

Course Code: CTC 177

Course Title: Database Applications I

Department: Business/Computer Science and Technologies

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 52.0407

Repeatability: 0

Credit Hours

Catalog Notation: 1-0-1

Credit Hour Distribution:

Lecture: 1

Lab: 0

Clinical: 0

Total: 1

General Course Information

Catalog Description

Introduction to database applications using Microsoft Access to create tables, queries, and forms.

General Course Objectives

To enable students to acquire and develop skill in the efficient use of database applications on a computer.

Minimum Placement Levels

English

None

Reading

None

Math

None

Prerequisites

None

Methods of Evaluation

A minimum of 3 lessons, 4 exams, and 3 projects.

Instructional Materials and Additional Supplies

Microsoft Access 365 In Practice, SIMnet

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Creating a Database and Tables	<ol style="list-style-type: none"> 1. Explain data organization concepts, use the Access Navigation Pane, and identify objects. 2. Create and manage a database. 3. Create and use a table in datasheet view. 4. Create records by importing data from Excel. 5. Modify formatting in Datasheet View. 6. Organize data using Search, Sort, and Filter Tools. 	4	0	0
Using Design View, Data Validation, and Relationships	<ol style="list-style-type: none"> 1. Create a table in Design view. 2. Explain Data Integrity and Data Validation. 3. Create data validation rules. 4. Modify field properties. 5. Explain the design of relational databases. 6. Generate hard copy of the contents of a table. 7. Explain the compact and repair utility. 	3	0	0
Creating and Using Queries	<ol style="list-style-type: none"> 1. Create a query using the Simple Query Wizard. 2. Create a query in Design view. 3. Modify a query with criteria. 4. Modify a query using filters. 5. Create multiple criteria in a query using the AND and OR operators. 6. Create a parameter query. 7. Create calculated fields in a query. 8. Create a summary query using aggregate functions. 	4	0	0
Creating and Using Forms and Reports	<ol style="list-style-type: none"> 1. Create a simple form using quick create options. 2. Create and modify a form in Layout view. 3. Modify data input options in a form. 4. Create and modify a simple report. 5. Create and modify a report in Layout view. 6. Reorganize a report with grouping, sorting, and totals in Layout view. 7. Modify a report using conditional formatting. 8. Generate hard copy of a report. 	4	0	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
15	0	0