

DATA ANALYTICS, CERTIFICATE OF ACHIEVEMENT

Course	Title	Units
ICS C165	Foundations of Data Science and Artificial Intelligence	
Total Units		27

Banner Code: 3_CN_DATA

Control Number: 38543

Financial Aid Eligible

The Certificate of Achievement in Data Analytics equips students with a strong foundation in analytics, business intelligence, and data visualization. This program prepares students for entry-level positions and career advancement in roles such as Business Analytics Specialist, Data Analyst, Data Visualization Developer, Operations Research Analyst, and Market Research Analyst. Key topics include data analysis, data mining, statistical modeling, SQL querying and data visualization, systems analysis and design, and reporting techniques.

Program Level Student Level Outcomes

Upon completion of this program, students will be able to:

1. Apply foundational data analysis and statistical modeling techniques to interpret data and generate actionable insights for business decision-making.
2. Employ systems analysis and design methodologies to identify business challenges and implement data-driven solutions.
3. Utilize SQL, data mining, and other analytics tools to query, organize, and analyze datasets across various business domains.
4. Create clear and effective data visualizations and reports using modern tools and techniques to communicate findings to diverse audiences.

Review Graduation Requirements (<https://catalog.cccd.edu/coastline/graduation-requirements/certificates/#achievementtext>).

Course	Title	Units
Required Core		
Complete all of the following:		
CIS C111	Information Systems, Programming, and Database Management	3
CIS C157	Introduction to Python Programming	3
CIS C240	SQL Database Development	3
CIS C250	Introduction to Data Analytics	3
CIS C260	Systems Analysis and Design	3
CIS C280	Data Visualization	3
CIS C285	Data Governance, Privacy, and Policies	3
Program Electives		
Select two (2) courses from the following:		6
CIS C190	Introduction to Geographic Information Systems and Techniques with Lab	
CIS C191	Intermediate Geographic Information Systems (GIS)	
CIS C270	Predictive Analytics	
CIS C275	Data Mining and Analytics (Data+)	