**1. Basic Understanding of Operating Systems (Windows & Linux)**

* **Windows:**
  + Familiarize yourself with the Windows operating system, especially Windows Server versions.
  + Understand basic Windows administration tasks like user management, file systems, and system configurations.
* **Linux:**
  + Get comfortable with Linux commands and file systems.
  + Learn the basics of shell scripting in Linux.

**2. Introduction to Command-Line Interfaces**

* **Command Prompt & PowerShell:**
  + Learn basic commands in the Windows Command Prompt.
  + Get familiar with navigating the file system, managing files and directories, and basic networking commands.
  + Begin with simple PowerShell commands to understand its syntax and structure.
* **Linux Terminal:**
  + Understand the basic Linux commands, such as ls, cd, cp, mv, rm, etc.
  + Learn how to use bash or other common shells to write simple scripts.

**3. Basic Scripting Concepts**

* **Variables and Data Types:**
  + Learn how to declare and use variables in scripts.
  + Understand different data types (strings, integers, arrays) and how to manipulate them.
* **Control Structures:**
  + Get comfortable with if-else statements, loops (for, while), and switch cases.
  + Understand how to use these structures to automate tasks.
* **Functions and Procedures:**
  + Learn how to define and call functions in a script.
  + Understand the importance of modular scripting, where functions perform specific tasks.

**4. Networking Basics**

* **IP Addressing:**
  + Understand the basics of IP addressing (IPv4 and IPv6).
  + Learn about subnetting, gateways, and DNS.
* **Network Services:**
  + Familiarize yourself with DHCP, DNS, and their roles in networking.
  + Learn how these services interact with server environments.

**5. Basic Server Administration**

* **Windows Server Basics:**
  + Understand the basic roles and features of Windows Server (Active Directory, DNS, DHCP, etc.).
  + Learn how to perform basic server management tasks, such as installing roles and features.
* **Virtualization:**
  + Learn the basics of virtualization technologies, especially Hyper-V in Windows Server.
  + Understand how to create and manage virtual machines.

**6. Understanding of Active Directory (AD)**

* **AD Basics:**
  + Get a basic understanding of what Active Directory is and its importance in managing networks.
  + Learn about key concepts like domains, organizational units (OUs), user accounts, and group policies.

**7. Introduction to Azure & Cloud Computing (Optional but Beneficial)**

* **Azure Basics:**
  + Familiarize yourself with basic Azure services and concepts, especially if your course will touch on PowerShell for Azure.
  + Understand the basics of cloud computing, including IaaS, PaaS, and SaaS models.

**8. Text Editors and IDEs**

* **Using PowerShell ISE:**
  + Learn how to use the Integrated Scripting Environment (ISE) for writing and testing PowerShell scripts.
* **Text Editors:**
  + Familiarize yourself with basic text editors like Notepad++ or VSCode, which are useful for scripting.

**9. Understanding of Scripting Best Practices**

* **Commenting and Documentation:**
  + Understand the importance of commenting on your scripts for clarity.
* **Error Handling:**
  + Learn how to handle errors in your scripts to prevent unexpected failures.