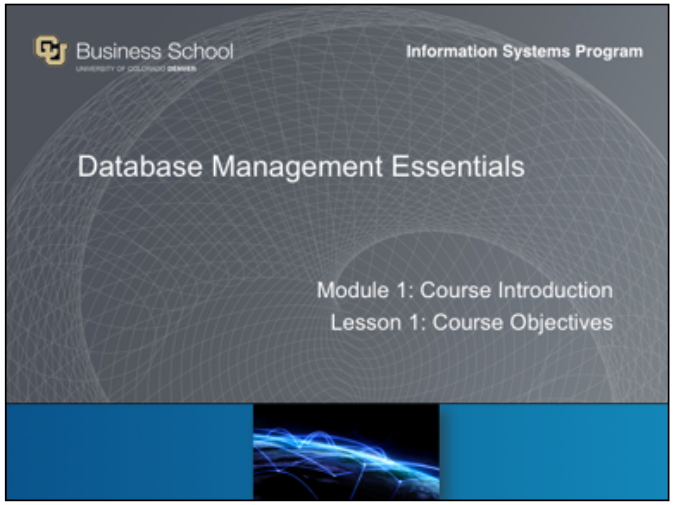


Welcome to Database Management Essentials, the first course in the specialization of Data Warehousing for Business Intelligence.

Fun but challenging specialization for both business and computer science students as well as information technology professionals

Learn new concepts, skills, and practices vital to careers in business intelligence

Introductory course on database management concepts and skills

Other courses deal directly with data warehouse concepts, technologies, and skills.

Database management is crucial to the operation and management of modern organizations:

- infrastructure (plumbing) for daily business operations
- raw materials for long range decision making

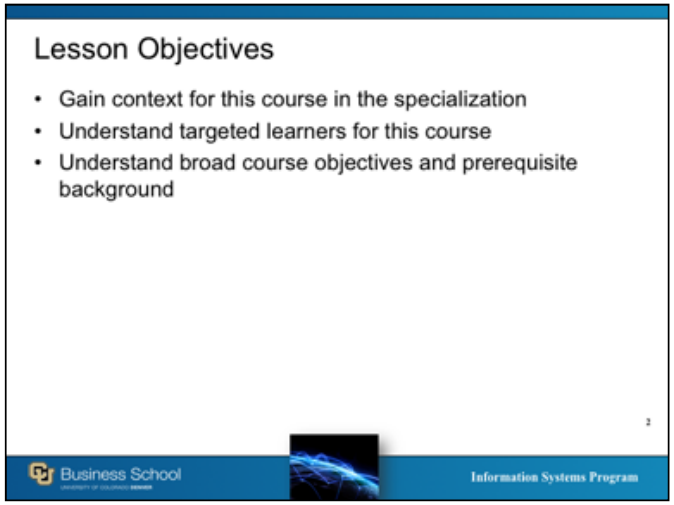
Transformation: as significant as learning computer programming and algebra

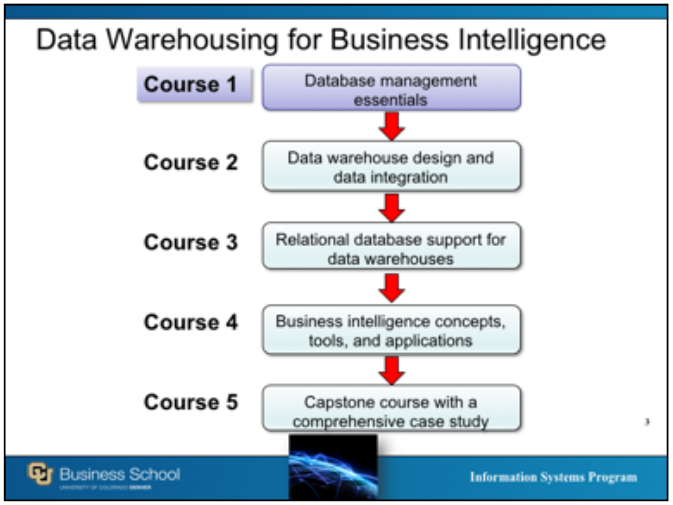
Objectives:

- Cover targeted users, course objectives, and prerequisites
- Provide excitement for this course and the entire specialization

Data warehouses provide key infrastructure for business intelligence services used in many organiz large, complex data warehouses involves technical skills and conceptual background needed by inf professionals as well as tactical and strategic issues faced by information technology managers. Ac report by McKinsey, demand for graduates with business intelligence skills is large and growing wi of 1.5 million analysts by 2018.

Before learning about data warehouses, students need a basic background in database management this foundation in query formulation and database development so that students can progress to top architectures that support business intelligence.





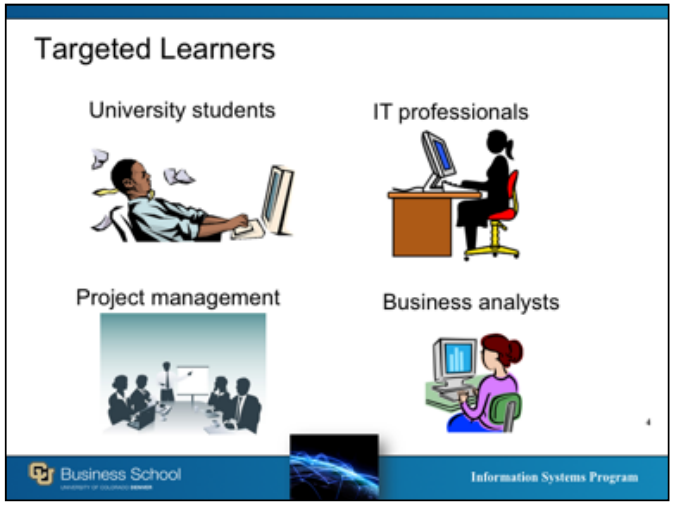
Course 1: database management fundamentals (query formulation and database development)

Course 2: DW concepts, design, and data integration

Course 3: Relational database support for DWs and data administration

Course 4: Business intelligence concepts, tools, and applications

Course 5: Capstone project with a case study about business needs, data warehouse schema design, data integration processes, relational database implementation, and dashboard and business reporting



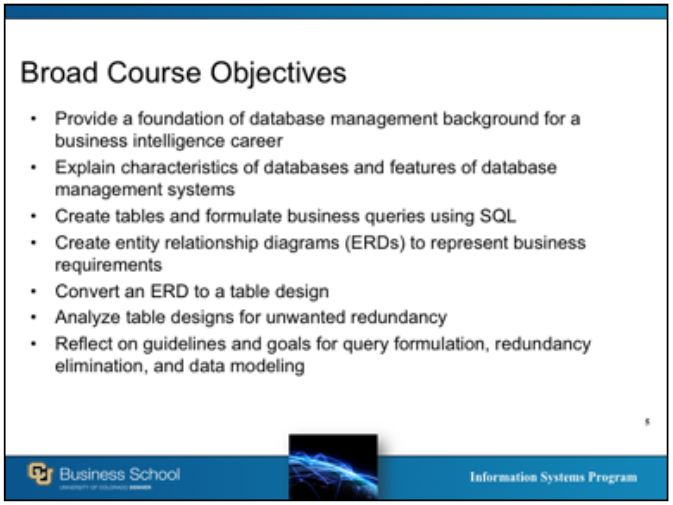
Business and computer science students with career interests in business intelligence

IT professionals

- Seek career change to fast growing area of business intelligence
- Programmers and analysts
- Project managers, user support

Non IT professionals

- Seek credentials for starting an IT career in business intelligence
- Business analysts
- Students with business or computing degrees



A background in database management is essential for a career in business intelligence. This course provides the foundation for students without a previous course in database management.

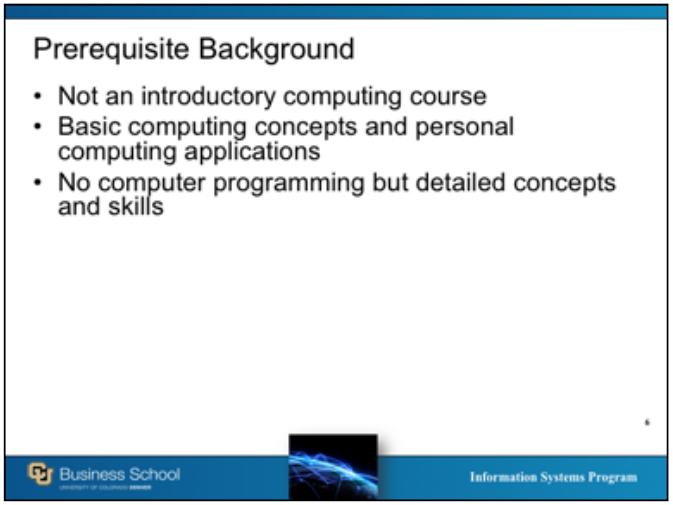
Major skills:

- Query formulation using the SQL SELECT statement for problems involving multiple tables and row summaries (grouping)
- Data modeling: using Entity Relationship diagrams to develop data models consistent with business requirements
- Table designs: convert an ERD to a table design and eliminate unwanted redundancy

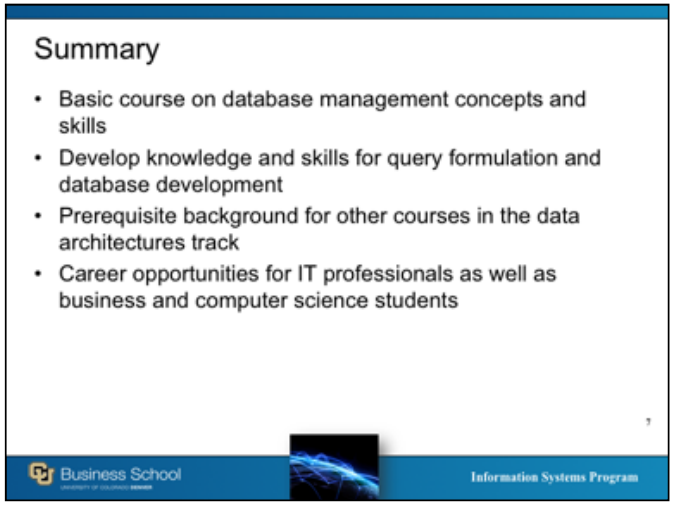
Major concepts

- Characteristics of business databases
- Features of database management systems especially importance of non procedural access
- Differences in requirements for transaction processing and business intelligence processing

- Reflect on guidelines for query formulation (critical questions), redundancy elimination (update (alternative designs and simplification)



Computer programming background does indicate an aptitude for the detailed concepts and skills covered.



Basic course

- Subset of background provided in a complete database course
- Essential skills: query formulation, data modeling, and table design

Prerequisite background

- Schema design of data warehouses
- Query formulation using advanced parts of the SQL SELECT statement
- Data modeling patterns used in data warehouse schemas

Provide foundation for career opportunities in business intelligence working with or developing data warehouses