

# COMPUTER STUDIES AND INFORMATION PROCESSING, DATA ANALYTICS - CERTIFICATE



## DATC

The Certificate in Data Analytics aims to introduce the concepts, techniques, ideas, skills, theories, methods, and practice necessary for entry in the fields of Data Analytics or Data Science. Students will learn the foundational skills necessary to work in a data-driven world.

Statistical, data and visualization tools will provide students with the background necessary to complete either a capstone project or an internship in the field of Data Analytics.

Note: Students in this program must earn a grade of at least C in all computer course requirements and must maintain a 2.0 GPA. Many courses require prerequisites, corequisites and/or testing. See course descriptions for details (<https://www.ccri.edu/catalog/current/courses/>).

## Program Learning Outcomes

Upon completion of this program, a student will be able to:

1. Perform statistical analysis of data to provide the basis for decision making.
2. Utilize data analysis tools for the analysis of data sets.
3. Construct computer programs to access and manipulate data sets.
4. Develop visualizations of data to communicate the results of statistical analysis.
5. Analyze real-world problems based on data analysis techniques.
6. Demonstrate the ability to manage a project from the design stage to the final report.

## Certificate Requirements

Code	Title	Hours
COMI 1150	Programming Concepts	3
COMI 1260	Introduction to SQL	3
COMI 1300	Introduction to Data Analytics	3
COMI 1350	Data Analytics Programming	3
COMI 2900	Data Analytics Internship <sup>^</sup>	3
MATH 1139	Mathematics for Liberal Arts Students (or MATH 1139C) <small>MSCI; Scientific Reasoning; Quantitative Literacy</small>	3
<b>Total Hours</b>		<b>18</b>

**Note:** COMI-1260, COMI-1350, and COMI-2900 are offered in the Spring semester only.

<sup>^</sup> Work-based learning course

## Recommended Course Sequence

Course	Title	Hours
<b>Year 1</b>		
<b>Semester 1</b>		
COMI 1150	Programming Concepts	3
COMI 1300	Introduction to Data Analytics	3
MATH 1139	Mathematics for Liberal Arts Students (or MATH 1139C)	3
<b>Hours</b>		<b>9</b>
<b>Semester 2</b>		
COMI 1260	Introduction to SQL <sup>1</sup>	3
COMI 1350	Data Analytics Programming <sup>1</sup>	3
COMI 2900	Data Analytics Internship <sup>^</sup> <sup>1</sup>	3
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>18</b>

<sup>1</sup> This course is offered in Spring Semester only.

<sup>^</sup> Work-based learning course