The Building Management and Maintenance Program aims to develop skills which are needed for planning, scheduling and controlling the efficient operation and repair of state-of-the-art equipment and buildings.

The Building Management and Maintenance curriculum prepares students to assume key positions in fields of facility operations and property management. There is a great need for highly-trained individuals to operate, manage and maintain various kinds of facilities both locally and nationally. The curriculum is unique among New York State colleges in providing this technical and managerial training.

The student will gain knowledge in the following areas: operation of a building’s mechanical system; overview of the building trades; and managerial/supervisory skills and business practices. Our program aims to develop skills which are needed for planning, scheduling and controlling the efficient operation and repair of state-of-the-art equipment and buildings.

The facilities operations and property management fields will require a thorough understanding of the construction and maintenance process. This is accomplished by utilizing trade-specific software for estimating, project management, and preventative maintenance. The training will also include computer simulations which provide students both problem solving and troubleshooting skills. The curriculum provides hands-on activities to augment and complete the education of the student.

Positions our graduates may acquire include: facilities manager, director of building services, building inspector, building automation controls technician, building engineer, property manager, building mechanic, and sales representative for building services and products.

Program Description

Degree: Associate in Occupational Studies
HEGIS Code: 5317
Curriculum Code: 0576
Campus Location: City
Engineering & Technologies Division
Pre-Admission Recommendations: 2 years math
Recommended H.S. Courses and/or Experiences: Drafting/CAD, business courses, shop courses, building trades
Career Opportunities/Further Education: Facilities manager, director of building services, building automation control technician, sales of products and service, building inspector, building mechanic, and many more.
Although this degree is designed for students entering the work force, our graduates have successfully transferred to several area colleges, such as Empire State College. At Empire State, students can work toward a B.P.S. (Baccalaureate of Professional Studies) in Facilities Management, Sports Facilities Management or Business Administration. Some graduates have also transferred to the State University of New York College at Buffalo’s Vocational Education Department to pursue trade teaching positions.

Program Competencies

Upon graduation with an Associate in Occupational Studies degree in the field of Building Management and Maintenance, the graduate will be able to:

• install, identify, categorize, operate, maintain and troubleshoot building mechanical and electrical systems using diagnostic analysis methods;
• identify building components, systems, construction material means and methods utilized in residential and commercial buildings;
• demonstrate knowledge of multiple building trade and management procedures, tool usage, diagnostic preventive maintenance and safety practices;
• ability to estimate and schedule the labor, materials and equipment necessary to manage construction renovation-restoration project and facilities operations;
• develop an understanding of project, property and supervision management for scheduling that includes the knowledge of the employment requirements, service contracts and financial documents that impact workloads, daily operations and capital improvements; and
• ability to read and interpret blueprints including structural, mechanical, electrical and architectural prints.

CURRICULUM

Total Degree Credits: 64.0

Full-Time Students

First Year, Fall Semester
BM 130 Building Systems I (3 cr)
BM 140 Electrical Systems I (3 cr)

First Year, Spring Semester
BM 231 Building Systems II (3 cr)
BM 237 Building and Grounds Operations (3 cr)
BM 240 Plumbing Systems (3 cr)
BM 241 Electrical Systems II (3 cr)
BM 275 Maintenance Management/Supervision (3 cr)
BM 281 Facilities Maintenance & Environmental Topics (3 cr)

Second Year, Fall Semester
BM 200 Techniques of Renovation and Restoration (3 cr)
BM 243 Heating Systems I (3 cr)
BM 244 Air Conditioning and Ventilation (3 cr)
BM 270 Project Management (2 cr)
BM ___ * Approved Technical Elective (3 cr)

Second Year, Spring Semester
BM 225 Energy Management (3 cr)
BM 246 Heating Systems II (3 cr)
BM 272 Property Management (3 cr)
BM 290 Maintenance Programs (4 cr)
BU ___ Business Course Elective (3 cr)

Note 1: This is a recommended sequence. Each student should consult their academic adviser prior to registering.

Note 2: Students must be at MT 006 level to take BM 181.

* Student may choose from the following list and the selection must be approved by an adviser. The course should be trade related or career path related.

BM 101 Tools, Equipment and Materials
BM 105 Refrigeration Principles
BM 120 Electricity for HVAC/R
BM 210 Commercial Air Conditioning Systems
BM 215 Workplace Practicum
BM 250 Renewable Energy Systems
BM 255 Green Building Technology
BM 260 Electrical Systems for Renewable Energy
BM 266 Green HVAC & Plumbing
BM 295 Green Building Lab
BR 100 Building Trades Practicum
BR 102 Building Trades Practicum II

Articulation Agreements - The Building Management and Maintenance curriculum currently has articulation agreements with Buffalo Public Schools and Erie 1 BOCES.