

# DevNet Automation Bootcamp for Meraki

**Course Duration: 40 H**

**Course code: DevNet**

## 1. Course Overview

This intensive, hands-on bootcamp equips participants with the skills to automate and orchestrate Cisco Meraki networks using DevNet tools, APIs, and best practices. Over multiple days, you will learn to integrate automation into real-world Meraki deployments, covering topics from API fundamentals to advanced automation workflows. You'll gain the ability to programmatically configure, monitor, and troubleshoot Meraki devices, streamline network management, and improve operational efficiency.

## 2. What you'll learn?

### **Describe the Cisco Meraki architecture and dashboard functionality**

- Understand the Cisco DevNet ecosystem and developer resources for Meraki
- Use Meraki Dashboard API for network configuration and management
- Automate tasks such as device provisioning, SSID configuration, and VLAN management
- Implement bulk configuration changes using Python scripts and Postman collections
- Integrate Meraki APIs with third-party systems and automation frameworks
- Configure and monitor Meraki devices using webhooks and real-time alerts
- Deploy automation workflows for common use cases in switching, wireless, and security
- Troubleshoot automation scripts and API integrations

- Apply best practices for security, rate limiting, and error handling in API usage

### 3. Target Audience

- **This course is aimed at:**  
Network engineers and administrators managing Meraki deployments
- DevOps engineers working on network automation
- System integrators and solution architects designing Meraki-based solutions
- IT professionals seeking DevNet certifications with a focus on Meraki automation

### 4. Pre-Requisites

**Attendees should have:**

- Basic knowledge of networking concepts (Layer 2 & Layer 3)
- Familiarity with Cisco Meraki dashboard operations
- Experience with Python scripting fundamentals
- Understanding of REST APIs and JSON data format

### 5. Course content

**1 – Course Introduction**

Introductions and course logistics

Course objectives

**2 – Cisco Meraki & DevNet Fundamentals**

Overview of Cisco Meraki architecture

Introduction to Cisco DevNet resources

API key management and security considerations

### **3 – Meraki Dashboard API Essentials**

API endpoints, authentication, and rate limits  
Testing APIs with Postman  
Retrieving organization and network information

### **4 – Automating Configuration Tasks**

Automating device provisioning  
SSID and VLAN configuration via API  
Bulk updates for switch and wireless settings

### **5 – Monitoring & Alerts Automation**

Using Meraki webhooks for real-time monitoring  
Automating alert handling and notifications  
Building custom dashboards and reports

### **6 – Advanced Automation Workflows**

Integrating Meraki APIs with Python scripts  
Orchestrating changes across multiple sites  
Using automation frameworks and GitHub repositories

### **7 – Troubleshooting & Best Practices**

Debugging automation scripts  
Handling API errors and timeouts  
Securing API integrations and adhering to best practices