

BUILDING CONSTRUCTION MANAGEMENT, Associate in Applied Science Degree

- 4510

Engineering & Technology Department

The Building Construction Management AAS program prepares students for entry-level positions in the construction/contracting field as quantity take-off technicians and estimators, schedulers, supervisors, construction inspectors, project engineers, shop drawing reviewers, construction administrators as well as others. This curriculum is also supported by general education courses in the communications, humanities, sciences, and mathematics areas. All graduates acquire general knowledge of the overall construction process. The complete program is available through Virtual Learning. Students may take this program at the Harrisburg Campus if they take courses through Virtual Learning.

In October 2017, this program received candidacy status from the American Council on Construction Education (ACCE). Receiving candidacy status is the first step in the process for the program to receive full accreditation, which may take up to five years. With accreditation status comes the recognition that graduates of this program have completed a rigorous course of study that meets national standards in construction management education. Potential employers recognize that a graduate of an ACCE accredited program has the skills and knowledge to enter the workforce of construction management companies. ACCE accreditation will also make the transfer process easier for those students wishing to continue their education at ACCE accredited programs at four-year schools. Interested students should refer to the ACCE website at www.acce-hq.org for more information.

Career or Transfer Opportunities

Graduates of the program are prepared for positions in the construction/contracting field as project managers or supervisors, construction schedulers, construction inspectors, construction estimators and contractors, project engineers, and quantity take-off technicians. Graduates may pursue a bachelor's degree in Technical Leadership through HACCC's articulation agreement with Bloomsburg University. Students may also transfer to Construction Management bachelor's degree programs at four-year schools.

Competency Profile

This curriculum is designed to prepare students to:

- Demonstrate effective communication, both orally and in writing
- Demonstrate the ability to estimate quantities and costs for the bidding process in a construction project
- Demonstrate the ability to schedule a basic construction project
- Demonstrate the ability to use current technology related to the construction process
- Interpret construction documents (contracts, specifications, and drawings) used in managing a construction project
- Apply basic principles of construction accounting
- Discuss basic surveying techniques used in building layout
- Discuss basic principles of ethics in the construction industry
- Identify the fundamentals of contracts, codes, and regulations that govern a construction project
- Recognize basic construction methods, materials and equipment
- Recognize basic safety hazards on a construction site and standard prevention measures
- Recognize the basic principles of structural design
- Recognize the basic principles of mechanical, electrical and piping systems
- Discuss the application of principles of sustainability to construction

General Education

ENGL 101 English Composition I	3
COMM 101 Effective Speaking (or)	3
COMM 203 Interpersonal Communication	(3)
Humanities & Arts Elective - HUM 115, 117 or 118	3
Mathematics or Science Elective - MATH 103	3
Social & Behavioral Science Elective - ECON 201	3
First-Year Seminar Elective - ARCH 111	3
Wellness	<u>1</u>
	19

Major Requirements

ARCH 110 Construction Print Reading	3
ARCH 130 Construction Materials & Methods	3
ARCH 135 Codes, Specifications & Safety	3
ARCH 214 Site Planning	3
ARCH 251 Environmental Control Systems for Bldgs.	3
ARCH 253 Sustainable Architecture	3
BCT 211 Structural Concepts for Construction	3
BCT 212 Construction Contracts & Related Law	3
BCT 215 Construction Estimating	3
BCT 216 Construction Planning & Scheduling	3
BCT 217 Construction Project Administration	<u>3</u>
	33

Other Required Courses

CIS 105 Intro to Software for Business	3
MGMT 227 Project Management	3
PHSC 113 Intro to Physical Science	<u>3</u>
	9

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part time students can complete this program by taking one or more courses each semester.

Fall Semester I		Spring Semester I		Fall Semester II		Spring Semester II	
ARCH 110	3	ARCH 130	3	ARCH 214	3	BCT 215	3
ARCH 111	3	ARCH 135	3	ARCH 253	3	COMM 101 or 203	3
CIS 105	3	ARCH 251	3	BCT 211	3	ECON 201	3
ENGL 101	3	BCT 217	3	BCT 212	3	HUM 115, 117 or 118	3
MGMT 227	3	MATH 103	3	BCT 216	3	PHSC 113	3
						Wellness	1