

# Azure + Terraform. Training program

Unit, task	Code	Hours
<b>PowerShell</b>		<b>50</b>
<b>Working with help commands</b>	<b>PWS00</b>	<b>2</b>
Update\Asking help	PWS00.1	1
"About" topics	PWS00.2	1
<b>Running commands</b>	<b>PWS01</b>	<b>3</b>
Command names\aliases\shortcuts	PWS01.1	1
Dealing with errors	PWS01.2	2
<b>Working with pipeline</b>	<b>PWS02</b>	<b>3</b>
Set few commands to have big pipeline	PWS02.1	2
Exporting to log files	PWS02.2	1
<b>Objects</b>	<b>PWS03</b>	<b>6</b>
What is the objects	PWS03.1	3
Objects properties\methods	PWS03.2	3
<b>Remote control</b>	<b>PWS04</b>	<b>2</b>
WinRM overview	PWS04.1	1
Invoke-Command\Enter-ssession	PWS04.1	1
<b>Working with hash tables</b>	<b>PWS05</b>	<b>6</b>
What is hash table ?	PWS05.1	1
How we can work with Hash tables ?	PWS05.2	2
How you can use it in scripts ?	PWS05.3	3
<b>Working with functions</b>	<b>PWS06</b>	<b>7</b>
What is functions	PWS06.1	1
Declaring parameters in functions	PWS06.2	2
Using simple functions in Pipe	PWS06.3	2
Variable scoping in functions	PWS06.4	2
<b>Parallelization</b>	<b>PWS07</b>	<b>9</b>
What is job and how to use it	PWS07.1	1
Commands to work with jobs	PWS07.2	2
Working with child jobs	PWS07.3	2
Schedule jobs	PWS07.4	2
Read about RunSpaces	PWS07.5	2
<b>Final Task</b>	<b>PWS08</b>	<b>12</b>

Unit, task	Code	Hours
<b>Terraform + Azure</b>		<b>59</b>
<b>LEVEL 1</b>		<b>24</b>
<b>Course Agenda and how to start</b>	<b>AZ100</b>	<b>8</b>
Practice Overview	AZ100.1	0.5
Naming convention	AZ100.2	0.5
Examples	AZ100.3	0.5
What is Azure Cloud	AZ100.4	0.5
AD	AZ100.5	1
Access Policies	AZ100.6	0.5
MultiTenant	AZ100.7	0.5
Automation with Terraform	AZ100.8	1
Terraform Basics	AZ100.9	1
DEMO	AZ100.10	2
<b>NSG</b>	<b>AZ101</b>	<b>3</b>
Insert and update data using json interface layer	AZ101.1	0.5
VNET	AZ101.2	0.5
Terraform Basics	AZ101.3	1
DEMO	AZ101.4	1
<b>Virtual network Gateway and network connections</b>	<b>AZ102</b>	<b>3</b>
Virtual network gateway	AZ102.1	0.5
Network connections	AZ102.2	0.5
Network connections: Point-To-Site	AZ102.3	0.5
Network connections: Site-To-Site	AZ102.4	0.5
Network connections: Peering	AZ102.5	0.5
DEMO	AZ102.6	0.5
<b>Key vault and storage account</b>	<b>AZ103</b>	<b>2</b>
Keyvault	AZ103.1	0.5
Storage Account	AZ103.2	0.5
DEMO	AZ103.3	0.5
Business Case	AZ103.4	0.5
<b>Virtual Machine and Virtual Machine Scale Set</b>	<b>AZ104</b>	<b>8</b>
Virtual Machine	AZ104.1	1
Virtual machine disks	AZ104.2	1
Availability set	AZ104.3	1
Load balancer	AZ104.4	1
Public IP	AZ104.5	1
Virtual machine scale set	AZ104.6	1
Virtual machine provisioning	AZ104.7	1
DEMO	AZ104.8	1
<b>LEVEL2</b>	<b>AZ200</b>	<b>13</b>
<b>PaaS vs SaaS vs IaaS</b>	<b>AZ201</b>	<b>4</b>
WebApps	AZ200.1	1
App Service	AZ200.1	1

DEMO	AZ200.1	1
Business Case	AZ200.1	1
<b>Traffic Manager</b>	<b>AZ202</b>	<b>2</b>
Basics	AZ202.1	1
DEMO	AZ202.2	1
<b>Azure SQL Service</b>	<b>AZ203</b>	<b>3</b>
Basics	AZ203.1	1
DEMO	AZ203.2	1
Business Case	AZ203.3	1
<b>Azure Monitor</b>	<b>AZ204</b>	<b>2</b>
Basics	AZ204.1	1
Azure Dashboard	AZ204.2	1
<b>Application Insight</b>	<b>AZ205</b>	<b>1</b>
DEMO	AZ205.1	0.5
<b>Automation account</b>	<b>AZ206</b>	<b>1</b>
DEMO	AZ206.1	1
<b>LEVEL3</b>	<b>AZ300</b>	<b>22</b>
<b>DevOps Challenges</b>	<b>AZ301</b>	<b>10</b>
Docker	AZ301.1	0.5
Dockerfile	AZ301.2	1.5
DEMO	AZ301.3	1
Kubernetes Basics	AZ301.4	2
DEMO	AZ301.5	2
Kubernetes objects	AZ301.6	3
<b>Important deployment configuration</b>	<b>AZ302</b>	<b>12</b>
Labels	AZ302.1	1
nodeSelector	AZ302.2	0.5
affinitySettings	AZ302.3	0.5
preStop and pretart hooks	AZ302.4	0.5
Rolling update	AZ302.5	0.5
terminationGracePeriodSeconds	AZ302.6	0.5
Healthcheck probs	AZ302.7	0.5
Usage limits	AZ302.8	0.5
Autoscaling	AZ302.9	0.5
PodDisruptionBudget	AZ302.10	0.5
HELM	AZ302.11	4.5
Monitoring	AZ302.12	2