

GRADUATE CERTIFICATE IN BUSINESS INTELLIGENCE

*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.

Students will learn how to enable, support, and create a data-driven culture in an organization. Content will cover common functions, processes, and methods of business intelligence such as: reporting, data and text mining processes and related methodologies like CRISP-DM and SEMMA; complex event processing; performance management; predictive and prescriptive analytics; and creating effective visualizations. Students gain hands-on experience designing, implementing, manipulating, and managing databases through a rigorous foundation in relational database management systems.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (<http://catalog.colostate.edu/general-catalog/graduate-bulletin/>).

Learning Objectives

Students will:

1. Gain sound knowledge of the Business Intelligence (BI) field, including impacts, capabilities, and role in decision making.
2. Learn BI technologies and vendors, while gaining hands-on experience with BI tools.
3. Discover the importance of data mining and its application in business.
4. Learn the data mining process, including techniques for classification, segmentation, association, prediction and forecasting.
5. Understand and apply data modeling concepts.
6. Recognize patterns of data relationships that exist in most business applications.
7. Master various aspects of data, such as acquisition, classification, storage, and retrieval.

Requirements

The Certificate combines business intelligence with applied data mining and analytics to optimize, forecast, detect, predict, classify and discover new ways of using data to make a business more productive and efficient. Completion of the certificate allows students to bring value to companies that have vast quantities of both structured and unstructured data that requires identification, analysis, and transformation into useful data for business optimization and forecasting.

Effective Fall 2019

Additional coursework may be required due to prerequisites.

Code	Title	Credits
Select three courses from the following:		9
CIS 570	Business Intelligence	
CIS 575	Applied Data Mining and Analytics in Business	
CIS 576	Business Data Visualization	
CIS 655	Business Database Systems	
Program Total Credits:		9