

ITCO101: Unit 4 Lab

Introduction

LabSim PC Pro is used to provide a simulated, hands-on laboratory for the purposes of learning about important hardware and software concepts. In an online environment, it is impossible for students to work directly with hardware or software in administrative scenarios. Therefore, LabSim is the tool that supports students in their pursuit to understand difficult concepts in an online environment.

Use of LabSim PC Pro requires a one-time registration process. You should have received an activation code from the bookstore (Words of Wisdom). Notify the bookstore immediately if you have not yet received your activation code. Contact Words of Wisdom at aiuonlinebooks@wordsofwisdombooks.com.

Instructions for accessing LabSim can be found in the Course Materials section. You can also contact your instructor with any questions. You will have access to LabSim PC Pro for 36 months (3 years) from the date of registration.

Note that LabSim PC Pro is aligned with CompTIA's A+ certification. Completing this lab will not qualify you to complete the exam. You must complete several courses to cover all the concepts included in the certification exam. Further, completing the coursework does not conclude with automatic certification. Those students who wish to pursue certification may do so outside the classroom. For those students that qualify, they may contact the Registrar's office for receipt of a discounted certification voucher honored by CompTIA.

Hardware requirements: Click [here](#) to verify that you meet the necessary hardware requirements. Note that you will need speakers.

Expected time for completion: It should take you five hours or more depending on your hardware and your familiarity with LabSim. You may complete the tasks in numerous iterations. You do not need to complete all of the lab tasks in one sitting.

Lab Description

Upon completion, you will be able to do the following:

- Manage devices
- Troubleshoot issues with system hardware resources

ITCO101: Unit 4 Lab

Lab Tasks

Each module contains numerous sections. Each section contains subsections. The last subsection contains practice questions that are related to the topic of that subsection. The practice questions are not required. Completing the practice questions is optional. The results of the practice questions do not impact your course grade one way or the other.

Module 2.0: PC Technician

Complete the following section and the denoted subsection:

- **Section 2.5:** Troubleshooting Overview (Review video: Subsection 2.5.1)

The focus of this Unit is troubleshooting. Below are numerous modules covering system components, peripheral devices, storage, and mobile devices. Most of these module sections include hands-on simulations. You may complete any or all of these sections. You are required to choose 4 sections from any of the four modules, at a minimum. Mix and match by choosing one section from one module and other sections from other modules. Review all of the videos, demos, and simulations included in the sections that you choose to complete.

You are only required to choose and complete 4 sections, but you may choose to complete anywhere from four sections to all of the sections, depending upon your time availability. Note that you are permitted to return to these modules at any time throughout the course and the program if you wish to complete more than the four sections required for this assignment. However, the grade for this Unit 4 Individual Project assignment will be determined based upon the chosen sections completed during Unit 4.

Module 3.0: System Components

Choose from the following sections:

- **Section 3.4:** Motherboard Troubleshooting (Review video and complete simulations: Subsections 3.4.1, 3.4.3, and 3.4.4)
- **Section 3.6:** Processor Troubleshooting (Review video and complete simulations: Subsections 3.6.1, 3.6.3, and 3.6.4)
- **Section 3.9:** Memory Troubleshooting (Review video, demo and

ITCO101: Unit 4 Lab

complete simulations: Subsections 3.9.1, 3.9.2, 3.9.4, and 3.9.5)

Module 4.0: Peripheral Devices

Choose from the following sections:

- Section 4.5: Video Troubleshooting (Review video and complete simulation: Subsections 4.5.1 and 4.5.3)
- Section 4.7: Device Driver Troubleshooting (Review video, demo and complete simulations: Subsections 4.7.1, 4.7.2, 4.7.4, and 4.7.5)

Module 5.0: Storage

Complete the following section:

- **Section 5.10:** Storage Troubleshooting (Review videos and complete simulation: Subsections: 5.10.1, 5.10.3, and 5.10.5)

Module 8.0: Mobile Devices

Complete the following section:

- **Section 8.4:** Notebook Troubleshooting (Review video: Subsection 8.4.1)

The above sections include the following hands-on simulations:

- **3.4.3:** Troubleshoot System Power
- **3.4.4:** Troubleshoot Power Supply Problems
- **3.6.3:** Troubleshoot Processor Installation 1
- **3.6.4:** Troubleshoot Processor Installation 2
- **3.9.4:** Troubleshoot Memory 1
- **3.9.5:** Troubleshoot Memory 2
- **4.5.3:** Optimize Video Settings
- **4.7.4:** Manage Devices 1
- **4.7.5:** Manage Devices 2
- **5.10.5:** Troubleshoot SATA Devices