PROGRAM OF STUDY

BUILDING AUTOMATION CONTROL Certificate of Achievement

The BUILDING AUTOMATION CONTROL CERTIFICATE offers the students the opportunity to learn the academic, occupational, communication, and technical training skills needed by entry level technicians in the COMMERCIAL Heating, Ventilating, and Air Conditioning (HVAC) industry. Students completing this certificate will develop multiple skills that include real-world knowledge of: Fundamentals of electricity, physics for building science, building commissioning, schematic and blueprint reading, mechanical and electrical devices, hardware and software for building technicians, digital controls, control networks and programming, BAS system installation, service, operation, maintenance, and troubleshooting, automated HVAC system controls, energy management system controls, and lighting and security system controls. This curriculum was developed in collaboration with several community colleges and industry partners to provide a path to various COMMERCIAL Heating, Ventilation, and Air Conditioning (HVAC)career areas.

Career Opportunities in Air Conditioning/HVAC

building automation technician, control systems technician, programmers, facilities maintenance, building engineer, service, sales, and installation for large buildings such as universities, hospitals, hotels, government facilities, or schools.

Required Courses:

| ACR 060 | Air Conditioning & Refrigeration I | 3 |
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| ACR 064 | Air Conditioning & Refrigeration Electricity I | 3 |
| ACR 065 | Air Conditioning & Refrigeration Electricity II | 3 |
| ACR 076 | Facilities Maintenance - Chillers | 3 |
| ACR 090 | Building Automation Fundamentals | 3 |
| ACR 091 | Advanced Building Control Networks | 3 |
| ACR 092 | Advanced Building Automation Networks and Programming | 3 |

Total Units 21

PID 266