

# COUNTY COLLEGE OF MORRIS

## DATA ANALYTICS Certificate of Achievement



### WHAT YOU WILL LEARN

Data is continuously being amassed about all aspects of our lives, and industries of all kinds are using it to better understand our world and help solve its important problems. From public health to entertainment, agriculture to travel, banking to cyber security, data is collected, analyzed and used to make predictions and decisions that effect our every-day life. Study data analytics and an exciting and bountiful array of high-paying job opportunities await. And help shape the world of your future.

The certificate in Data Analytics will prepare you to apply data science techniques using in-demand skills and tools to:

- Tell a story with data
- Work with real-world data to answer and solve societal problems
- Identify and predict trends
- Collaborate with others
- Explore ethical issues related to data privacy, security, and integrity

The 16-credit program at CCM provides you with skills in statistical and computational thinking, computer programming, data storage and access, and machine learning. Students will walk away with the knowledge of R, Python, Tableau and SQL. These are all in-demand technology skills for the New Jersey labor market.

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### CAREERS

According to Glassdoor, data analysts are one of the most highly in-demand and sought after careers worldwide. The average salary in the New York City area is \$93,460 per year with an estimated total pay over \$110K.

- Big Data Engineer
- Business Intelligence Engineer
- Data Analytics Consultant
- Data Architect
- Data Business Analyst
- Data Visualization Developer
- Junior Data Support Specialist
- Machine Learning Scientist
- Operations Analyst
- Predictive Analytics Professional
- Project Manager
- Quantitative Analyst
- Report and Analytics Designer
- Report and Analytics Developer
- Statistician

### CONTACT INFORMATION

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## WHY STUDY DATA ANALYTICS AT CCM?

Early on, CCM recognized the importance of offering curriculum in this dynamic field of data analytics and we are thrilled to be the first community college in New Jersey to offer a credited certificate program. Our collaborative, team-based learning environment allows you to work with others to analyze real-world data to solve problems or answer questions. Taught by professors with experience in the field, classes are held in small classrooms equipped with industry-standard software to ensure that you graduate with current and relevant skills. Students will learn in demand technology and software such as Python, R and Tableau.

## WHERE YOU CAN GO!

The Certificate of Achievement in Data Analytics can help you in your academic journey or in jump-starting your career in data science. Pair the certificate with an existing CCM degree or use its college credited courses and skills to enhance your resume. The Data Analytics certificate is also “stackable”, meaning it can be applied to the following associate degree program at CCM: Business Administration, Computer Science, Information Technology, Mathematics and more in the works.

Students have transferred to Columbia University, Ramapo College and the University of Michigan - Ann Arbor.

## CURRICULUM

### DATA ANALYTICS (16 CR)

Introduction to Data Science		MAT 114	3
Probability and Statistics I	OR	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



*Note: You must see a faculty advisor to plan your sequence of courses. For the most up-to-date listing of courses, see the Curriculum Checklist for this program on the CCM website at [www.ccm.edu/checksheets](http://www.ccm.edu/checksheets).*