## Database Specialist
### Diploma
**DS14**

### Curriculum

#### Basic Skills
- **ENGL 1010 Fundamentals of English I (3)**
- **EMPL 1000 Interpersonal Relations and Professional Development (2)**
- **MATH 1012 Foundations of Mathematics (3)**

#### Occupational Courses
- **Required Courses:**
  - COMP 1000 Introduction to Computer Literacy (3)
  - CIST 1001 Computer Concepts (4)
  - CIST 1305 Program Design and Development (3)
  - CIST 1200 Database Management (4)
  - CIST 2921 IT Analysis, Design, and Project Management (4)

#### Occupational Electives: Programming Language Elective *(Choose ONE course)*
- CIST 2311 Visual Basic I (4)
- CIST 2341 C# Programming I (4)
- CIST 2361 C++ Programming I (4)
- CIST 2371 Java Programming I (4)
- CIST 2381 Mobile Application Development (4)

#### Specialization: *(Choose ONE course group below)*
- **Oracle specialization:**
  - **Required courses:**
    - CIST 1130 Operating Systems Concepts (3)
    - CIST 1210 Introduction to Oracle Databases (4)
    - CIST 2212 Oracle Database Administration I (4)
    - CIST 2214 Oracle Database Administration II (4)
    - CIST 2216 Oracle Advanced Topics (4)
  - **CIST Elective (Choose ONE course)**
    - Any course in Programming Language Elective above
    - CIST 1401 Computer Networking Fundamentals (4)
    - CIST 2312 Visual Basic II (4)
    - CIST 2372 Java Programming II (4)
    - CIST 2342 C# Programming II (4)
    - CIST 2382 Mobile Application Development II (4)
    - CIST 2129 Comprehensive Database Techniques (4)
    - CIST 2224 Designing and Implementing Databases with Microsoft SQL Server (4)
SQL Server specialization:

Required course: 20

- CIST 1210 Introduction to Oracle Databases (4)
- CIST 2411 Implementing Microsoft Windows Professional Client (4)
- CIST 2222 Administering Microsoft SQL Server (4)
- CIST 2224 Designing and Implementing Databases with Microsoft SQL Server (4)
- CIST 2414 Microsoft Server Administrator (4)

CIST Elective (Choose ONE course) 3

- Any course in Programming Language Elective above
- OR
- CIST 1130 Operating Systems Concepts (3)
- CIST 1601 Information Security Fundamentals (3)
- CIST 1510 Web Development I (3)
- CIST 1401 Computer Networking Fundamentals (4)
- CIST 2312 Visual Basic II (4)
- CIST 2372 Java Programming II (4)
- CIST 2342 C# Programming II (4)
- CIST 2382 Mobile Application Development II (4)
- CIST 2212 Oracle Database Administration I (4)
- CIST 2216 Oracle Advanced Topics (4)
- CIST 2129 Comprehensive Database Techniques (4)

Total Credit Hour (minimum): 53