

# IDSc 6446 Advanced Business Intelligence

## Executive Summary

<b>Course:</b>	IDSc 6446 Advanced Business Intelligence
<b>Credits:</b>	2 credits
<b>Prerequisites:</b>	IDSc 6444

### **Description**

This course builds upon IDSC 6444 “Business Intelligence” course. While IDSC 6444 focuses on the fundamental and most widely used data mining, data analytics, and personalization techniques, IDSC 6446 “Advanced Business Intelligence” delves into a number of other current and emerging data analytics areas that are becoming increasingly important for modern organizations. Such areas include mining text and Web data, temporal data analytics, and advanced data visualization. This course covers a number of fundamental issues and introduces students to a number of analytics techniques in each of these areas. The students will be able to apply these techniques in different settings, using real-world datasets. This course will also discuss the value of advanced data analytics in a variety of organizational contexts and business applications.

### **Objectives**

1. Provide an overview of advanced business intelligence and data analytics technologies.
2. Introduce essential techniques for mining text and Web data, temporal data analytics, and advanced data visualization.
3. Provide hands-on experience with advanced business intelligence techniques and tools using real-world scenarios and datasets.
4. Discuss and understand the value of advanced data analytics for a diverse set of business settings and applications.

### **Learning Outcomes**

1. Students will demonstrate knowledge of several advanced data analytics techniques in the areas that include:
  - Text and Web mining (i.e., extension of traditional data mining approached to unstructured data, such as text);
  - Temporal data analytics (i.e., analysis of time-dependent or time-varying data);
  - Advanced data visualization (i.e., interactive techniques for discovering patterns and relationships in large-scale data).
2. Students will demonstrate competence in applying the advanced business intelligence techniques to real-world problems.
3. Students will understand the benefits of advanced business intelligence and data analytics techniques for modern organizations.