Database Design I

Database Design I is a one-credit course designed to provide students with technical, analytical, and business skills that support the pursuit of professional careers and advanced study. Students learn the fundamentals of Structured Query Language (SQL) database technology, including creating, sorting, querying, and preparing reports.

Career and technical student organizations are integral, cocurricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Software Development

Students will:

1. Explain the history of computing and database development.
2. Design conceptual and physical models to create databases.
3. Prepare visual and written documentation of a database model.
4. Compare SQL and basic select statements to determine results.
5. Evaluate system and software requirements to meet needs of a database.
6. Explain the restricting and sorting of data.
   Examples: functions, average, minimum, maximum
7. Use basics of single row functions to query information in a database.
8. Explain steps of the software development process.
9. Design a database software application that includes mathematics.

Customer Service

10. Interpret an entity-relationship diagram (ERD) to match the business model.
11. Demonstrate different relationship types and transferability to match the business model.
12. Design an ERD for a business concept.
13. Implement the basic mapping of an ERD to meet customer needs.
Career Opportunities

15. Determine the nature of work, responsibilities, and educational and credentialing requirements related to entry-level database design career opportunities.