

## **CompTIA ITF+/A+**

### **Instructor**

Andrew Quilpa

### **Email**

[aquilpa@byteback.org](mailto:aquilpa@byteback.org)

### **Course Zoom Link**

TBD

### **Course Overview**

This 17-week course is designed for students who wish to follow an IT career path, developing knowledge and skills needed in a variety of IT oriented jobs. Students will review a combination of CompTIA ITF+ an A+ objectives through a combination of lectures, videos, in-person labs, virtual labs, and in-home practice. Specifically, students will study the following topics:

- IT concepts and terminology
- Mobile devices
- Applications
- Hardware and software
- Networking
- Troubleshooting
- Virtualization and cloud computing
- Operating systems and procedures
- Security

In addition, students will complete professionalism training that prepares students to apply and interview for jobs as well as to excel in an office work environment. By the end of the course, students will be prepared to take the CompTIA A+ Core 1 and Core 2 exams and interview for IT jobs.

## Course Materials

- CompTIA ITF+ student guides
- CompTIA A+ Core 1 and Core 2 student guides
- CompTIA A+ Core 1 and Core 2 [CertMaster Practice](#) accounts
- CompTIA A+ Core 2 Labs accounts
- Professor Messer Core 1 and Core 2 notes

## Our Class

- **Consistent** attendance and punctuality.
- One **conversation** at a time.
- **Considerate** and **courteous**.
- **Committed** to each other's success.

## Attendance

There are 68 classes in this course. Because attendance and participation is key to learning, only four absences are allowed. Students who miss more than four classes will be automatically dropped. If you must miss a class for whatever reason, please notify your instructor in advance via email or text.

The class will start promptly at 1:00 PM and ends no later than 5:00 PM each day. Students are expected to be in their seat by the start of class. Students who arrive within the first 30 minutes will be marked tardy and students who arrive later will be marked absent. Note earning two tardies equals one absence.

## Academic Progress

Academic progress will be assessed throughout the class using a combination of weekly quizzes and CertMaster Practice exercises. Students must maintain a minimum quiz average of 75% or risk being dropped. Once every three weeks students will meet with their instructor for a 1x1 progress check. If a student is below the 75% threshold they will have until the next progress check – three weeks later – to raise their average score. If a student is still below 75% at the next check-in date, they will be dropped from the class.

## **Certification Exams**

All students are expected to take the Core 1 and Core 2 exams by the final day of class. To qualify for a free certification exam voucher, students must maintain a weekly quiz average of 75%, complete at least 75% of the corresponding CertMaster activities with “yellow” level proficiency, and earn a minimum grade of 80% on the corresponding CertMaster pre-exam. Students may test for the Core 1 and/or Core 2 exam as soon as they qualify for either one.

Students who don’t complete both tests by the final day of class will not be eligible for free vouchers, but must pay half of the voucher cost. In cases where a student doesn’t complete both tests within two weeks of the final day of class, they will no longer be eligible for a discounted voucher, but must pay the full voucher cost.

## **Hands-On Learning Lab Days**

To enhance classroom learning, students are required to participate in several in-person labs. These activities will always be held on designated Tuesdays and split into two sections: 2:00 PM – 5:00 PM and 6:00 PM – 9:00 PM. Section assignments will depend on student schedules. Actual dates are subject to change.

- Lab 1 – PC Dissection, Desktop
- Lab 2 – PC Dissection, Laptop
- Lab 3 – Setup and Configure a SOHO Network
- Lab 4 – Survey of Virtualization and Cloud Tools
- Lab 5 – Windows 10 - Install, Configure, and Secure
- Lab 6 – Windows Scripting Fundamentals

## **Career Skills Training**

As part of the A+ course experience, students will participate in professionalism training classes on designated Mondays. These classes are designed to provide you with the tools to effectively identify, obtain, and keep a job upon earning your A+ certification.

## **Homework**

Spending time each day studying outside of class is an essential part of the learning process. In addition to completing reading assignments and practice activities, students are expected to reserve time to study key concepts on their own. Please do not limit your studying outside of class to just those readings; take advantage of the other resources provided.

## **CertMaster Practice**

CertMaster Practice accounts are user specific, providing an adaptive learning experience that reinforces what you read in the book and study in class. It is very important that you stay on track with CertMaster via the website and/or app. Also, do not skip ahead of sections where you earn a “red” level score because this indicates you are not proficient in the topic. If you are not current with your CertMaster progress and/or have not demonstrated sufficient mastery of key concepts, you may be excluded from taking certification exams.

## **Tutoring**

If you would like additional assistance with a specific topic and/or if you find that you are not doing well on assessments, please schedule a tutor session. These are free to you and a great additional resource. Tutor sessions are also helpful as you prepare for exams.

- Matt Walters – <https://calendly.com/mwalters-byteback>
- Nate Solloway – <https://calendly.com/nsolloway-byteback>

## **Study Groups**

Students are expected to meet with fellow classmates for at least one hour every week to discuss course materials. These small study groups are determined on the first day of class and will be formed according to schedule needs.

## **Special Accommodations**

Students with learning and/or physical disabilities are entitled to special accommodations. If you have a disability, please inform your instructor on the first day of class so special accommodations can be arranged.

## **Student Services**

If you are at risk of missing class for whatever reason please inform your instructor so they can connect you with our Student Services department, which is available to help students overcome a variety of challenges.

## **Typing**

Students are expected to practice typing skills throughout the course in order to achieve a minimum of 35 words per minute by the end of the course. Students who fail to achieve this threshold may be ineligible for certification level classes.

## Communication with Byte Back

Occasionally students will receive important announcements and/or updates from Byte Back or the instructor via email. To ensure you receive these messages we recommend checking your email account at least once a day for the duration of the class.

If you need to contact your instructor for whatever reason, please use their preferred method of communication and allow up to 48 hours for a response.

### Tentative Course Outline

| Day   | Topic  | Activity                    | Assignment   |
|-------|--|-----------------------------|--|
| Day 1 | Welcome and Course Introduction; Professionalism and Communication                     | itpro.tv<br>Class Quia Page | Read Lesson 1 pages 1-51; Watch LinkedIn Developing Resilience training<br><a href="https://www.linkedin.com/learning/building-resilience/what-why-and-how-to-become-resilient?contextUrn=urn%3Ali%3AlyndaLearningPath%3A574331753dd559c55463ddd2">https://www.linkedin.com/learning/building-resilience/what-why-and-how-to-become-resilient?contextUrn=urn%3Ali%3AlyndaLearningPath%3A574331753dd559c55463ddd2</a>   |
| Day 2 | (ITF): 1. Common Computing Devices 2. Introducing Internal Components and Motherboards | Slides 1.1                  | Read Lesson 1.1 pages 2-13<br>Read Lesson 3.1 pages 209-223; Watch LinkedIn Communications Foundations training<br><a href="https://www.linkedin.com/learning/communication-foundations-2/foundations-of-communication?contextUrn=urn%3Ali%3AlyndaLearningPath%3A574331753dd559c55463ddd2">https://www.linkedin.com/learning/communication-foundations-2/foundations-of-communication?contextUrn=urn%3Ali%3AlyndaLearningPath%3A574331753dd559c55463ddd2</a> |

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| Day<br>3 | (ITF): 1. Using Device Interfaces<br>2. Using Peripheral Devices<br>3. Using Storage Devices | Slides 3.2-3.4; Labs 244-248, 272-275, 286-288; Video 1<br><a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/central-processing-unit-cpu/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/central-processing-unit-cpu/</a> -, Video 2 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/common-hardware-itfun/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/common-hardware-itfun/</a> , Video 3 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/common-hardware2/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/common-hardware2/</a> , Video 4 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/peripheral-devices-itfundamentals/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/peripheral-devices-itfundamentals/</a> , Video 5 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/peripheral-devices2-itfundamentals/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/peripheral-devices2-itfundamentals/</a> , Video 6 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/display-hardware-itfundamentals/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/display-hardware-itfundamentals/</a> , Video 7 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/storage-hardware-itfun/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/storage-hardware-itfun/</a> | Read Lesson 3.2 pages 225-243<br>Read Lesson 3.3 pages 249-271<br>Read Lesson 3.4 pages 276-285 |
| Day<br>4 | (ITF): 1. Troubleshooting and Support 2.   | Slides 1.5; Week 1 Quiz; Video 1 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/troubleshooting-">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/troubleshooting-</a>  | Read Lesson 1.5 pages 85-101<br>Read Lesson 2.1 pages 109-123                                   |

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|       | Data Types and Units                                     | methodologyfundamentals/, Video 2 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/troubleshooting-methodology2/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/troubleshooting-methodology2/</a> , Video 3 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/troubleshooting-example/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/troubleshooting-example/</a>  |  |
| Day 5 | Professionalism Training                                 | What is professionalism?; The 60 second pitch  |  |
| Day 6 | (ITF): 1. Using an OS 2. Managing an OS                  | Slides 1.3, 1.4; Video 1 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/computer-operating-systems/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/computer-operating-systems/</a> , Video 2 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/microsoft-windows/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/microsoft-windows/</a> , Video 3 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/apple-macos/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/apple-macos/</a> , Video 4 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/gnu-linux/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/gnu-linux/</a> | Read Lesson 1.3 pages 39-62<br>Read Lesson 1.4 pages 65-82     |
| Day 7 | (ITF): 1. Networking Concepts 2. Connecting to a Network | Video 1 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/basic-networking-concepts/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/basic-networking-concepts/</a> , Video 2 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/basic-networking-concepts/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/basic-networking-concepts/</a>  | Read Lesson 4.1 pages 329-345<br>Read Lesson 4.2 pages 346-364 |

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|        |   | exam-fc0u61/basic-networking-concepts2/   |  |
| Day 8  | (ITF): 1. Secure Web Browsing 2. Using Shared Storage | Slides 4.3-4.4; Labs pages 383-385; Week 2 Quiz   | Read Lesson 4.3 pages 365-382<br>Read Lesson 4.4 pages 386-403 |
| Day 9  | Professionalism Training                              | Building your professional resume   |  |
| Day 10 | (ITF): 1. Security Concerns 2. Using Best Practices   | Slides 5.1-5.2; Labs 458-460; Video 1 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices-itfundamentals/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices-itfundamentals/</a> , Video 2 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices2-itfundamentals/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices2-itfundamentals/</a> , Video 3 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices3/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices3/</a> , Video 4 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices-itfundamentals/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices-itfundamentals/</a> , Video 5 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices2-itfundamentals/">https://app.itpro.tv/course-library/comptiafundamentals-exam-fc0u61/securitypractices2-itfundamentals/</a> , Video 6 - <a href="https://app.itpro.tv/course-library/comptiafundamentals-">https://app.itpro.tv/course-library/comptiafundamentals-</a> | Read Lesson 5.1 pages 425-436<br>Read Lesson 5.2 pages 437-457 |



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|           |  | exam-<br>fc0u61/securitypractices3/                       |  |
| Day<br>11 | (ITF): 1. Using<br>Access Controls<br>2. Behavioral<br>Security Concepts                                   | Slides 5.3-5.4  | Read Lesson 5.3 pages 461-476<br>Read Lesson 5.4 pages 477-483 |
| Day<br>12 | (ITF)  | Week 3 Quiz; Instructor<br>Student 1x1 Meetings           |  |
| Day<br>13 | Professionalism<br>Training  | Creating a cover letter that gets<br>employers' attention |  |
| Day<br>14 | Lab 1 - Computer<br>Dissection,<br>Desktops  |   |  |
| Day<br>15 | 1. Use<br>Appropriate<br>Safety Procedures<br>2. PC<br>Components<br>3. Common<br>Connection<br>Interfaces | Activities 1-1, 1-2, 1-3, 1-4                             | Read Lesson 1 pages 52-73                                      |
| Day<br>16 | 1. Use<br>Appropriate<br>Safety Procedures<br>2. Environmental   |   | Read Lesson 10 pages 521-536; CertMaster: 4.4, 4.5             |

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|        | Impacts and Controls   |   |   |
| Day 17 | Professionalism Training   | How to really search for employment; Networking |   |
| Day 18 | 1. Install Peripheral Devices 2. Troubleshooting Methodology   | Activities 1-5, 1-6                             | Read Lesson 2 pages 75-112; CertMaster 5.1  |
| Day 19 | 1. Secure Mobile Devices 2. Troubleshoot Mobile Devices  | CertMaster 2.8, 3.4, 3.5                        | Read Lesson 10 pages 499-520                |
| Day 20 | 1. Install and Configure Display Devices 2. Troubleshoot Display Devices 3. Install and Configure Multimedia Devices | Activities 2-1, 2-3, 2-4                        | Read Lesson 3 pages 113-139; CertMaster 5.4 |
| Day 21 | Professionalism Training   | Review week                                     |   |
| Day 22 | Lab 2 - Computer Dissection, Laptops   |   |   |
| Day 23 | 1. Install System Memory 2. Install and Configure Mass Storage Devices   | Activities 3-1, 3-2, 3-3                        | Read Lesson 3 pages 140-155; CertMaster 3.3 |

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| Day 24 | 1. Install/Configure Removeable Storage 2. Configure Raid                               | Activities 3-5, 3-6; Instructor Student 1x1 Meetings | Read Lesson 3 pages 156-168; CertMaster 3.4   |
| Day 25 | Professionalism Training  | Interivew skills that get the offer letter           |   |
| Day 26 | 1. Manage Disks in Windows 2. Manage Devices in Windows 3. Troubleshoot Storage Devices | Activities 3-7, 3-8                                  | Read Lesson 1 Topic E and Lesson 2 Topic A; Read Lesson 4 pages 170-207; CertMaster 5.3 |
| Day 27 | 1. Install & CPUSs 2. Configure & Update BIOS/UEFI 3. Install Power Supplies            | Activities 4-1, 4-2, 4-3, 4-4                        | Read Lesson 4 pages 208-234; CertMaster 3.5, 3.7  |
| Day 28 | Lab 3 - Setup and Configure a SOHO Network  |  |   |
| Day 29 | Professionalism Training  | Interview skills (continued)                         |   |
| Day 30 | 1. Troubleshoot Internal System Components 2. Configure a Custom PC                     | Activities 4-6, 4-7, 4-8, 4-9, 4-10 4-11             | Read Lesson 5 pages 235-263; CertMaster 3.8, 5.2  |
| Day 31 | Topic A Wired Networks, Topic   | Activities 5-1, 5-2                                  | Read Lesson 5 pages 264-277; CertMaster 2.8, 3.1, 3.2                                   |

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|        | B Network Hardware Devices   |  |   |
| Day 32 | 1. Configuring Network Settings  |  | Read Lesson 4 (Topic B)                           |
| Day 33 | Professionalism Training   | Success on the job                                   |   |
| Day 34 | 1. Wireless Networks 2. Internet Connection Types                                  | Activities 5-3, 5-4                                  | Read Lesson 5 pages 278-309                       |
| Day 35 | 1. Network Configuration Concepts 2. Network Services                              | Activities 5-5, 5-6; Instructor Student 1x1 Meetings | Read Lesson 6 pages 311-346; CertMaster 2.5, 2.6  |
| Day 36 | Lab 4 - Survey of Virtualization and Cloud Tools                                   |  |   |
| Day 37 | Professionalism Training   | Applications   |   |
| Day 38 | 1. Install and Configure SOHO Network Security                                     |  | Read Lesson 4 pages 298-322                       |
| Day 39 | 1. Configure Network Connection Settings<br>2. Install and Configure SOHO Networks | Activities 6-1, 6-2, 6-3                             | Read Lesson 6 pages 347 - 386                     |
| Day 40 | 1. Configure Remote Access 2.  |  | Read Lesson 5 pages 323-355; CertMaster: 3.1, 4.9 |

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|        | Troubleshoot Network Connections   |                                 |  |
| Day 41 | Professionalism Training   | Applications                    |  |
| Day 42 | 1. Configure SOHO Network Security 2. Configure Remote Access 3. Troubleshoot Network Connections    | Activities 6-4, 6-5, 6-6        | Read Lesson 6 pages 338-406; CertMaster: 2.1, 2.10                       |
| Day 43 | 1. Logical Security Concepts   |                                 | Read Lesson 6 pages 388-406; CertMaster 2.2, 5.7                         |
| Day 44 | Lab 5 - Windows 10 - Install, Configure, and Security  |                                 |  |
| Day 45 | Professionalism Training   | Applications                    |  |
| Day 46 | 1. Project Data During Incident Reports 2. Threats and Vulnerabilities 3. Physical Security Measures | Instructor Student 1x1 Meetings | Read Lesson 8 pages 441-460; CertMaster 4.6; Read Lesson 7 pages 407-434 |
| Day 47 | Professionalism Training   | Applications                    |  |

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| Day 48 | 1. Implement Security Best Practices 2. Implement Data Protection Policies                  |                               | Read Lesson (?) pages 435-440; CertMaster 1.6, 2.3, 2.6, 2.7        |
| Day 49 | 1. Detect, Remove, and Prevent Malware 2. Troubleshoot Common Workstation Security Issues   |                               | Read Lesson 9 pages 471-498; CertMaster 2.2, 2.4, 3.2, 3.3          |
| Day 50 | 1. Install & Configure IoT Devices 2. Configure Client-Side Virtualization                  | Activities 6-7, 6-8           | Read Lessons 7 and 8; CertMaster 2.3, 2.4 and 4.2                   |
| Day 51 | Professionalism Training  | Applications                  |   |
| Day 52 | Lab 6 - Windows Scripting Fundamentals  |                               |   |
| Day 53 | 1. Cloud Computing Concepts 2. Use Laptop Features 3. Install and Configure Laptop Features | Activities 7-2, 8-1, 8-2, 8-3 | Read Lessons 8 and 9 pages 439-462; CertMaster 1.1., 1.2., 3.2, 4.1 |
| Day 54 | 1. Troubleshoot Common Laptop   | Activities 8-4, 9-1           | Read Lesson 9 pages 463-482; CertMaster: 1.4, 5.5                   |

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|        | Issues 2. Mobile Device Types  |  |  |
| Day 55 | 1. Connect and Configure Mobile Device Accessories 2. Configure Mobile Device Network Connectivity | Activities 9-2, 9-3  | CertMaster: 1.5, 1.6, 2.7  |
| Day 56 | 1. Support Mobile Apps 2. Maintain Laser Printers  | Activities 9-5, 10-1   | Read Lesson 10 pages 506-520; CertMaster 1.7, 3.9  |
| Day 57 | 1. Maintain Inkjet Printers 2. Maintain Impact, Thermal, and 3D Printers                           | Activities 10-2, 10-3  | Read Lesson 10 pages 521-558   |
| Day 58 | 1. Install and Configure Printers 2. Troubleshoot Print Device Issues                              | Activities 10-4, 10-5, 10-6, 10-7; Instructor Student 1x1 Meetings | Read Lesson 10 pages 559-568 and review Glossary pages 569-586; CertMaster 3.10, 3.11, 5.6 |
| Day 59 | 1. Install & Configure Imaging Devices   | Activity 10-8  | CertMaster: 3.6  |
| Day 60 | 1. Identify Common Operating Systems 2. Use Windows Features and Tools                             |  | Read Lesson 1 (Topic C)  |

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| Day 61 | 1. Manage Files in Windows 2. Configure and Use Linux                              |                                    | Read Lesson 1 (Topic D); Read Lesson 2 Topic B  |
| Day 62 | 1. Configure and Use macOS 2. Install and Upgrade Operating Systems                |                                    | Read Lesson 2 Topic C   |
| Day 63 | 1. Maintain OS's 2. Install and Manage Windows Applications                        | CertMaster 1.1, 1.2, 1.3, 1.7, 1.9 | Read Lesson 2 Topic D and Lesson 3 Topic A; Read Lesson 3 Topic C Pages: 211-244; CertMaster 1.1, 1.2 |
| Day 64 | 1. Manage Windows Performance 2. Troubleshoot Windows                              |                                    | Read Lesson 4 (Topic A)   |
| Day 65 | 1. Manage Users 2. Configure Shared Resources                                      |                                    | Read Lesson 5 pages 356-376; CertMaster 1.5   |
| Day 66 | 1. Configure Active Directory Accounts and Policies                                |                                    | Read Lesson 6 pages 378-387; CertMaster 1.4, 1.8  |
| Day 67 | 1. Create and Maintain Documentation 2. Use Basic Change Management Best Practices |                                    | Read Lesson 10 pages 537-564; CertMaster 4.1, 4.2   |



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| Day<br>68 | 1. Implement<br>Disaster<br>Prevention and<br>Recovery<br>Methods<br>2. Basic Scripting<br>Concepts |  | Read Lesson 10 pages 565-578; CertMaster 4.3, 4.8 |
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