DevNet Associate Study Plan

An Item is Complete ONLY when:

* You have watched the video tutorials
* Completed related practice questions in textbook
* Created flashcards for the section
* Completed related labs

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|  | **Day 1**  *Friday* | **Day 2**  *Saturday* | **Day 3**  *Sunday* | **Day 4**  *Monday* | **Day 5**  *Tuesday* | **Day 6**  *Wednesday* | **Day 7**  *Thursday* |
| **Week 1**  *2/9 – 8/9* | **1.5** Basic Programming Control Flow (34 min)  **1.6** Determine When to Use Design Patterns (21 min)  **1.7, 1.8** Getting Started with Git (10 min) | **1.7, 1.8** Getting Started with Git (54 min)  **1.7, 1.8** Collaborate with Git (34 min)  **1.1** XML, JSON and YAML Data Formats (34 min) | **1.1** XML, JSON and YAML Data Formats (17 min)  **1.2** Parse Data Formats into Python Structures (27 min)  **2.3** REST API Fundamentals (20 min) | **2.1, 2.4, 2.5, 2.6** REST API Requests and Responses (21 min)  **2.4, 2.5, 2.6** Parameters and Payloads for REST APIs (17 min)  **2.7** Authentication with HTTP and REST (13 min) | **2.7** Authentication with HTTP and REST (11 min)  **2.1** Use Postman for REST API Interaction (25 min)  **2.7, 5.1, 5.2** Network Programmability and Automation (55 min) | **3.7, 5.3** Prepare a DevNet Study Environment (30 min)  **3.8, 5.11** Data Models and YANG (39 min)  **3.6, 3.8, 5.10** Develop NETCONF Scripts for Cisco IOS-XE Devices (41 min) | **3.6, 3.8, 5.10** Develop RESTCONF Scripts for Cisco IOS-XE (21 min)  **3.6** Nexus Programmability with NX-API CLI (20 min) |
| **Week 2**  *9/9 – 15/9* | **2.9** Nexus Programmability with NX-API REST (32 min)  Real-World Nexus Automation for Real-World Network Engineers (23 min) | Catch-Up on Anything Behind Schedule | **3.2, 3.9a, 3.9c, 5.7, 5.2** Automate Cisco Meraki Networks (23 min)  **3.1, 5.7** Automation with Meraki Python SDK (20 min)  **3.1, 3.9a, 5.7** Automate the Data Center with ACI (12 min) | **3.1, 3.2, 3.9a, 5.7** Automate the Data Center with ACI (28 min)  **3.1, 3.2, 3.9a, 5.7** Easier ACI Automation with the Toolkit (21 min)  **3.2, 3.9a, 3.9c, 5.7** Automate the Campus with DNA Center Platforms (34 min) | **3.1, 3.2, 5.7** Easier DNA Center Automation with the SDK (18 min)  **3.4** Automate Cisco Collaboration Platforms (28 min)  **3.4, 3.9b** Automate Your Teamwork with Webex Teams (26 min) | **3.2, 3.9a, 5.2** Automate WAN Workloads with SD-WAN (17 min)  **3.5** Automate the Cisco Security Platform (16 min)  Create Access Policies in FMC with Python (15 min) | Automate Cisco ASA Firewalls (16 min)  **3.3** Automate Cisco  Compute and More with UCS (28 min)  **3.2, 3.9a, 5.6** Automate Everything with NSO (26 min) |
| **Week 3**  *16/9 – 22/9* | **3.2, 3.9a** Automate Cisco Platforms with PowerShell (23 min)  **4.1, 4.2, 4.3** Computing and Application Deployment Models (28 min)  **4.6, 4.7** Understand the Basics of Docker (34 min) | Catch-Up on Anything Behind Schedule | **4.4, 5.4** Describe the Components for a CI/CD Pipeline (19 min)  **4.8, 4.9** Secure Data in Your Applications (19 min)  **4.10** Identify OWASP Standard Threats (16 min) | **4.11, 5.9** Understanding the Basics of Linux and Bash (32 min)  **4.12, 5.13** Identify the Principles of DevOps Practices (16 min)  **1.3, 4.5** Unit Tests and Test-Driven Development (TDD) (25 min) | **5.5, 5.6, 5.8** Install and Configure Ansible (52 min)  **5.5, 5.6, 5.8** Automate your Entire Network with Ansible (48 min) | **6.1, 6.3, 6.4** Describe how a Switch Performs Layer 2 Forwarding (13 min)  **6.3, 6.2** Describe How a Router Performs Layer 3 Forwarding  **6.6, 6.7** Describe Transport Layer Potocols | **6.5** Describe Application Layer Functions and Protocols  **6.3, 6.4** Interpret and Describe a Basic Network Topology |
| **Week 4**  *23/9 – 29/9* |  |  |  |  |  |  |  |
| **Week 5**  *30/9 – 6/10* |  |  |  |  |  |  |  |
| **Week 6**  *7/10 – 13/10* | EXAM DAY |  |  |  |  |  |  |
| **Week 7**  *14/10 – 21/10* |  |  |  |  |  |  |  |

# Exam Topics that are NOT Covered

**1.0 Software Development and Design**

* 1.4 - Compare software development methods (agile, lean, and waterfall)

**2.0 Understanding and Using APIs**

* 2.2 - Describe common usage patterns related to webhooks
* 2.8 - Compare common API styles (REST, RPC, synchronous, and asynchronous)

**5.0 Infrastructure and Automation**

* 5.1 - Describe the value of model driven programmability for infrastructure automation
* 5.12 - Interpret a unified diff
* 5.14 - Interpret sequence diagram that includes API calls

**6.0 Network Fundamentals**

* 6.8 - Identify cause of application connectivity issues (NAT problem, Transport Port blocked, proxy, and VPN)
* 6.9 Explain the impacts of network constraints on applications