

# CICS® Overview

## Course No.

2405

## Description

This course is intended for information systems personnel interested in understanding the CICS® environment. The course will provide a high-level overview of the CICS® environment. CICS® terminology, concepts, and capabilities will be presented and discussed. Comparisons of CICS® to other environments will be used to help students understand how CICS® works and why CICS® is used.

## Audience

This course is designed for information systems personnel interested in understanding the CICS® environment from a developer's perspective.

## Prerequisites

Prior to attending this course, the student should understand general information systems processing and experience in designing or programming application systems.

## Objectives

- Understand CICS® concepts
- Describe capabilities of CICS® and addressability issues
- Define CICS® access to DB2 UDB® tables and DL/I databases
- Contrast how CICS® is different from other on-line environments
- Understand CICS® application development processes and issues
- Learn how applications are developed for the CICS® environment

## Major Topics

- CICS® Concepts
- CICS® Facilities
- Application Development Considerations
- Execute Interface Program
- Program Control
- Terminal Control
- File Control
- Basic Mapping Support
- Additional Services
- Addressability Considerations
- DL/I Interface
- DB2 UDB® Interface
- Additional Topics

## Duration

1 day



## Course Contents

### 1. CICS® Concepts

- Environment Concepts
- Batch vs. Online Processing
- CICS® Characteristics
- CICS® Interfaces
- CICS® Functions
- CICS® Components
- CICS® Facilities Overview

### 2. CICS® Facilities

- Facilities Introduction
- System Management
- Data Management
- Database Managers
- Terminal Management
- CICS® Intercommunication
- Recovery and Restart
- Storage Protection
- Problem Determination

### 3. Application Development Considerations

- Program Design
- Passing Data Between Programs
- CICS® Resource Definition
- Definitions

### 4. Execute Interface Program

- Invoke CICS® Services
- The Execute Interface Program
- EIP Processing
- Execute Interface Block
- Program Preparation
- Command Translation
- Exceptional Condition Handling

### 5. Program Control

- Purpose of Commands
- Program Levels Samples

### 6. Terminal Control

- Functions and Commands

- Sample RECEIVE and SEND
- Cursor Position
- Attention Identifier

### 7. File Control

- Functions, Services, and Commands
- Sample READ and WRITE
- Error Handling Deadlock Resolution

### 8. Basic Mapping Support

- Advantages of BMS
- BMS Interfaces
- Map and DSECT Definition
- Flow of BMS Processing
- Online Definition of Maps
- Handling of Cursors

### 9. Additional Services

- Temporary Storage
- Transient Data
- Journal Control

### 10. Addressability Considerations

- CICS Storage Areas
- Obtaining Address of Storage Areas

### 11. DL/I Interface

- EXEC DL/I
- EXEC DL/I Sequence of Events
- EXEC CL/I Sample Program
- CALL Method

### 12. DB2 UDB® Interface

- Features and Overview
- Program Examples
- Accessing DB2 UDB® Tables

### 13. Additional Topics

- Intersystem Communication
- Multi-region Operation
- Command Level Interpreter
- Transaction Dumps

