### COUNTY COLLEGE OF MORRIS CURRICULUM CHECK SHEET Requirements for Graduation Certificate of Achievement

## #0150 DATA ANALYTICS Certificate of Achievement

Name:

ID\_

COURSE	CODE	CR	GR	TR
*Introduction to Data Science	MAT 114	3		
*Probability and Statistics I	MAT 130	4		
Fundamentals of Programming	CMP 131	3		
Database Programming	CMP 241	3		
Data Science Programming OR	CMP 262	3		
Machine Learning	ENR 264	5		
	TOTAL	16		

Total Transfer Credits

# NOTES:

#### This is an unofficial document and should be used for academic planning purposes only.

**FALL 2021** 

The certificate in Data Analytics will prepare individuals to apply data science techniques to generate insights from data and identify and predict trends utilizing multiple variables. Data Analytics courses will include instruction in computer databases, computer programming inference, machine learning, probability and statistics, and visual analytics and modeling. Students will work with real world databases to answer and solve societal problems and explore ethical issues related to data privacy, security, and integrity.

For more information, and/or advisement assistance, contact Prof. Kelly Fitzpatrick at (973) 328-5765 or <u>kfitzpatrick@ccm.edu</u>

Certificate awarded after successful completion of all courses with an overall average of 2.0 or better.

\*Students must have the proper exemption by either passing through the Algebra Accuplacer placement test, review of the high school transcript (for recent graduates), have the minimum SAT, ACT, or PARCC/NJSLA scores, or appropriate transfer of credit in a college math course.

#### DATA ANALYTICS #0150 Suggested Sequence by Semester

*This suggested sequence does not include any required developmental courses. Degree completion time may vary depending upon the number of credits taken each semester.* 

SEMESTER I		CREDITS	SEMESTER II		CREDITS
Introduction to Data Science	MAT 114	3	Database Programming	CMP 241	3
Probability & Statistics I	MAT 130	4	Data Science Programming OR	CMP 262	3
Fundamentals of Prog	CMP 131	3	Machine Learning	ENR 264	
	TOTAL	10		TOTAL	6

## **CERTIFCATE COMPLETION**

Because some of the courses in the Data Analytics certificate are prerequisites of others, the certificate will take at least two semesters to complete (this does not include any developmental course work in math that may be required).

## MATH PREREQUISITE INFORMATION

In order to enroll in MAT 114, Introduction to Data Science and MAT 130, Probability and Statistics I, students must have the proper exemption by either passing through the Algebra Accuplacer placement test, review of the high school transcript (for recent graduates), have the minimum SAT, ACT, or PARCC/NJSLA scores, or appropriate transfer of credit in a college math course.

## **OTHER PREREQUISITE INFORMATION**

The prerequisite of CMP 241 is CMP 131 Fundamentals of Programming The prerequisite for CMP 262 is CMP 131 Fundamentals of Programming The prerequisite for ENR 264 is MAT 114 Introduction to Data Science AND CMP131 Fundamentals of Programming

## **HONORS OPTION**

There is an honors option for MAT 130 Probability and Statistics I, students can take MAT 183 Honors Probability and Statistics I.

GENERAL EDUCATION: Click here for the more recent General Education course list.