

# COMPUTER - DATABASE MANAGEMENT SYSTEMS (AS DEGREE S0706)

- Apply normalization rules to database design.
- Create a program using script and stored procedure.

Review Student Learning Outcomes (SLOs) (<http://www.mtsac.edu/instruction/outcomes/sloinfo.html>) for this program.

## Business Division Degree S0706

The A.S. Degree in Database Management Systems is a two-year program designed to prepare students for careers in database management systems. The degree offers a balanced catalog of classes that prepares students to work with both small and enterprise-level computer databases required by industry. Emphasis is placed on current techniques used in relational database management systems, including creating and maintaining table data, setting appropriate relationships between tables, querying needed information, creating additional objects needed for the dissemination of information from the database and setting properties to help ensure the security of data. In addition, VBA (Visual Basic for Applications) programming is covered. The enterprise level also concentrates in SQL development. In addition, the degree covers the theory of database design, including normalization and other current database topics. Students wishing a bachelor's degree (transfer program) should meet with a counselor or advisor to discuss transferability of courses. Opportunities that are available after completion of this degree include, but are not limited to, database administrators, designers and developers, and database systems analysts.

This degree requires the completion of General Education coursework plus the following:

## Required Courses

Course Prefix	Course Name	Units
CISB 11	Computer Information Systems	3.5
CISB 15	Microcomputer Applications	3.5
CISD 40	Database Design	3
CISM 11	Systems Analysis and Design	3.5
Choose one from the following:		3-3.5
BUSA 7	Principles of Accounting - Financial	3-5
or BUSM 20	Principles of Business	
CISN 21	Windows Operating System	7
CISN 31 & 31L	Linux Operating System and Linux Operating System Laboratory	
Choose two lecture-lab combinations from the following:		7
CISD 11 & 11L	Database Management - Microsoft Access and Database Management - Microsoft Access Laboratory	26.5-29
CISD 14 & 14L	VBA for Excel and Access and Visual Basic for Applications (VBA) Excel and Access Laboratory	
CISD 21 & 21L	Database Management - Microsoft SQL Server and Database Management - Microsoft SQL Server Laboratory	26.5-29
CISD 31 & 31L	Database Management - Oracle and Database Management - Oracle Laboratory	
<b>Total Units</b>		<b>26.5-29</b>

CIS Program Website (<http://www.mtsac.edu/cis/>)

## Program Learning Outcomes

*Upon successful completion of this program, a student will be able to:*