

Microsoft 365 - advanced automation and SharePoint migration

Course code: GOC223

This five-day advanced course builds on the fundamentals of SharePoint administration and deepens engineering skills in Microsoft 365/SharePoint Online automation, scripting (PowerShell + Microsoft Graph), migration preparation and execution, lifecycle provisioning and management, governance enforcement, management visibility, and Azure integration. We emphasize resilience, security, and repeatability.

Affiliate	Duration	Course price	ITB
Praha	5	30 000 Kč	50
Brno	5	30 000 Kč	50
Bratislava	5	1 200 €	50

The prices are without VAT.

Course terms

Date	Duration	Course price	Type	Course language	Location
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The prices are without VAT.

Who is the course for?

Migration and automation engineers

Advanced M365/SharePoint Online administrators

DevOps / platform engineers for governance

Consultants designing scalable provisioning and migration frameworks

Assumed entry knowledge

Knowledge within the scope of the courses listed in the **Previous courses** and **Related courses**

sections PowerShell basics

Experience with SharePoint Online administration

Azure basics (resource groups, identities)

Knowledge of JSON & REST is an advantage

Experience with ShareGate or migration tools is an advantage

Course outline

Engineering environment, VS Code and Copilot

- VS Code for automation: workspace, tasks, formatting, debugging
- Git basics, repository hygiene, PR and code review
- GitHub Copilot responsibly: prompting, security guidelines, acceptance criteria
- Lab: Repo initialization, scaffolding, linting & tests

Automation strategy & tool map

- PowerShell vs Graph vs PnP vs REST
- App registration & identity strategy
- Least privilege security posture
- Lab: App registration & baseline permissions

PowerShell in depth

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- Modules: PnP.PowerShell, Microsoft.Graph, SPO Management Shell
- Authentication: interactive, device code, certificate, managed identity
- Lab: Unified connect wrapper & logging scaffolding

Microsoft Graph — engineering basics

- Batching, delta, throttling control
- Error classification and retry strategies
- Lab: Resilient ingest & Graph paging

Staging environments: DEV, TEST, PROD

- Tenant/environment roles and secure deployment of changes
- Comparing environments, sites, lists, items; drift detection
- Baseline and diff automation
- Lab: Diff & baseline report script

Migration composition

- Pre-migration checks and planning
- Parallelization, wave planning, cutover tactics
- Large lists, versions, throttling, search delays
- Lab: Wave plan & throttle-aware execution

Provisioning automation patterns

- PnP provisioning vs Orchestration catalog (overview)
- Web requests and metadata capture
- Lab: Dynamic PnP provisioning artifact

Orchestration integration & custom scripts (simulation)

- Request center and workspace template lifecycle
- Hooks: pre-provision, post-provision, compliance checks
- Integration with PnP.PowerShell / Microsoft Graph
- Governance artifacts: owner attestation, sensitivity, sprawl
- Lab: Script integration design (PnP simulation)

Lifecycle & compliance enforcement

- Scripts for retention and sensitivity
- Governance sharing and drift detection
- Lab: Compliance drift report + remediation

Azure integration patterns

- Logic Apps vs Functions vs Runbooks
- Event/webhook subscription, change notifications
- Lab: Functions for change notifications (skeleton)

SIEM integration via Azure Blob

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- Logging strategy: schema, PII minimization, retention

- Pipeline: app > Blob > Event Grid > Function > SIEM

- Cost and reliability (batching, retry, dead-letter)

- KQL basics for validation and dashboards

- Lab: Blueprint ingest and transform skeleton

Microsoft Clarity — configuration

- Project setup: roles, retention, privacy

- Creation of tracking code and governance

- Injection into SPO: SPFx App Customizer, tenant-wide, opt-out strategy

- Compliance: consent/cookie banner, regional data

- Lab: Rollout plan + App Customizer injection (simulation)

SPFx basics & App Catalog

- Dev setup (Node LTS, Yeoman, gulp) and project structure

- Generation of HelloWorld webpart and key files

- Build/package .sppkg

- App Catalog (tenant vs site), upload, deploy, trust

- Adding webpart to modern page; versioning & update

- Lab: HelloWorld deploy via App Catalog

Security hardening & least privilege

- Minimizing scope, Conditional Access impact

- Secret rotation & transition to cert-based auth

- Lab: Hardening app registration & scope adjustment

Performance, costs & capstone

- API efficiency (batching, selective projection)

- Logging costs, asynchronous fan-out patterns

- Capstone

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