

# PC HARDWARE FUNDAMENTALS

## Pierce County Careers Connection Dual Credit Articulation Agreement

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Upon completion of high school courses equivalent to the following competencies:

- Demonstrate the ability to:
  - Diagram, label and describe the functions of:
    - ~Components inside the system unit.
    - ~Features of the motherboard and its key components.
  - Assemble and disassemble PC's.
  - Explain the subsystems within the PC and how they interact.
  - Describe and document the boot process.
  - Describe how conflicts arise between components in a PC.
  - Install RAM
  - Describe and demonstrate the use of safety precautions when working with PC's.
  - Format and partition hard drive.
  - Load and configure operating system.
  - Install and configure hardware components such as:
    - ~Motherboard
    - ~Hard drive
    - ~Cards
    - ~Mice
    - ~Printers
    - ~Other peripherals
  - Access and configure the CMOS set up.
  - Use available resources to determine a PC's component information such as size of hard drive, amount of RAM, and type of processor.
  - Perform routine preventative maintenance for hardware.
  - Install and configure components such as modems, CD-ROM drives and hard disks.
  - Perform advanced preventative maintenance for hard disks using utilities software.
  - Research and document solutions to error messages or symptoms of a hardware problem.
  - Diagnose and troubleshoot common problems relating current operating systems.
  - Compare unique hardware configurations of PCs to:
    - ~Servers
    - ~Dual boot systems
    - ~Thin clients.
  - Use personal qualities, attitudes and key skills that foster successful relationships with customers.
- Problem Solving/Troubleshooting
  - Identify and use appropriate communication tools and methods to correctly isolate and identify technical problems.
  - Identify and use a wide range of resources and techniques to identify technical problems and develop and implement resolution plans.
- Project Management
  - Coordinate the use of resources with other team members and groups.

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A student earning a "B" grade or better may earn college credit at one of the following colleges:

<u>College</u>	<u>Course</u>	<u>Credits</u>
Bates Technical College	INFO 105 (CIP Code: 15.1202)	5
Clover Park Technical College	NSS 101 (CIP Code: 47.0104)	5