



ASSOCIATE IN APPLIED SCIENCE DEGREE Building Construction Management (ACMU)

This program prepares you for advancement to field supervisor, estimator, or field superintendent. You will reinforce your experience with the technical and theoretical knowledge essential to success in the field of building construction management.

Graduates may continue their education at Wentworth. Students are prepared to enter the Bachelor degree programs in Building Construction Management or Project Management.

Program Requirements

Graduates of the NE Carpenters Union Apprenticeship Training program will receive **23** credits in the following:

BLDG150	Contracts and Codes	4 credits
BLDG155	Construction Methods	4 credits
BLDG200	Construction Estimating	4 credits
BLDG355	Basic Building Services	4 credits
SURV100	Construction Surveying	4 credits
	Labor History	2 credits
COMP100	Intro to Computers	1 credit

Note credit for BLDG200 & COMP100 is not given until a student takes the course through the New England Carpenter's Training Fund.

Students who have not completed the Carpenters Union Apprenticeship Training Program must demonstrate competency in these specific areas to earn the 23 credits. Students who are unable to demonstrate competency in any of these areas will be required to take the appropriate coursework through Wentworth at their Boston Campus.

Major Requirements¹:

Orientation	
Construction Graphics	4 credits
Structural Design I	4 credits
Construction Project Scheduling	4 credits
Construction Safety and Risk Management	3 credits
Business Law	4 credits
Leadership and Management	4 credits

Total Major Requirements **23 credits**

General Education Requirements:

English Composition	3 credits
Literature and Composition	3 credits
Humanities <i>or</i> Social Science	3 credits
Math B	3 credits
Math C	3 credits
Physics	3 credits

Total General Education Requirements **18 credits**

Total Degree **64 credits**

This program is in candidate status with the American Council for Construction Education, ACCE.

¹ See back of sheet for course descriptions.

BLDG150 CONTRACTS AND CODES

A comprehensive study of construction contracts including conditions of agreement and modifications. Students analyze the Massachusetts State Building Code as it applies to buildings. *Prerequisites: BLDG155*

Construction Methods and CCEV115 Construction Graphics or ARCH201. 4 credits

BLDG155 CONSTRUCTION METHODS

A detailed study of current methods and equipment used in timber, masonry, and steel construction. Lab exercises emphasize plan reading. 4 credits

BLDG200 CONSTRUCTION ESTIMATING

The fundamentals of construction estimating are covered. Quantity surveys are made for various building components and prices determined for labor and materials using a current pricing handbook. Standard estimators' forms are prepared. Computer techniques and applications are also examined. *Prerequisites: BLDG155*

Construction Methods, BLDG420 Construction Operations and CCEV115 Construction Graphics. 4 credits

BLDG420 CONSTRUCTION OPERATIONS

Materials handling in heavy construction. The selection and application of heavy construction equipment including equipment productivity and cost. *Prerequisite: BLDG155 Construction*

BLDG115 CONSTRUCTION GRAPHICS

The development and interpretation of civil, architectural, structural, and electrical drawings; freehand sketching of construction details and sections; computer-aided construction drafting.

4 credits

BLDG355 BASIC BUILDING SERVICES

Examines the basic building services, including heating, water, plumbing, drainage, ventilation, air-conditioning, vertical transportation, acoustical control, electrical controls, and associated building code requirements. 4 credits

CONM241 STRUCTURAL DESIGN I

Topics include the principles of mechanics with emphasis on the use of dimensions, weights, forces and angles, centroids, center of gravity, free body diagrams and the laws of equilibrium as applied to trusses. *Prerequisite: MATH245 College Math II; PHYS 210 College Physics.* 4 Credits

BLDG425 CONSTRUCTION PROJECT SCHEDULING

Topics include project network planning, scheduling, and cost control models. Computer applications to PERT and CPM will be explored and used by the student. *Prerequisite: BLDG155 Construction Methods.* Junior status or permission of the Division Head. 4 credits

MGMT415 LEADERSHIP AND MANAGEMENT

The course presents a range of contemporary theories in management. The role of the leader and how to create leadership are stressed. 4 Credits

MGMT418 MANAGEMENT LAW, PLEASE SEE NOTE

To familiarize students with legal aspects of business and management, with special emphasis on torts, contracts, choice of business entity and creditor and consumer and issues that students may encounter in their careers. 4 credits

SURV100 CONSTRUCTION SURVEYING

Instruction is given in the theory and techniques of horizontal and vertical measurements using the tape, transit, and level. Laboratory exercises will focus on the application of these techniques as they relate to the building industry, including construction layout and grades. *Prerequisite: MATH225 College Mathematics A.* 4 credits

CONM625 CONSTRUCTION SAFETY AND RISK MANAGEMENT

Topics include the knowledge and skills required to effectively manage safety compliance and risks associated with construction.

Program Notes:

Humanities/Social Science (HUSS) electives can be either 100 or 300 level electives. Technical Courses will *not* be permitted as substitutions for the HUSS elective.

Humanities Electives: Humanities (HUMN), History (HIST), Literature (LITR) and Philosophy (PHIL) courses

Social Science Electives: History (HIST), Psychology (PSYC), Sociology (SOCL), Economics (ECON) and Political Science (POLS) courses.

**Please note that HIST can be used for both Humanities and Social Sciences courses*