Course Title:
Introduction to Hardware

Catalog Description
Introduction to Hardware introduces computer hardware components and explains how they work together to make computers functional. Also includes procedures for disassembling and reassembling different classes of computers, troubleshooting, and repair.

Prerequisites or Necessary Entry Skills/Knowledge:
None

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
- Goal 1: Communication: By meeting the following competencies:
- Goal 2: Critical Thinking: By meeting the following competencies:
- Goal 3: Natural Sciences: By meeting the following competencies:
- Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- Goal 7: Human Diversity: By meeting the following competencies:
- Goal 8: Global Perspective: By meeting the following competencies:
- Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- Goal 10: People and the Environment: By meeting the following competencies:

Topics to be Covered (General)
- Microprocessors
- Random Access Memory (RAM)
- Motherboards and BIOS
- Power supplies
- Disk drives
### Student Learning Outcomes

- Identify PC components.
- Perform AC/DC voltage measurements.
- Calculate power supply requirements.
- Diagnose computer problems.
- Calculate RAM volume, banks and module types for upgrades.
- Determine expansion card upgrade needs.
- Install and configure master/slave hard drives.
- Assemble and disassemble personal computers.

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**Is this course part of a transfer pathway:** Yes ☐ No ☒

*If yes, please list the competencies below*

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Revised Date: 10/29/2023