

Business Intelligence Essentials

In today's big data world, managing data efficiently requires analytical skills and the ability to use relational databases. This course introduces you to basic relational database concepts, terminology of relational databases and simple database design. Learn to design efficient relational databases using the principles of SQL language. Topics include attaching and detaching a database, creating a database diagram and writing simple SQL statements.

Who Should Take This Course?

This course is designed for students interested in becoming familiar with relational databases and the basic terminology that applies to them. This is the first required course in the SQL Server Certificate.

Course Objectives

- Describe core database concepts.
- Use data manipulation language (DML) statements.
- Identify core components, definitions and concepts of relational databases.
- Demonstrate knowledge of data types.
- Create a new table in an existing database.

Course Info

- Length: 9 hours
- Format: Classroom instruction, demonstration and hands-on exercises
- Prerequisite: Basic computer skills and Windows proficiency; highly recommended: experience with Excel, Access or any other database

Course Content

Describe core database concepts.

- Describe the basic concepts of a database and table.
- Review different types of databases.
- Describe a relational database and tables.
- Identify major players in today's market of RDBMS.
- Use SSMS to attach/detach a database and become familiar with three basic windows: Object Explorer, Query Editors, and Results Pane.

Use data manipulation language (DML) statements.

- Review common DML Statements.
- Create and run a simple SELECT statement to retrieve data from a table.
- Use a WHERE clause to limit the number of rows returned.
- Combine multiple WHERE clauses using the AND, OR and NOT logical operators to retrieve filtered data.



COLLEGE
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Course Outline

- Sort the result set by using the ORDER BY clause.

Identify core components and concepts of relational databases.

- Identify different database objects.
- Implement normalization.
- Review referential integrity.
- Describe primary key constraints and foreign key constraints.
- Understand relational structure with keys and relationship of tables.
- Create a database diagram to see the relational structure of tables.

Demonstrate knowledge of data types.

- Identify different data types and NULL data.
- Understand implicit and explicit data conversion.
- Review data type precedence.

Create a new table in an existing database.

- Create a new table using management studio.
- Create scripts using management studio.
- Use a DROP TABLE statement to remove an existing table.
- Write a CREATE TABLE statement to create a table.

Assessment /Evaluation

This course is not assigned a letter or numerical grade. However, in some cases, skill assessments may be administered during the course to gauge progress and comprehension.

Course Completion Letter

If your company requires proof of course completion, or if you would like to have proof for your own records, you may request a Continuing Education Unit (CEU) letter, **after the final session**. You must attend 80 percent of the course to qualify for the letter.* To request a CEU letter, please stop by the front desk after the last session of class and complete the CEU Request Form.

Certificates of Completion for Certificate Programs

Certificates of Completion are automatically given at the end of the certificate program to those who have registered for a certificate program series (or after Part 2 of the series, when applicable) as long as attendance* and other program requirements have been met. If you complete a certificate program by taking courses individually (not through a series), please stop by the front desk and complete a Certificate Request Form. Attendance requirements for certificate programs vary by certificate and can be found by visiting [Certificate Programs & Certifications](#) on our website.

*Attendance for CEU letters and certificate programs is verified via the sign-in sheets provided at each class session. It is the students' responsibility to sign-in.



Course Outline

Green River College is committed to providing access to all who visit, work and study on campus. The College will provide reasonable accommodations for individuals with disabilities, with advance notice of need. If you require accommodations, please contact Disability Support Services as soon as possible to determine eligibility and/or request accommodations. Accommodations are determined on a case-by-case basis. Please contact Disability Support by email at dss@greenriver.edu; by phone at 253-833-9111, ext. 2631; TTY 253-288-3359; or in person at the Student Affairs and Success Center, Room 274, to request accommodations. For additional information, please visit www.greenriver.edu/student-affairs/disability-support-services.htm. The accommodations authorized on your forms should be discussed with your instructor. All discussions will remain confidential. Accommodations are not provided retroactively, so it is essential to discuss your needs at the beginning of the quarter. Additionally, only accommodations approved by Disability Support Services will be provided.

This syllabus is available in alternate formats upon request.

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