

Common Course Outline
CINS 233
Information Management for Decision Making
4 Semester Hours

The Community College of Baltimore County

Description

CINS233 Information Management for Decision Making introduces students to the multidimensional data analysis techniques of Business Intelligence that are used to retrieve and present information for decision making and problem solving. Techniques will be applied to various industries. Technologies used include Data Visualization, QBE, SQL, Report Writers, Pivot Tables, Pivot Charts, MS Office, Web Pages and Adobe Portable Documents (PDF). In this capstone course for the Information Management certificate students will complete case projects that require them to retrieve information from various data sources and present that information in various formats.

Prerequisite: CINS132, CINS134 and CINS146 or permission of Program Director.

Overall Course Objectives

Upon completion of this course the student should be able to:

1. define Information Management and Business Intelligence and their roles within organizations;
2. analyze information needs to determine appropriate information retrieval tools or techniques;
3. setup Open Database Connectivity (ODBC);
4. generate Business Intelligence by using multidimensional data analysis techniques (Pivot Tables, Cross Tabs, etc.);
5. create and manipulate Adobe Portable Document Files (PDF);
6. create data visualizations using MS Office, MS Office Add-ins and Adobe Acrobat;
7. retrieve information using Query by Example (QBE) and Structured Query Language (SQL);
8. identify the information need and presentation format;
9. determine the data sources for the required information need;
10. choose the appropriate processing required to retrieve the required information;
11. retrieve information typically required from various industries;
12. integrate external information (currency exchange rates, prime rate, etc.) from electronic sources;
13. design Business Intelligence Models for various types of industries;
14. implement Business Intelligence Models for various types of industries; and
15. create a web information portal.

Major Topics

- I. Defining Information Management and Business Intelligence
- II. Identifying the information need
- III. Determining data sources and their formats
- IV. Cleansing and validating data sources
- V. Choosing the appropriate presentation format for information
- VI. Choosing the appropriate processing required to retrieve and present information
- VII. Determining when to link to data as opposed to Importing or Exporting data

- VIII. Using a Report Writer to write various types of reports (Summary, Detail, Sub-Reports...)
- IX. Using Multidimensional Data Analysis techniques (Cross Tabs, Pivot Tables and Pivot Charts)
- X. Creating Data Access Pages
- XI. Creating and manipulating Adobe Portable Document Format (PDF) documents
- XII. Creating Data Visualizations using MS Office, MS Office Add-ins and Adobe Acrobat
- XIII. Creating Static and Dynamic Web Pages
- XIV. Identifying and integrating appropriate external information (prime rate, currency rates...)
- XV. Designing a Business Intelligence Model
- XVI. Implementing a Business Intelligence Model
- XVII. Retrieving and presenting information for various types of industries
- XVIII. Creating a Web Information Portal

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following:

- At least four projects. Each project should focus on a different industry or business unit and incorporate various data sources, information requests, multidimensional data analysis techniques, and presentation formats.
- A comprehensive final exam

Writing: The individual faculty member will determine specific writing assignments.

Other Course Information

This course is the capstone course of the Information Management Certificate.
This course is taught in a computerized environment.