

Course Code: CMW01G

Course Title: IMS Fundamentals

## Description:

Learn about the basic Information Management System (IMS): IMS facilities, the IMS database system, and the IMS Transaction Manager (IMS/TM). Explore how these facilities work together and how application programs interact with them in today's complex enterprise systems.

This course has 30 hours of instruction.

This course uses a Web conference medium with live instructor audio and Internet Web conferenced material. You have chat-type Question and Answer (Q and A) ability, plus live audio. The course is taught 10:00 a.m. to 12:00 noon and 1:00 p.m. to 4:00 p.m. Central time for six work days over a two-week period. Since the course is taught live using Web conferencing methods, you can attend from your home or work. Class durations are approximately one-half day so you can still accommodate daily work responsibilities. You will be contacted prior to class start to receive connection information, hardcopy student materials, and other relevant information.

## Course Materials

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## Objectives:

- Understand the components and benefits of an IMS Database system
- Describe the processing of a database record in hierarchic sequence
- Identify the different IMS database organization types
- Understand the differences between Database Description (DBD) and Program Specification Block (PSB) control blocks
- Contrast the requirements and effects of sequential versus direct access of database segments
- Explain reasons for the use of secondary indexes and logical relationships
- Contrast full-function and Fast Path database organizations
- List the basic IMS Data Communications functions of the IMS Transaction Manager (IMS/TM)
- Identify the roles of messages, queues, and logical terminal names
- Explain the different scheduling characteristics of the IMS/TM regions types: Message Processing, Batch Message Processing, and Interactive Fast Path
- Describe the role of commit points in recovery and restart
- Identify the functions of dynamic and batch backout, the system log and the benefits of periodically backing up a database
- Explain the capabilities of a conversational program and its implications on processing and performance
- Describe the function of Database Recovery Control (DBRC), Integrated Resource Lock Manager (IRLM) for data sharing and distributed processing
- Understand how DB2 data can be accessed by IMS TM, IMS DB databases can be accessed through the DBCTL interface by CICS, and how IMS DB data and IMS TM transactions can be accessed from the internet

## Prerequisites:

You should have basic understanding of database management **or** transaction management along with working knowledge of z/OS concepts **and** tools **and** Job Control Language (JCL).

**Duration:**

24 Hrs

**Topics:**

- IMS Database Fundamentals
- Accessing IMS Databases - DL/I Calls
- IMS Hierarchic Access Methods
- Additional IMS Database Functions
- IMS Transaction Manager
- IMS Transaction Message processing
- IMS Fast path
- Connecting IMS to Other Systems
- Enhancing IMS Availability
- Business Integration of IMS Assets - SOA

**Audience:**

This is a basic course for users, who want a basic understanding of the IMS database and IMS/TM products, and Information Technology professionals, who work with or manage an IMS system (Database (DB), Database/Data Communications (DB/DC), or Database Control Subsystem (DBCTL)).