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# Executive Summary: IDSc 6444

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**Course Name:** Business Intelligence  
**Course Number:** IDSc 6444      **Credits:** 2 credits

## Description

The interaction between companies and their customers has changed dramatically in recent years. Customers and prospective customers want to interact with companies on their own terms, and even the business of loyal customers is no longer guaranteed. As a result, companies have realized that they need to understand their customers better and to be able to respond to various customer needs in a timely fashion. Business intelligence is the use of information technologies for gathering, storing, analyzing, and providing access to data to help managers make better decisions about their business and the way they serve customers. The innovative use of business intelligence technologies forms a powerful basis for competitive advantage in today's networked economy. The purpose of this course is to explain how technologies such as data mining, personalization, and recommender systems can help in many important business applications, such as new customer acquisition, developing customized product and service offerings, customer relationship management, fraud detection, and credit analysis. This course begins by covering these topics at a basic fundamental level for those who have little or no experience with these technologies, and builds on this foundation to provide a comprehensive exploration of a variety of business intelligence technologies.

## Objectives

1. Provide an overview of the benefits of using personalization and data mining technologies to generate business intelligence.
2. Develop an understanding of the main data mining and personalization tools that form the foundation for advanced and robust business intelligence.
3. Know how to integrate business intelligence-related technologies with business processes.
4. Provide an overview of the current market of data mining, personalization, and CRM systems and tools, as well as discuss the potential directions for next generation business intelligence technologies.

## Learning Outcomes

1. Students will understand the process of introducing data mining and personalization technologies into the business processes which includes:
  - Building the business case for data mining and personalization
  - Deploying and managing business intelligence applications
  - Collecting relevant data
  - Applying data mining models to various business problems
2. Students will learn about various data mining and personalization techniques, including decision trees, clustering, and business rule induction.
3. Students will learn how the above techniques are applied in a variety of business applications and organizational settings.