# IT-BAS 430: Business Intelligence and Data Mining

### Credits 5

#### **Quarter Offered Winter**

The course covers business intelligence (BI), data mining, fundamental concepts, techniques, and applications to produce data-driven insights and inform strategic decision-making in contemporary business contexts. Topics include data warehousing, preprocessing, data mining algorithms (regression, classification, clustering), predictive modeling, and performance evaluation. Emphasis is placed on integrating BI with organizational decision-making processes and business strategy, with practical exercises using industry-standard tools for data visualization, reporting, and dashboard creation. This class may include students from multiple sections.

Must be seeking a Bachelor of Applied Science in Management degree to enroll. If interested, visit <a href="mailto:pencol.edu/bas">pencol.edu/bas</a>

## **Prerequisites**

Information Technology Management BAS Program Admittance

#### **Course Outcomes**

Demonstrate understanding of the principles of business intelligence and data mining.

Apply data warehousing techniques, including preprocessing and integration, to get data in place for analysis.

Implement various data mining algorithms like regression, classification, and clustering. Develop forecasting models.

Evaluate the results of business intelligence and data mining using appropriate metrics.