



Minor Requirement*	4		CMPS 231 - Data Structures and Algorithms	4	
	2			1	
	18			17	

		!			!
CMPS 320-Machine Learning	4		DATA 450-Data Science Capstone Project	4	
CMPS 310 - Big Data Programming (Data Science Elective required for major)	4		CMPS 531 Data Structures and Algorithms	3	
Minor Requirement*/Elective	4		MSCS Elective or DATA 620	3	
CMPS 547 Foundations of Computer Science	3		CMPS 311 - Operating System Design ²	4	
	15			14	

		!			!
	3			3	
	3			3	
	3			3	
	3				
	12			9	

128 credits****
 2.0
 3.0

Writing Intensive-3 required in the major

* As part of their degree requirements, Data Science majors are also required to complete a minor or double major to gain domain knowledge in a particular field, to better contextualize their data studies. Most minor programs require 5-6 courses. Any minor or second major can be selected: <https://www.ramapo.edu/majors-minors/a-z/>

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*** Two additional free electives are required in the 3rd year because graduate courses are only 3 credits, instead of the usual 4 for undergraduate courses. Thus, a student must take an additional 3 credits to meet the 128-credit graduation requirement.

30 credits****
 3.0

****The 9 credits of graduate coursework taken in the fourth-year will double count towards both the undergraduate degree requirement of 128 credits as well as the required 30 graduate credits.