



Course Outline/Description— Building Maintenance



DIPLOMA PROGRAM

24 weeks – 30 semester credit hours (DAY)
52 weeks – 30 semester credit hours (EVENING)
Total 720 hours

OBJECTIVE

Building Maintenance* teaches diversified skills needed to maintain and renovate commercial and residential properties. Students are taught basic skills in electricity, carpentry, plumbing, heating and air conditioning maintenance. Training also includes painting, papering, and tiling. Students acquire skills in appliance repair.

EMPLOYMENT OPPORTUNITIES

Graduates are prepared for entry-level employment as maintenance mechanics in apartment complexes, healthcare facilities, industrial establishments, and commercial buildings.

	COURSE TITLE	CREDIT HOURS
1001	Introduction and Safety Procedures in Building Maintenance	0.5
1002	General Mathematics for Building Maintenance	1.0
1003	Blueprint Reading	0.5
1004	Carpentry	4.0
1005/1013	Screen Repair, and Appliance Repair and Maintenance	1.5
1006/1007	Painting, Papering, Tiling, and Floor Care	3.5
1008	Concrete Pads	0.5
1009	Electricity	4.5
1010	Plumbing and Pipe Fitting	4.0
1011	Air Conditioning	2.0
1012	Heating	4.0
616	Professional Development	3.5

* Students in this program are eligible to receive industry recognized certification from the Residential Construction Academy (RCA) of the Home Builders Institute upon successful completion of certification exams.



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- 1001 INTRODUCTION AND SAFETY PROCEDURES IN BUILDING MAINTENANCE**
Students are introduced to building maintenance job skills and employment opportunities. They learn identification and proper use of hand and power tools. Students are instructed in proper safety precautions in the performance of building maintenance tasks. Emphasis is placed on safety, clothing, and proper use of hand and power tools.
- 1002 GENERAL MATHEMATICS FOR BUILDING MAINTENANCE**
Students review mathematical procedures including computations using fractions, decimals, and percentages.
- 1003 BLUEPRINT READING**
Students are instructed in the use of blueprints showing building stages from excavation to completion. Students learn to read plans, interpret symbols, and identify standard dimensions.
- 1004 CARPENTRY**
Students learn types of construction lumber, installation of studding and joists, and installation and repair of drywall. Practical applications of carpentry taught include identification of moldings; cutting, mitering, and nailing of finished carpentry projects; installation of interior doors, and sub-flooring.
- 1005/1013 SCREEN REPAIR, AND APPLIANCE REPAIR AND MAINTENANCE**
Students learn basic screen repair. Students also learn how to troubleshoot, repair, and maintain dishwashers, washers, gas/electric dryers, and gas/electric hot water heaters.
- 1006/1007 PAINTING, PAPERING, TILING, AND FLOOR CARE**
Students are instructed regarding classification of paints, preparation of walls and woodwork, and application of paint to these surfaces. Students learn classification and application of wall coverings and methods of repairing them. They also learn laying floor covering and ceramic tiling. Students will also learn general cleaning techniques for floor care.
- 1008 CONCRETE PADS**
This course covers the preparing, pouring, and finishing of concrete.
- 1009 ELECTRICITY**
Students are provided with an introduction to electrical theory and fundamentals of electrical wiring and repairs. Students learn to install light switches, receptacles, doorbells, and light fixtures; and connect circuits to panel boxes and 220/240-volt lines for large appliances. They also learn the importance of preventive maintenance and how it affects energy consumption and appliance function.
- 1010 PLUMBING AND PIPE FITTING**
Students receive instruction in the installation and repair of plumbing fixtures and garbage disposals. Students also learn to install pipes and fittings. Cold water supply systems and sewage systems are discussed. Students make lead and oakum joints; cut, ream, and thread gas pipes; and solder copper.
- 1011 AIR CONDITIONING**
This course instructs students in the basic air conditioning cycle and how to service window units. Students also learn the importance of preventive maintenance and how it directly involves energy saving. Students are taught to charge, evacuate, and reclaim refrigerants of window units.
- 1012 HEATING**
Students learn the function, maintenance, and troubleshooting of heating systems, including warm air and hot water heating systems.
- 616 PROFESSIONAL DEVELOPMENT**
Students learn the skills employers require for positive work relationships and long-term employment. They include targeted workplace competencies: problem solving and other cognitive skills, oral communication skills, personal qualities, work ethic, and customer service, interpersonal and teamwork skills. Students also learn about the importance of professionalism on the jobsite and employer expectations. Employment Specialists teach students effective Internet, interviewing, and job search skills.