

BUILDING CONSTRUCTION TECHNOLOGY, A.A.S. - BCT3

Concerns about building costs, home maintenance and repair and energy efficient dwellings have elevated job market demands for skilled construction workers in practically every area of the building industry. A comprehensive program that offers practical training in the entire range of residential and light commercial building techniques, Building Construction Technology puts classroom knowledge to work in hands-on projects both on the Lex Walters Campus-Greenwood and outside the college community. Students get practical training in estimating building costs, carpentry, cabinet making, residential wiring, blueprint reading, brick masonry, construction, building codes and safety. A good background in economics and communications combines with a high level of skills in building techniques to prepare graduates for general construction, specialty work or supervision of construction projects. Upon completion of 73 credit hours, a student will be awarded an Associate in Applied Science degree with a major in Building Construction Technology.

Requirements

Courses	Course Title	Credit Hours
General Education Courses		
ENG 165	Professional Communications	3
MAT 170	Algebra, Geometry and Trigonometry I	3
SPC 205	Public Speaking	3
Elective Social/Behavioral Sciences (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/)		3
Elective Humanities/Fine Arts (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/)		3
Subtotal		15
Required Core Subject Areas		
BCT 101	Introduction to Building Construction	5
BCT 102	Fundamentals of Building Construction	4
BCT 113	Fundamentals of Construction Prints	4
BCT 131	Estimating/Quantity Take Off	2
BCT 212	Construction Methods and Design	3
BCT 221	Construction Building Code	3
Subtotal		21
Other Courses Required for Graduation		
BCT 103	Construction Site Layout	4
BCT 105	Tool Usage and Safety	2
BCT 139	Advanced Residential Wiring	3
BCT 151	Introduction to Residential Plumbing	3
BCT 202	Principles of Form Construction	4
BCT 204	Cabinet Making	4
BCT 208	Framing and Roofing	3
BCT 209	Construction Project Management	3
BCT 222	License Preparation	3

BCT 231	Construction Labor and Expediting	3
MSY 101	Masonry Fundamentals	5
Subtotal		37
Total Hours		73

Graduation Plan

Fall Start

Course	Title	Hours
First Year		
Fall Semester		
BCT 101	Introduction to Building Construction	5
BCT 105	Tool Usage and Safety	2
BCT 113	Fundamentals of Construction Prints	4
MAT 170	Algebra, Geometry and Trigonometry I	3
Hours		14

Spring Semester

BCT 102	Fundamentals of Building Construction	4
BCT 131	Estimating/Quantity Take Off	2
BCT 139	Advanced Residential Wiring	3
ENG 165 or ENG 101	Professional Communications or English Composition I	3
Elective Humanities/Fine Arts (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/)		3
Hours		15

Summer Semester

BCT 103	Construction Site Layout	4
BCT 204	Cabinet Making	4
BCT 208	Framing and Roofing	3
BCT 212	Construction Methods and Design	3
Hours		14

Second Year

Fall Semester

BCT 202	Principles of Form Construction	4
BCT 221	Construction Building Code	3
BCT 231	Construction Labor and Expediting	3
MSY 101	Masonry Fundamentals	5
SPC 205	Public Speaking	3
Hours		18

Spring Semester

BCT 151	Introduction to Residential Plumbing	3
BCT 209	Construction Project Management	3
BCT 222	License Preparation	3
Elective Behavioral Science (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/)		3
Hours		12
Total Hours		73



Spring Start

Course	Title	Hours
First Year		
Spring Semester		
MAT 170	Algebra, Geometry and Trigonometry I	3
ENG 165 or ENG 101	Professional Communications or English Composition I	3
	Elective Behavioral Science (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/)	3
	Elective Humanities/Fine Arts (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/)	3
	Hours	12
Fall Semester		
BCT 101	Introduction to Building Construction	5
BCT 105	Tool Usage and Safety	2
BCT 113	Fundamentals of Construction Prints	4
SPC 205	Public Speaking	3
	Hours	14
Second Year		
Spring Semester		
BCT 102	Fundamentals of Building Construction	4
BCT 131	Estimating/Quantity Take Off	2
BCT 139	Advanced Residential Wiring	3
	Hours	9
Summer Semester		
BCT 103	Construction Site Layout	4
BCT 204	Cabinet Making	4
BCT 208	Framing and Roofing	3
BCT 212	Construction Methods and Design	3
	Hours	14
Fall Semester		
BCT 202	Principles of Form Construction	4
BCT 221	Construction Building Code	3
BCT 231	Construction Labor and Expediting	3
MSY 101	Masonry Fundamentals	5
	Hours	15
Third Year		
Spring Semester		
BCT 151	Introduction to Residential Plumbing	3
BCT 209	Construction Project Management	3
BCT 222	License Preparation	3
	Hours	9
	Total Hours	73

Summer Start

Course	Title	Hours
First Year		
Summer Semester		
MAT 170	Algebra, Geometry and Trigonometry I	3

ENG 165 or ENG 101	Professional Communications or English Composition I	3
	Elective Behavioral Science (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/)	3
	Elective Humanities/Fine Arts (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/)	3
	Hours	12
Fall Semester		
BCT 101	Introduction to Building Construction	5
BCT 105	Tool Usage and Safety	2
BCT 113	Fundamentals of Construction Prints	4
SPC 205	Public Speaking	3
	Hours	14
Spring Semester		
BCT 102	Fundamentals of Building Construction	4
BCT 131	Estimating/Quantity Take Off	2
BCT 139	Advanced Residential Wiring	3
	Hours	9
Second Year		
Summer Semester		
BCT 103	Construction Site Layout	4
BCT 204	Cabinet Making	4
BCT 208	Framing and Roofing	3
BCT 212	Construction Methods and Design	3
	Hours	14
Fall Semester		
BCT 202	Principles of Form Construction	4
BCT 221	Construction Building Code	3
BCT 231	Construction Labor and Expediting	3
MSY 101	Masonry Fundamentals	5
	Hours	15
Spring Semester		
BCT 151	Introduction to Residential Plumbing	3
BCT 209	Construction Project Management	3
BCT 222	License Preparation	3
	Hours	9
	Total Hours	73

Application and Advising

If you are ready to start your education, there are a few simple steps involved in enrolling at Piedmont Technical College.

Get Started Today (<https://www.ptc.edu/admissions/new-students/>)

Advising Information

The following information provides a guide for advisors who are helping students enroll in this program.

Program Notes

BCT coursework starts fall semester only. BCT courses are generally offered only during the day at the Greenwood Campus, and should be taken as outlined in the Semester-by-semester graduation plans below.

General education requirements may be met at county campuses, in evening classes, and online.

When advising students for fall, advise for BCT courses first and then for developmental courses if they are needed. However, if placement test scores are very low, advise for developmental courses, and have the student meet with the department head of BCT, who will determine if the student can enter BCT courses. Students entering the college in spring or summer should be advised to complete any needed developmental coursework and/or general education coursework before the BCT program starts in the fall.

Students with proven experience in the field may be eligible to exempt certain courses. The department head administers exemption tests.

Estimated cost of hand tools is \$200 per semester. Students will be given a list of required tools each semester.

Students may earn a carpentry certificate by completing BCT 101, 113, 142, 102, 131, 212 and an elective. All students should come in under BCT3, and they can stop once they earn the certificate. However, students are more likely to find employment, and earn higher wages, by earning the degree.

Notes About Individual Classes

The math required for this program is MAT 170. Students will follow this progression, with their starting point being determined by their placement test scores: MAT 032/012 > MAT 170.

The English required for this program is ENG 165. Students will follow this progression, with their starting point being determined by their placement test scores: ENG 032/012 and/or RDG 032/012 (or RWR 032/012) > ENG 100 and/or RDG 100 (or RWR 100) > ENG 165.

Program Student Learning Outcomes

Purpose Statement

The mission of the Building Construction Technology program is to be a comprehensive training program that offers practical training in the entire range of residential and light commercial building techniques through "hands-on" training applications with associated lecture classes to provide the most up-to-date training and to enable gainful employment in the field.

Program Student Learning Outcomes

1. Perform the basic manipulative skills involved in carpentry for residential construction.
2. Perform the basic manipulative skills in masonry for residential construction.
3. Perform the basic manipulative skills in residential wiring for residential construction.
4. Make application and use the underlying theories, technical information and related occupational information to assure sound judgments, decisions, and proper procedures involved in the

residential building construction trades of construction trades of carpentry, masonry, and electrical.

5. Demonstrate the ability to interpret blueprints and technical materials necessary to construct a residential building.
6. Perform in an acceptable workmanship-like manner in the residential construction trade based recognized building codes (both local and international residential builders' code).
7. Estimate and schedule the materials and labor in the building of a residential structure through the framing stages and finish stages.
8. Demonstrate the ability to perform the majority of tasks assigned in a safe and common sense manner in accordance with established safety standards in the construction industry. (OSHA standards for the construction industry).
9. Demonstrate the ability to identify entry level procedures and planning processes needed to open and operate a small business in the free enterprise system.