Name:_____

ID_____**Total Transfer Credits**_____

FALL 2022

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			
		TOTAL	16		

NOTES:

This is an unofficial document and should be used for academic planning purposes only.
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 kfitzpatrick@ccm.edu

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, NJSLA scores, or appropriate transfer of credit in a college math course.

<div align="center">

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.

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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, 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 most recent General Education course list.