

BUSN 515 Introduction to Data Analysis for Decision-Making

Course Description

This course introduces the methods and tools which help to systematically extract not only information but also insights from the data in various business functions, such as operations, supply chain, marketing, and finance. The course first covers the foundations of business analytics: decision making, definition and categories of business analytics, big data. Candidates will get hands-on experience by ethically analyzing real world business data using a state-of-the-art business analytics software. The course puts an emphasis on how to effectively communicate findings with business managers and other interested parties.

Course Learning Outcomes

Upon successful completion of the course, students will be able to:

1. Demonstrate critical understanding of how a range of specialized quantitative and qualitative business analytics techniques are used to inform decision making across multiple domains.
2. Apply specialized quantitative and qualitative business analytics techniques to form legitimate business questions, determine variables needed, structure scenario analysis, and make informed decisions.
3. Critically analyze authentic business problems, using appropriate quantitative techniques to make informed decisions in view of diverse perspectives.
4. Use pre-programmed MS Excel functions, SPSS, and other suitable packages to consolidate concepts, information and issues related to different business cases.
5. Communicate ethical, moral, and legal strategic decisions in oral and written formats, considering the short- and long-term implications.

Learning Resources

Evans, J.R., Business Analytics. Pearson Education Limited. (latest available editions)

Course Content

1. Introduction to Business Analytics
2. Analytics on Spreadsheets
3. Visualizing and Exploring Data
4. Descriptive Statistical Measures
5. Trendlines and Regression Analysis
6. Regression Analysis
7. Forecasting Techniques
8. Linear Optimization
9. Application of Linear Optimization