

# Powershell - Introduction & Essentials («PWSE01»)

In this two-day Windows PowerShell course, you will be introduced to programming scripts with Windows PowerShell. This course is the perfect introduction for people that have never worked with PowerShell before.

**Duration:** 2 days

**Price:** 1'800.-

**Course documents:** Digital Digicomp Courseware

## Content

1. Introduction to Windows PowerShell
  - o What are Cmdlets?
  - o The 4+1 most important cmdlets
  - o A simple PowerShell task
2. Windows PowerShell tools
  - o The Windows PowerShell console
  - o PowerShell Integrated Scripting Environment (ISE)
3. Security issues
  - o Creating and running a script
  - o Security policies
  - o Signing scripts
4. Profile scripts
  - o Introduction to profile scripts
  - o Types of profile scripts
  - o Creating profile scripts
5. Windows PowerShell navigation
  - o Navigating the Registry
  - o Understanding providers and drives
  - o Navigation commands
  - o Path specifications
  - o Defining custom drives
6. Windows PowerShell aliases
  - o Introduction to aliases
  - o Determining commands for aliases
  - o Defining custom aliases
7. Windows PowerShell modules
  - o Basics about modules
  - o Modular architecture
  - o Installing and listing modules
  - o Developing a simple module
8. The Windows PowerShell pipeline
  - o Introduction to the PowerShell pipeline
  - o Selecting Columns with Select-Object
  - o Filtering results with Where-Object
  - o Sorting results with Sort-Object
  - o Freely Programmable Action with Foreach Object
  - o Analyzing Results with Group-Object
  - o Frequency and total values: Measure-Object
9. Output Results
  - o Cmdlets for Output
  - o Graphical Output

- Parameterization of the output
- User-defined output
- Output redirection

#### 10. Windows PowerShell scripts

- Starting a script
- Aliases for script files
- Passing parameters to scripts
- Including scripts permanently
- Delaying scripts

#### 11. Introduction to Windows PowerShell scripting language

- Comments
- Variables
- Calculating with numbers
- Operators
- Manipulation of strings
- Arrays and hashtables
- Control structures and loops
- Conditions

## Key Learnings

- Introduction to the concept of PowerShell
- Introduction to the use of commandlets
- Creating and testing simple scripts

## Target audience

This course is designed for IT professionals who want to learn about PowerShell, understand and customize existing scripts, and create simple scripts themselves. No prior PowerShell knowledge is necessary to attend this course.

## Further courses

- [Administering Microsoft Endpoint Configuration Manager \(«55348A»\)](#)
- [Automating Administration with PowerShell – Intensive Training \(«AZ040»\)](#)
- [Windows PowerShell – Administration & Automation \(«PWS»\)](#)

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-microsoft-technology/microsoft-powershell/course-powershell--introduction-essentials](http://www.digicomp.ch/courses-microsoft-technology/microsoft-powershell/course-powershell--introduction-essentials)