

TEIT 1210 - A+ Core II (3 Credits)

Course Description

A+ Core II is a follow up to A+ Core1 and provides further instruction on installation, configuration, maintenance, and security of various common operating systems and platforms. This course aligns with the objectives of the CompTIA A+ Core 2 certification exam.

Course Objectives

- Install and Configure Windows, Mac, and Linux.
- Identify best practices for safety, environmental impacts, communication, and professionalism.
- Troubleshoot common operating system, malware, and security issues.
- Identify basic vulnerabilities and protect against threats.
- Install, configure, and maintain software in computers and mobile devices.

Course Outline

- Managing Windows
- · Securing Windows
- Operating System Management
- Security Best Practices
- Mobile Devices
- Data Security

Textbook & Reading Materials

TestOut PC Pro, Test Out, ISBN: 9781935080428

Assignments and Assessments

Course Introduction and Standards

Meet Your Instruction Team

Rules of the Lab

CS Code of Conduct Policy

Submitting Assignments in Canvas

Taking a Screenshot

Orientation

Syllabus Agreement

Module 13.0 introduction

13.1.4 - Lab: Disk Management

13.1.7 - Lab: Users and Groups

13.1.12 - Lesson Review

13.2.4 - Lab: Manage Files and Folders

13.2.7 - Use System Management Commands

13.2.8 - Lesson Review

13.3.7 - Lab: Configure a VPN Connection

13.3.9 - Lab: Local Firewall Settings

13.3.10 - Lab: Configure TCP/ IP Settings on Windows 10

13.3.11 - Lab: Configure TCP/IP Settings on Windows 11

13.3.12 - Lesson Review

13.5 - Module Quiz

14.1.2 - Lab: Assisted Troubleshooting

14.1.4 - Lab: Troubleshoot Physical Connectivity

14.1.8 - Lab: Connectivity

14.1.9 - Lab: Services/Name Resolution

14.1.10 - Lesson Review

14.2.4 - Lab: Configure Remote Services

14.2.10 - Lesson Review

14.3.10 - Lab: Manage Applications

14.3.14 - Lesson Review

Student Acknowledgement Statement Module 1

Checkpoint Meeting Module 1

14.4 - Troubleshoot Windows OS Problems

14.4.3 - Lab: Boot into the Windows Recovery Environment

14.4.5 - Lab: Create a Restore Point

14.4.9 - Lab: Configure the Boot Order

14.4.14 - Lesson Review

14.6 - Module Quiz

14.7 - Checkpoint Review

15.1.4 - Asymmetric Encryption

15.1.8 - Lab: Create User Accounts

15.1.10 - Authentication

15.1.11 - Lesson Review

15.2.3 - Lab: Create OUs

15.2.5 - Lab: Use System Commands

15.2.6 - Lab: Group Policy Management

15.2.7 - Lesson Review

15.3.6 - Lab: Configure NTFS Permissions

15.3.11- Lab: Support AD Domain Networking

15.3.12 - Lesson Review

15.5 - Module Quiz

16.1.6 - Lab: Windows 11 Features/Desktop

16.1.7 - Lesson Review

16.2.6 - Lesson Review

16.4 - Module Quiz

Student Acknowledgement Statement Module 2

Checkpoint Meeting Module 2

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17.1.7 - Lab: File Management

17.1.10 - Lab: Manage Linux File Ownership

17.1.11- Lesson Review

17.2.4 - Lab: Informational and Network Tools

17.2.6 - Lab: Configure Linux

17.2.7 - Lesson Review

17.3.11- Lesson Review

17.5 - Module Quiz

17.6 - Checkpoint Review

18.1.3 - Lab: Respond to Social Engineering Exploits

18.1.9 - Lab: Explore SQL Injection Flaws

18.1.10 - Lesson Review

18.2.4 - Authentication Methods

18.2.6 - Lesson Review

Student Acknowledgement Statement Module 3

Checkpoint Meeting Module 3

18.3 - SOHO Router Security

18.3.2 - Lab: SOHO Router Configuration

18.3.9 - Secure a Small Wireless Network

18.3.10 - Lesson Review

18.4.2 - Lab: Implement Physical Security

18.4.5 - Lesson Review

18.6 - Module Quiz

19.1.2 - Lab: Enforce Password Settiings

19.1.9 - Lab: User Policy Management

19.1.10 - Lesson Review

19.2.7 - Lab: Configure Microsoft Defender Antivirus

19.2.9 - Windows Defender

19.2.11- Lab: Encrypt Files with EFS

19.2.13 - Lab: Configure BitLockerwith a TPM

19.2.14 - Lesson Review

19.3.2 - Lab: Practice Installing & Removing Browser

Software

19.3.4 - Lab: Safe Browsing Best Practices

19.3.9 - Clear Browser History

19.3.10 - Lesson Review

Student Acknowledgement Statement Module 4

Checkpoint Meeting Module 4

19.4 - Troubleshoot Workstation Security

19.4.9 - Check for Anti-Malware on a Machine

19.4.13 - Lesson Review

19.6 - Module Quiz

20.1.8 - Lab: Configure Remote Wipe

20.1.9 - Lesson Review

20.2.2 - Mobile Device Troubleshooting

20.2.6 - Lab: Connect to WiFi

20.2.7 - Lesson Review

20.3.4 - Lesson Review

20.5 - Module Quiz

20.6 - Checkpoint Review

21.1.3 - Lab: Back Up t he Computer

21.1.6 - Lab: Restore Data from File History

21.1.7 - Lesson Review

Student Acknowledgement Statement Module 5

Checkpoint Meeting Module 5

21.2 - Data Handling Best Practices

21.2.7 - Lesson Review

21.3.5 - Lesson Review

21.5 - Module Quiz

22.1.7 - Lesson Review

22.2.8 - Lab: Install a UPS

22.2.9 - Lesson Review

22.3.2 - Bash Command Syntax

22.3.4 - Conditionals

22.3.7 - Lab: JavaScript

22.3.10 - Lesson Review

22.5 - Module Quiz

22.6 - Checkpoint Review

End of Course Survey

End of Course Student Acknowledgement Statement

Course Completion Checkpoint Meeting

Subject to change. Please consult your Canvas course for the most current instructions and updates.

Classroom Hours

Mo, Tu, W, Th, Fr 8:00 AM - 11:00 AM 12:00 PM - 3:00 PM

For a full list of course hours visit: Course Schedule

Instructor Contact Information

Greg Davis — gdavis@stech.edu Austin Prince — aprince@stech.edu

Office Hours: By appointment

Email is the preferred method of communication; you will receive a response within 24 hours during regular business hours.

Canvas Information

Canvas is the where course content, grades, and communication will reside for this course.

- stech.instructure.com
- For Canvas passwords or any other computer-related technical support contact Student Services.
- For regular Hours and Weekdays call (435) 586 2899.
- For after Hours & Weekends call (435) 865 3929 (Leave a message if no response).

Course Policies

All Students: This course is pass or fail. All assignments in this course require 100% score with unlimited submissions. All quizzes in this course require a minimum score of 80%. Each module of this course will contain at least one quiz. There is a student/teacher checkpoint meeting at the end of each module. You are required to keep your progress at a 67% minimum throughout the program. Progress is determined by the number of completed module hours (15 hours per module) divided by the number of enrolled hours.

Iron County High School Students: In addition to the above information, Iron County students have the following policies. Your progress grade will be submitted every Friday to PowerSchool. You must maintain a progress percentage of 67% or over to stay in the course. You will receive a No-Grade (NG) in the course until all course fees are paid.

Attendance All Students: You are required to keep your attendance at a 67% minimum throughout the program. Attendance is determined by the number of attended hours divided by the number of enrolled hours. You must complete this program within 150% estimated program length. You are permitted one 15 minute break every 90 minutes. If you take more than one break in a 90 minute period or your break lasts longer than 15 minutes, your attendance will be penalized. As per Southwest Tech policy, 10 consecutive absences will lead to being withdrawn from the program. Please notify your instructors about absences as soon as possible. If absence is due to illness, please email your instructors prior to end of day.

Iron County High School Students: In addition to the above information, Iron County students must maintain an attedance percentage of 67% or over to stay in the course. Cell Phone/Electronics Cell phones cannot be used during class time. In the lab, the PCs are reserved for students in IT courses. All students can use the iMacs, which run OSX, Windows, and Linux operating systems. You may bring your personal computers to class. You must be on topic in the lab while clocked-in. Industry Environment Computer Science typically is very sedentary. This means you may sit at a desk for long hours. Be sure to move and get what exercise you can.

High School Power School Grades: Quarter student grades will be determined by student progress percentage. Faculty will use the higher percentage of either 1) quarter progress, or 2) cumulative progress for the current training plan year. The progress percentage will be used with the grading scale to determine the minimum grade. High School Grade Scale: The following grading scale will be used to determine a letter grade from the progress percentage:

• A:94-100%

A-: 90 - 93%

• B+: 87 - 89%

• B:83-86%

• B-: 80 - 82%

• C+: 77 - 79%

• C:73-76%

• C-: 70 - 72%

• D+: 67 - 69%

• D:63-66%

• D-: 60 - 62%

• F:0-59%

Additional Information

InformaCast Statement: Southwest Tech uses InformaCast to ensure the safety and well-being of our students. In times of emergency, such as weather closures and delays, this app allows us to promptly deliver notifications directly to your mobile devices. To stay informed and receive real-time updates, we encourage all students to sign up for notifications. Your safety is our priority, and staying connected ensures a swift response to any unforeseen circumstances. More information and directions for signing up are available at: https://stech.edu/emergency-notifications/

Internet Acceptable Use Policy: The student is expected to review and follow the Southwest Technical College Internet Safety Policy at: https://stech.edu/students/policies/

Student Code of Conduct Policy: The student is expected to review and follow the Southwest Technical College Student Code of Conduct Policy at: https://stech.edu/students/policies/

Accommodations: Students with medical, psychological, learning, or other disabilities desiring accommodations or services under ADA, must contact the Student Services Office. Student Services determines eligibility for and authorizes the provision of these accommodations and services. Students must voluntarily disclose that they have a disability, request an accommodation, and provide documentation of their disability. Students with disabilities may apply for accommodations, based on an eligible disability, through the Student Services office located at 757 W. 800 S., Cedar City, UT 84720, and by phone at (435) 586-2899. No diagnostic services are currently available through Southwest Technical College.

Safety and Building Maintenance: The College has developed and follows a variety of plans to ensure the safe and effective operation of its facilities and programs. The following plans are available online:

1) Facilities Operations and Maintenance Plan; 2) Technical Infrastructure Plan; and 3) Health and Safety Plan.

Withdrawals and Refunds: Please refer to the Southwest Technical College Refund Policy at: https://stech.edu/students/policies/

Any high school or adult student, who declares a technical training objective is eligible for admission at Southwest Technical College (Southwest Tech). Program-specific admissions requirements may exist and will be listed on the Southwest Tech website. A high school diploma or equivalent is not required for admission but is mandatory for students seeking Title IV Federal Financial Aid.

Non-Discriminatory Policy: Southwest Technical College affirms its commitment to promote the goals of fairness and equity in all aspects of the educational enterprise, and bases its policies on the idea of global human dignity.

Southwest Tech is committed to a policy of nondiscrimination. No otherwise qualified person may be excluded from participation in or be subjected to discrimination in any course, program or activity because of race, age, color, religion, sex, pregnancy, national origin or disability. Southwest Technical College does not discriminate on the basis of sex in the education programs or activities that it operates, as required by Title IX and 34 CFR part 106. The requirement not to discriminate in education programs or activities extends to admission and employment. Inquiries about Title IX and its regulations to STECH may be referred to the Title IX Coordinator, to the Department of Education, and/or to the Office for Civil rights.

If you believe you have experienced discrimination or harassment on our campus, please contact the Title IX Coordinator, Cory Estes: cestes@stech.edu, (435) 865-3938.

For special accommodations, please contact the ADA Coordinator, Cyndie Tracy: ctracy@stech.edu, (435) 865-3944. Southwest Technical College 757 West 800 South Cedar City, UT 84720 info@stech.edu (435) 586-2899