Business Intelligence and Reporting

2023-2024 Catalog

[ARCHIVED CATALOG]

INFM 219 - Business Intelligence and Reporting

PREREQUISITES: INFM 109 - Informatics Fundamentals and DBMS 110 - Introduction to Data Analytics

PROGRAM: Informatics **CREDIT HOURS MIN:** 3 LECTURE HOURS MIN: 3

DATE OF LAST REVISION: Spring, 2020

Introduces students to technology and techniques used to effectively consolidate, arrange, and analyze vast amounts of data. Business intelligence has become a highly sought after skill in many industries. Students will be introduced to business intelligence concepts and best practices to help organize data to make data-driven decisions. Emphasis is placed on learning how to mine large amounts of data using common business intelligence and decision support tools. Students will be introduced to data warehousing, business intelligence, and related topics such as decision support systems, data mining, web mining, and customer relationship management. Emphasis is placed on learning how to derive business value from large amounts of data.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:



- 1. Identify key concepts and techniques related to business intelligence.
- 2. Employ common business intelligence tools to extract, transform, and load data to aid in data-driven decision making.
- 3. Analyze data to generate information for decision making.
- 4. Discuss and explain the societal impacts and ethical dimensions of business intelligence and data analysis.
- 5. Identify and examine data in order to ensure consistency and quality.
- 6. Identify bad data and formatting for consistency following established data governance methodologies.
- 7. Create reports utilizing common data visualization techniques to support business decisions.
- 8. Explain the value of business intelligence and decision support systems and technologies.
- 9. Explain how to use data diversity and transparency to improve inclusion, belonging, and equity of business decision making.
- 10. Analyze structured and unstructured data.

COURSE CONTENT: Topical areas of study include -

- · Knowledge management
- Relational databases
- · Big data and unstructured data
- · Report writing
- Data governance
- Data quality
- Extract, Transform, Load (ETL) processes
- Data Warehouse/Data Mart
- · Information/Data Security
- Data visualization
- Query selection criteria

- Data maintenance
- Decision making
- Tools used for querying and reporting
- Ethical use of data
- Data diversity and transparency
- Data cleansing
- Data Mining

Course Addendum - Syllabus (Click to expand)

