IT Support Essentials II

2023-2024 Catal

[ARCHIVED CATALOG]

ITSP 134 - IT Support Essentials II

PREREQUISITES/COREQUISITE: INFM 109 - Informatics Fundamentals or CSCI 101 - Computer Science I or SDEV 120 - Computing Logic.

PROGRAM: Information Technology Support

CREDIT HOURS MIN: 2 LECTURE HOURS MIN: 1 LAB HOURS MIN: 2

DATE OF LAST REVISION: Fall, 2020

Delivers the necessary competencies with hands-on experience in the lab for an entry-level Information Technology professional. Students will have the knowledge to install software on PCs and mobile devices for end users. Understand the basics of security forensics. Properly and safely diagnose, resolve, and document common software issues. Apply troubleshooting skills and provide appropriate customer support and understand operational procedures and best practices.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

- 1. Operating Systems.
 - a. Compare common operating system types and their purposes including Microsoft Windows, Mac OS and Linux.
 - b. Demonstrate general installation and configuration of common operating systems including upgrades.
 - c. Evaluate common operating system features and tools, including scripting techniques.
- 2. Security.
 - a. Explain the importance of physical security measures, logical security concepts, wireless security protocols. and authentication methods.
 - b. Differentiate social engineering, threats, and vulnerabilities; and the procedures to detect, remove and prevent malware using appropriate tools.
 - c. Implement security best practices to secure a workstation, mobile devices, SOHO wired and wireless networks; and appropriate data destruction and disposal methods.
- 3. Hardware.
 - a. Examine Microsoft Windows OS problems and resolve PC security issues to include malware identification and removal
 - b. Analyze mobile OS and application issues and mobile application security issues.
- 4. Operational Procedures.
 - a. Explain best practices associated with types of documentation, basic change management, basic disaster prevention and recovery.
 - b. Identify common computing safety procedures, environmental impacts and appropriate controls.
 - c. Explain the processes for addressing prohibited content/activity, and privacy, licensing, and policy concepts.
 - d. Apply proper communication techniques and professionalism.

COURSE CONTENT: Topical areas of study include -

· Operating systems

- Issue resolution
- Needs assessment
- Professional communication
- Security principles
- · Desktop imaging
- System documentation
- · Troubleshooting best practices



CERTIFICATION ASSOCIATED COURSE:

This course has been identified as appropriate preparation for a nationally recognized, vendor certification that closely reflects the objectives of the course. In addition to a textbook, certification preparation materials have also been incorporated into the course for purchase at the bookstore to acclimate students to the manner and rigor of the actual certification exam. Preparation materials will consist of TestOut, LabSim, and/or some kind of practice test software such as ExamForce, Transcender or other equally appropriate software and will make up no less than 20% of the final grade.

CERTIFICATION/LICENSURE DISCLAIMER:

Ivy Tech cannot guarantee that any student will pass a certification or licensing exam. Your success will be determined by several factors beyond the instruction you are given in the classroom including your test-taking skills, your willingness to study outside of class, and your satisfactory completion of appropriate practice exams. Certification exam questions are drawn from databases of tens of thousands of possible questions and no two people are asked exactly the same progression of questions. Therefore, a thorough understanding of the subject matter is required. The goal of Ivy Tech in providing a certification exam studies class is to assist you in understanding the material sufficiently to provide a firm foundation for your studies as you prepare for the exam.

Course Addendum - Syllabus (Click to expand)