

(345) SQL Database Fundamentals (S | PS)

Description

Demonstrate knowledge of fundamental database development and SQL scripting. Competencies addressed in this event will mandate the member use a high-end database product such as MS SQL Server®, the focus of this event, in order to acquire the necessary skills; however, topics addressed are transferable to any database product such as Oracle® or MySQL™.

This event includes a separate certification component which will be offered in conjunction with the BPA event at NLC; all members passing this component will receive an industry certification regardless of their overall event placement. The certification offered will be IT Specialist – Databases and upon passing the exam, members will be awarded 100 points to their final score. All persons planning to take a certification test MUST register with Certiport (www.certiport.com) before attending NLC to create their Certiport profile. Members must include their BPA member ID in their Certiport profile when they register online. For more information on the exam, visit: <http://www.certiport.com>

Eligibility

Any Secondary or Post-secondary division student member may enter this event.

Member must supply

Sharpened No. 2 pencils, pens

Cordless calculator: Electronic devices will be monitored according to ACT standards. See [NLC Calculator Guidelines](#). Members who violate this rule will be *disqualified*.

Published and/or unpublished non-electronic written reference materials

No equipment, supplies, or materials other than those specified for an event will be allowed in the testing area. No previous Business Professionals of America tests and/or sample tests or facsimiles thereof (handwritten, photocopied, or keyed) may be taken into the testing area. Violation of this rule will result in disqualification.

Competencies

- Identify various types of databases
- Create and employ tables, rows, columns
- Understand roll of keys, constraints
- Understand and create indexes
- Define relational types and integrity
- Identify normal forms and normalize to 3NF
- Understand data types and when to use them
- Understand SQL Server® schemas
- Understand/use DDL commands such as CREATE, DROP, ALTER database
- Understand/use DML commands such as INSERT, SELECT, UPDATE, DELETE
- Select data from multiple tables using the WHERE clause
- Understand JOIN, UNION, INTERSECT
- Use aggregate and scalar functions
- Create and use views
- Use and understand transactions
- Understand how to back up databases
- Understand Stored Procedures

Method of evaluation

Objective Test

Certification test taken per conference schedule at NLC

Length of event

No more than sixty (60) minutes for objective test, no more than one hundred twenty (120) minutes for certification test.

Entries

Each state is allowed five (5) entries