IBM i Curriculum at MCC

Muskegon Community College is proud to be a designated "IBM Academic Initiative" institution.

IBM courses can be used as CIS electives to complement your major, can be used toward a A.A.S. degree in Computer Programming, or can be used toward obtaining a Midrange Programming Certificate. Please see the college catalog for further details.

These courses are offered in an online format, with two on-campus tests per course; arrangements can be made for off-site testing.

Course content is delivered via a web site, and students remotely connect to the IBM i server to do course work.

CIS 121 File Design and Utilities for Midrange Computers
Prerequisite: CIS120A or instructor permission
Credits: 1
Apply fundamentals of file design and relational databases

- Understanding relational database principles
- Coding Data Description Specifications
- Using Source Entry Utility and Programming Development Manager to enter code, compile, and test physical and logical files
- Using RDP-Rational Developer for Power System, a GUI-based editor for coding
- Using Data File Utility to enter, maintain, and delete data within a physical file
- Creating access paths to logical files
- Querying the database with Query/400, SQL, and DB2 Web Query

CIS 131 Operations and Commands for Midrange Computers
Prerequisite: CIS120A or instructor permission
Credits: 1
Apply fundamental skills necessary to interface with the system

- Understanding the layered machine architecture of a midrange system
- Understanding of single-level storage and virtual addressing
- Understanding the role of subsystems in a midrange system
- Using control language with prompting methods and keyword methods
- Controlling job queues
- Controlling output queues
- Handling system and user messages
- Understanding the concepts of control language programming

CIS 170 RPG IV Programming

- Program-described input and output
- Externally described input and output - DDS
- Calculations - free form
  - arithmetic
  - processing character data
  - processing dates
  - decision-making and subroutines
- Random file processing
- Introduction to RDP and RDP Screen Designer
- Introduction to interactive applications
- Fixed vs. Free

CIS270A - Advanced RPG IV Programming

- Tables and arrays
- File maintenance and data validation
- Interactive applications using RDP and RDP Screen Designer
- Modular programming - ILE - procedures, subprocedures
- List panels and subfiles
- Embedding SQL

Additionally, COBOL is available for students, although it does not appear on our regular rotation of courses, it is available upon request.

The Ferris State University – MCC Connection

Seeking a higher degree? FSU and MCC offer a unique 3 + 1 program, through which 3 years of study can be completed via MCC course work, which transfer into the Bachelor of Science CIS degree at FSU. Call 1.800.562.9130 for more information.

For more information, contact Char Parker at char.parker@muskegoncc.edu or 231.777.0523