Course Objectives/Course Outline
Spokane Community College

Course Title: Direct Digital Control Systems

Prefix and Course Number: AIRC 265

This course provides advanced programming and networking applications. The student will setup and program various components of a DDC system. All components will be tied to the Building Manager and the system will be monitored for proper operation. The student will learn to use the computer to troubleshoot the system. External equipment will be connected to the system and programmed and monitored.

Learning/Performance expectations (e.g., outcomes, performance, objectives, competencies, etc.)
By the end of this course, a student should:

- describe the various network components and their function
- design a system with given components
- program the components to work with the Building Manager
- connect external devices to system and control/monitor their I/O's
- troubleshoot system failures using computer
- describe various types of DDC systems

Course Outline:

I. Network Components
   A. T7300
   B. Command Display
   C. CVAHU (Constant Volume Air Handling Unit)
   D. SLTA (Network Interface)
   E. XL15A Building Manager

II. Network Design
   A. Components of Specific Buildings

III. Program Network Components
   A. Components OF Specific Criteria
   B. Interfacing Components to Building Manager

IV. External Equipment
   A. Connecting Through the Building Manager

V. Troubleshooting
   A. Component Failure
   B. Program Failure

VI. Other DDC Configurations
   A. Carrier, Johnson, etc.
   B. Home Zone Systems (Limited Components)

VII. Exit Exam
   A. Practical Exam (Monitored and Graded by Advisory Board Members)
   B. National Written Exam