

SOUTHEAST COMMUNITY COLLEGE
ADVANCED TECHNOLOGIES & SKILLED TRADES DIVISION
Computer Information Technology Program
Revision Date: October 2025

I. CATALOG DESCRIPTION

Course Number: INFO1448
Course Title: Hardware & Windows Management
Prerequisite(s): INFO1171 & INFO1283
Corequisite(s): MATH1020 or higher
Catalog Description: Fundamental concepts related to managing the hardware and operating system in a Windows environment. Students have hands-on experience with hardware and software installation, maintenance, and troubleshooting; peripheral interfacing; both workgroup and domain networking; and file and system management.

Credit Hours: 3
Class Hours: 45
Lab Hours: 0
Total Contact Hours: 45

II. COURSE OBJECTIVES: *Course will:*

- A. Present an overview of the safety precautions necessary when working around computer equipment.
- B. Provide hands-on experience with computer hardware and operating systems.
- C. Provide critical thinking opportunities when installing hardware and troubleshooting hardware and operating system problems.
- D. Examine the qualities needed to be a professional IT technician.
- E. Examine installation and configuration of Windows clients.
- F. Introduce different approaches to resource sharing.
- G. Allow students the opportunity to take the TestOut PC Pro certification exam.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Utilize appropriate safety precautions when working with computers and components.
 - 2. Demonstrate understanding of the functions of hardware components.
 - 3. Install hardware components.
 - 4. Install operating systems both in a dual boot and virtualized environments.
 - 5. Set up a computer and configure drivers for computer devices.
 - 6. Distinguish how best to deal with customers in various situations.
 - 7. Compare different OS installation methods.
 - 8. Evaluate different System Utilities provided with Windows client machines.
 - 9. Use necessary utilities to configure system access and application compatibility.
 - 10. Evaluate the tools needed to maintain Windows client machines within local and domain environments.
 - 11. Develop strategies to maintain Windows client machines within local and domain environments.
 - 12. Compare the different methods of sharing resources within workgroup and domain environments.
 - 13. Demonstrate an understanding of when each sharing method should be used.

- B.** General Education Learning Outcomes (GELOs)
 - 1.** GELO #3: Critical Thinking & Problem Solving
Outcome 1: Collect, identify, interpret and analyze data.

IV. CONTENT/TOPICAL OUTLINE

- A.** Hardware Basics
- B.** Operating System Basics
- C.** Protection and Safety
- D.** Professionalism
- E.** PC Tools and Maintenance
- F.** System Components
- G.** Peripheral Devices
- H.** Storage Devices and Storage Management
- I.** File Systems
- J.** Networking
- K.** Printers
- L.** Mobile Devices
- M.** System Management
- N.** System Implementation
- O.** File Management
- P.** Enterprise Computing

V. INSTRUCTIONAL MATERIALS

- A.** Required Resource: As determined by the instructors of this course
- B.** Other Resources: Computer and Internet access

VI. METHODS OF PRESENTATION/INSTRUCTION

- A.** Methods of presentation typically include a combination of the following:
 - 1.** Technology enhanced lectures
 - 2.** Audio visual materials
 - 3.** Demonstrations
 - 4.** Classroom discussions
 - 5.** Interactive group activities

VII. METHODS OF EVALUATION

- A.** Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
 - 1.** Homework
 - 2.** In-class assignments
 - 3.** Group discussions
 - 4.** Research project
 - 5.** Quizzes
 - 6.** Tests

VIII. SPECIFIC COURSE REQUIREMENTS

- A.** This course will not qualify as a prerequisite if the student receives a final grade below a C (70%).