

# Windows Internals – Part 1: System

Course code: GOC781

Newly updated course will help attendees understand how the Windows operating system works. Windows Server administrators and desktop support technicians alike can learn about the architecture of the operating system, how services work, what the registry is for, and how to work with it. We will explain processes and the various mechanisms around them, such as thread scheduling, handles, access tokens, and others. Understanding the way Windows OS accesses memory can help not only optimize memory configuration for virtual machines, but also identify leaking applications or even drivers. In addition to drivers, we will also touch on other interesting topics such as WMI, access control in and out of the domain, the operation of the disk subsystem, or file systems.

## Prerequisites

Knowledge in extent of the courses which are listed in the bellow sections **Previous Courses** and **Related Courses**

Good understanding of TCP/IP and DNS technologies

## Course outline

Concepts and Tools

System Architecture

System Mechanisms

Crash Dump Analysis

Management Mechanisms

Processes, Threads, and Jobs

Memory Management

Security

## Preparation for Microsoft certification

Most Microsoft certification exams do not require students to attend an official MOC course in order to pass the exam.

This applies to all certifications except for MCM

Official Microsoft MOC courses as well as our own GOC courses are good ways of preparation for Microsoft certifications such as MCP, MTA, MCSA, MCSE or MCM

This does not mean that official MOC courses would serve as the only necessary preparation. The primary goal of an MOC course is to provide for sufficient theoretical knowledge and practical experience to effectively work with the related product

MOC courses usually cover most of the topics required by their respective certification exams, but often do not give every topic the same amount of time and emphasis as may be required to completely pass the exam

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