 8045 (may take concurrent)	3	
CS 8375: Advanced Artificial Intelligence	CS 8045 (may take concurrent)	3	
CS 8540 : Advanced Network Security	CS 8027 (may take concurrent)	3	
CS 8545: Advanced AI for Security and Privacy	CS 8045 (may take concurrent)	3	
CS 8990 : Advanced Special Topics in Computer Science	Depends on topic	3	