Data Science
Recommended Four-Year Plan - (Fall 2020)

The recommended four-year plan is designed to provide a blueprint for students to complete their degrees within four years. Students must meet with their Major Advisor to develop a more individualized plan to complete their degree. This plan assumes that no developmental courses are required. If developmental courses are needed, students may have additional requirements to fulfill which are not listed in the plan and may extend degree completion.
NOTE: This recommended Four-Year Plan is applicable to students admitted into the major during the 2020-2021 academic year.

First Year

Fall Semester	HRS	✓	Spring Semester	HRS	✓
Gen Ed: Quantitative Reasoning - MATH 121-Calculus I	4		CMPS 130-Sci Problem Solving-Python	4	
Gen Ed: INTD 101-First Year Seminar	4		MATH 237-Discrete Structures or MATH 205-Mathematical Structures **WI**	4	
Gen Ed: CRWT 102-Critical Reading and Writing II	4		Gen Ed: AIID 201-Studies in the Arts & Humanities	4	
DATA 101-Introduction to Data Science	4		Gen Ed: SOSC 110-Social Science Inquiry	4	
			Career Pathways: SCIN 001 – Career Pathways Module 1	Degree Rqmt.	
Total:	16		**Total:**	16	

Second Year

Fall Semester	HRS	✓	Spring Semester	HRS	✓
CMPS 240-Data Analytics in Python	4		Minor Requirement*	4	
MATH 262-Linear Algebra **WI**	4		Gen Ed: Scientific Reasoning	4	
Gen Ed: Historical Perspectives	4		Gen Ed: Culture & Creativity, Systems Sustainability & Society, Values & Ethics	4	
Minor Requirement*	4		Elective	4	
Career Pathways: SCIN 002 – Career Pathways Module 2	Degree Rqmt.		Career Pathways: SCIN 003 – Career Pathways Module 3	Degree Rqmt.	
Total:	16		**Total:**	16	

Third Year

Fall Semester	HRS	✓	Spring Semester	HRS	✓
DATA 225-Ethics of Technology **WI**	4		MATH 370-Applied Statistics	4	
Gen Ed: Culture & Creativity, Systems Sustainability & Society, Values & Ethics (Must be outside of TAS)	4		CMPS 364-Database Design	4	
Minor Requirement*	4		Gen Ed: Global Awareness	4	
Minor Requirement*	4		Minor Requirement*	4	
Total:	16		**Total:**	16	

Fourth Year

Fall Semester	HRS	✓	Spring Semester	HRS	✓
DATA 301-Data Analysis & Visualization	4		DATA 450-Data Science Capstone Project **WI**	4	

CMPS 320-Machine Learning	4		DATA Elective	4	
Minor Requirement*/Elective	4		Elective	4	
Elective	4		Elective	4	
Total:	16		**Total:**	16	

Total Credits Required: 128 credits
GPA Required: 2.0
WI: 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/