

Database Administration

(Academic Plan code 1101017079 subplan code 110101702)

The Database Administration option provides students with the knowledge needed to work in the fields of database administration, database design, and programming with database management systems. The course of study includes a foundation in business information systems, database theory and design, a procedural programming language, and a database language. Upon completion of the degree the graduate will be qualified to take industry designed and recognized certification examinations. Employment opportunities include entry-level positions to develop, implement, manage and maintain database systems. This curriculum is supported by a solid foundation of core courses that focus on problem solving and communications skills for Information Technology professionals.

A KCTCS Institution

Students entering this program will need to have basic computer skills such as would be obtained through the CIS 100 course (Introduction to Computers) or equivalent.

General Education Core courses:

- ENG 101 *Writing I*
- ENG 102 *Writing II*
- Oral Communication Course
- Social Interaction Course
- Heritage/Humanities Course
- MT 150 *College Algebra*
- Science Course with Lab

*All incoming freshmen are required to successfully complete GE 100 or GE 101 within their first 18 hours. Note: this does not apply to transfer students

Technical Core courses:

- CIS 120 *Program Design and Development*
- ET 107 *Computer Applications for Technicians*
- OR CIS 130 *Microcomputer Applications*
- Complete **one** of the following pairs of courses:
 - ET 232 *Software Maintenance* OR CIS 110 *Operating Systems Concepts* AND
 - ET 234 *Hardware Maintenance*
- OR
- IT 105 *Computer Maintenance Essentials* AND
- IT 205 *Advanced Computer Maintenance*
- Introductory Networking Course
- IT 170 *Introduction to Database Design*
- IT 132 *Web Page Development* OR IT 130 *Web Site Design and Production*
- Beginning Level Programming Language Course (*IT 147 will not satisfy this requirement*)

Database Administration Option courses:

- IT 147 *SQL Programming*
- IT 270 *Database Systems – Implementation and Management Communication*

Server Administration Course:

- NIS 213 *Microsoft Windows Server* OR
- NIS 230 *UNIX Administration*

Multi-Vendor Database Administration Courses:

- NIS 246 *Microsoft SQL Server Administration Topic*
- IT 272 *Oracle Database Fundamentals I*
- IT 266 *Open Source Database Administration Topic*

Web/Database Programming Course:

- IT 235 *Data-Driven Web Applications* OR
- IT 236 *Active Server Pages* OR

Functionally equivalent course approved by Program Coordinator

- Technical Elective from any IT Option technical elective or “Selected Topics” approved by Program Coordinator

Beginning Level Programming Language Courses

CIS 143 *COBOL Programming*
 CIS 148 *Visual Basic I*
 CIS 149 *Java Programming I*
 CIS 155 *C/C++ Programming I*
 CS 115 *Introduction to Computer Programming*
 IT 147 *SQL Programming* (cannot fulfill technical core requirement)
 NIS 150 *Perl Programming I*
 NIS 152 *Introduction to JavaScript*
 IT 141 *Introduction to PHP*

Other courses approved by program coordinator**Introductory Networking Courses**

NIS 160 *Networking Core Technologies*
 IT 120 *Networking Fundamentals*
 IT 121 *Networking for Home and Small Business*



For additional information about this degree contact
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