

Course Code: ES15G

Course Title: z/OS Facilities

## Description:

This classroom course introduces the base elements, optional features, and servers that are provided in z/OS. It focuses on the system service facilities that are provided by the z/OS Base Control Program (BCP). It teaches the students the functions of major software base elements in the management of jobs, tasks, storage, data, and problems. It also addresses how these functions can be affected by the system programmer.

Students are introduced to the services provided by the servers which execute in the z/OS environments, such as the Communications Server and the Security Server. Installation packaging options and steps to install the z/OS environments also are introduced.

## Objectives:

- Describe the system initialization process of the z/OS operating systems
- State the differences between an address space, data space, and hyperspace
- Describe the process of translating a virtual address to a real address
- Explain the difference between paging and swapping
- Define a z/OS task
- Describe dispatching, interrupt processing, supervisor calls, cross memory services, and serialization
- Describe the purpose of the Job Entry Subsystem (JES)
- Illustrate the flow of a job through the z/OS environment
- Describe the allocation process for data sets in the z/OS environments
- Illustrate how an I/O request is processed in a z/OS environment
- Describe how workload management is accomplished in a z/OS environment
- Explain the z/OS recovery processes and list available Problem Determination Tools
- Describe z/OS storage management concepts
- Describe the UNIX System Services functions provided in the z/OS environments
- Explain the network topologies and protocol support provided in z/OS
- Describe system security and network security for a z/OS environment
- Create a high-level plan for the installation and configuration of a z/OS environment

## Prerequisites:

You should have a basic knowledge of IS technologies **and** also should be familiar with z/OS concepts and how these systems support the Enterprise servers. This knowledge can be obtained by attending *An Introduction to the z/OS Environment (ES050)*. Youd should also have practical experience with logging on to TSO **and** working with JCL. This experience can be obtained by attending *z/OS Quick Start (ES10A)*

## Duration:

36 Hrs

## Topics:

## **Day 1**

- Unit 1: z/OS overview
- Including welcome and course overview
- Unit 2: Storage management

## **Day 2**

- Unit 3: Managing work
- Unit 4: Input/output processing

## **Day 3**

- Unit 4: Input/output processing (continued)
- Unit 5: Data management
- Unit 6: Job management

## **Day 4**

- Unit 7: IPL and system initialization
- Unit 8: Termination and recovery analysis
- Unit 9: Installing and configuring

## **Day 5**

- Unit 10: Communicating
- Unit 11: Security in z/OS
- Including end-of-course summary

## **Audience:**

This class is designed for persons who are new to the z/OS platforms but have a technical background in information technology. It is intended for those who require an in-depth understanding of z/OS.