

Course Name: CL Programming

Course Code: ISCLP

Duration: 3 Days

Price: £ 1,650

Course Outline: CL commands are integral to IBM i and when incorporated into programs many procedures can be automated and controlled in a very flexible manner. This course is aimed at programmers and support staff who wish to be able to automate and control operational procedures and system applications or modify and support existing CL programs and procedures.

Prerequisites: It is expected that delegates will be able to find their way around the system and have a basic understanding of objects, libraries, PDM, SEU, SDA. The Systems Facilities course covers these requirements

Course Content:

Introduction to the language and environment:

- What commands are available
- When and Where CL commands can be executed
- Automating commands with Menus

Introduction to CL programming:

- The source code
- The structure
- The objects (ILE and OPM)
- Compiling and Binding

Basic Operations Functions and Variables:

- Declaring & initialising variables (DCL)
- Changing values in variables (CHGVAR)
- Passing variables between programs & procedures – Parameters (PGM)
- Multi-member files and overrides (OVRDBF)

Monitoring and Retrieving:

- Intercepting errors (MONMSG)
- Validating object existence (CHKOBJ)
- Retrieving system information (RTV commands)

Using pre-defined messages:

- Creating (ADDMSGD)
- Storing (Message Files)
- Sending (SND commands)
- Message queues and Message types
- Receiving (RCVMSG)

Conditional processing:

- Questions (IF, ELSE, SELECT:WHEN)
- Conditional Actions (DO, ENDDO)
- Branching (GOTO)
- Repeating Code (DOUNTIL, DOWHILE, DOFOR)

Data Areas and Locking Objects:

- Creating Data Areas (CRTDTAARA)
- Accessing Local Data Area (*LDA)
- Using Data Areas (RTVDTAARA, CHGDTAARA)
- Object Locking (ALCOBJ, DLCOBJ)
- Job Control (DLYJOB)

Declaring and Using Database Files:

- Output from CL commands DSP...
- Model output files
- User Defined Files
- Declaring and Reading Files (DCLF, RCVF)

Declaring and Using Display Files:

- Defining display files (SDA)
- Declaring & Using (DCLF, SNDRCVF)
- Coding a screen timeout (WAIT)
- Password Checking (CHKPWD)
- Code and use Sub Routines

Tools to aid in discovering program bugs:

- Program Dump
- Enabling debug for a program
- Interactive Source Debug (OPM & ILE)

Creating User Defined CL Commands:

- Program & Command Relationship
- Command Source statements (CMD, PARM, PMTCTL, QUAL, ELEM)



Follow on Courses: To expand programming skills consider the RPG and SQL suite of courses.

Schedule:

2025

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec