

Course Title	DATABASE MANAGEMENT SYSTEMS
Course Code	CSC 218
Course Purpose and Objectives	The course CSC 218 Database Management Systems is aligned with the course of Microsoft DP-300: Administering Relational Databases on Microsoft Azure. In this course students will be able to learn the basics of Microsoft's dialect of the standard SQL language: Transact-SQL. Moreover, students will be able to use a variety of methods and tools to perform day-to-day operations, including applying knowledge of using T-SQL for administrative management purposes. Students will be able to play the role of DBA taking responsibilities for management, availability, security and performance monitoring and optimization of modern relational database solutions.
Learning Outcomes	<ol style="list-style-type: none"> 1. Use SQL Server query tools 2. Write SELECT statements to retrieve columns from one or more tables 3. Sort and filter selected data 4. Modify data with Transact-SQL using INSERT, UPDATE, DELETE and MERGE 5. Plan and Implement Data Platform Resources 6. Implement a Secure Environment 7. Monitor and Optimize Operational Resources 8. Optimize Query Performance 9. Perform Automation of Tasks 10. Plan and Implement a High Availability and Disaster Recovery (HADR) Environment 11. Perform Administration by Using T-SQL
Course Content	<ul style="list-style-type: none"> • Module 1: getting started with transact-SQL • Module 2: sorting and filtering query results • Module 3: using joins and subqueries • Module 4: using built-in functions • Module 5: modifying data • Module 6: data platform resources • Module 7: secure environment • Module 8: operational resources • Module 9: query performance • Module 10: automation of tasks • Module 11: high availability & disaster recovery (HADR) environment • Module 12: using t-SQL