



# BUILDING CONSTRUCTION TECHNOLOGY PROGRAM OF STUDY

## Education Planning Guide for High School and Beyond

This Education Planning Guide is designed to assist students toward developing a program of study well suited for preparation and pursuit of careers within the Carpentry & Construction Trades industry. The program of study as outlined below allows students to earn college credit while completing coursework within high school, and apply those credits toward attainment of a college certificate and/or degree. **The Tech Prep dual credit courses are shown in blue /<sup>TP</sup>**. As with all high school planning, it is important to share and review your plan with a parent/guardian and school counselor.

School District Component of Program of Study	Gr	English	Social Studies	Science	Math	Health/Fitness	Arts	Career & Technical	Recommended Courses	School District Graduation Requirements	
	9								<b>Computer Applications</b> <sup>TP</sup>  <b>Construction</b> <sup>TP</sup> <b>Careers Academy</b>  <b>Carpentry</b> <sup>TP</sup>  <b>Woodworking</b> <sup>TP</sup>  <b>CAD</b> <sup>TP</sup>  Business/ Entrepreneurship	Business Communications  Algebra I & II  Geometry	<b>Credit Requirements ( credits total):</b> credits - English credits - Social Studies credits - Math credits - Science credits - Health credits - Physical Education credits - Art credits - Career and Technical credits - Electives  <b>Additional Requirements:</b> • High School and Beyond Plan • Culminating Project • Certificate of Academic Achievement or approved alternative
	10										
	11										
	12										

**\*Take College Placement Assessment/Academic-Career Advisement Provided**

Post - High School Options for Program of Study	Program Options	Earn a Program Certificate Construction Technician	Earn a 2-Year Degree (AAS) Building Construction Technology	Complete a Carpentry Apprenticeship Program	Earn a Transfer Degree (AAS-T) Associate of Applied Science Degree
	Program Requirements	<b>Completion: 3 quarters/75 credits</b> COM 170 Oral & Written Communications 5 MATH 100 Occupational Math – 5 cr PSYC 111 Interpersonal & Organizational Psychology – 5 cr  <b>BCT 111 Career Opportunities &amp; Industrial Safety – 1 cr</b> <b>BCT 112 Construction Materials &amp; Application – 2 cr</b> <b>BCT 113 H and Tool Use &amp; Operations – 2 cr</b> <b>BCT 114 Portable Power Tools Use &amp; Operations – 4 cr</b> <b>BCT 115 Stationary Power Tool Use &amp; Operations – 4 cr</b> <b>BCT 116 Building Layout – 2 cr</b> <b>BCT 117 Concrete &amp; Concrete Forming – 3 cr</b> <b>BCT 121 Blueprint Reading – 4 cr</b> <b>BCT 122 Framing Methods - Floor Framing – 4 cr</b> <b>BCT 123 Framing Methods - Wall Framing – 4 cr</b> <b>BCT 124 Framing Methods - Ceiling Framing – 4 cr</b> <b>BCT 125 Truss Roof Framing – 4 cr</b> BCT 130 Roof Framing – 5 cr BCT 131 Roof Sheathing & Coverings – 2 cr BCT 132 Stair Framing – 2 cr BCT 133 Exterior Door Windows & Skylights – 4 cr BCT 134 Exterior Walls & Roof Coverings – 2 cr BCT 135 Interior Wall Covering Insulation & Trim – 4 cr BCT 136 Intro to House Wiring & Plumbing – 3 cr	<b>Completion: 5 quarters/109 credits</b> COM 170 Oral & Written Communications 5 MATH 100 Occupational Math – 5 cr PSYC 111 Interpersonal & Organizational Psychology – 5 cr <b>BCT 111 Career Opportunities &amp; Industrial Safety – 1 cr</b> <b>BCT 112 Construction Materials &amp; Application – 2 cr</b> <b>BCT 113 H and Tool Use &amp; Operations – 2 cr</b> <b>BCT 114 Portable Power Tools Use &amp; Operations – 4 cr</b> <b>BCT 115 Stationary Power Tool Use &amp; Operations – 4 cr</b> <b>BCT 116 Building Layout – 2 cr</b> <b>BCT 117 Concrete &amp; Concrete Forming – 3 cr</b> <b>BCT 121 Blueprint Reading – 4 cr</b> <b>BCT 122 Framing Methods - Floor Framing – 4 cr</b> <b>BCT 123 Framing Methods - Wall Framing – 4 cr</b> <b>BCT 124 Framing Methods - Ceiling Framing – 4 cr</b> <b>BCT 125 Truss Roof Framing – 4 cr</b> BCT 130 Roof Framing – 5 cr BCT 131 Roof Sheathing & Coverings – 2 cr BCT 132 Stair Framing – 2 cr BCT 133 Exterior Door Windows & Skylights – 4 cr BCT 134 Exterior Walls & Roof Coverings – 2 cr BCT 135 Interior Wall Covering Insulation & Trim – 4 cr BCT 136 Intro to House Wiring & Plumbing – 3 cr BCT 241 CAD Drafting Fundamentals – 8 cr BCT 242 Building Plan Drafting – 8 cr BCT 243 Estimating Materials & Labor – 5 cr BCT 245 Project Tracking – 2 cr BCT 251 Internship Building Construction -11 cr	<b>Completion: 3-4 years</b> Programs require 640 hrs of related instruction (classroom) as well as up to 8000 hrs of supervised on-the-job training. <ul style="list-style-type: none"> <li>• Safety 500 hours</li> <li>• Concrete Formwork 2000 hours</li> <li>• Wood Framing 1500 hours</li> <li>• Interior/Exterior Finish 2000 hours</li> <li>• Systems 1000 hours</li> <li>• Supplemental 1000 hours</li> </ul> <b>Preferred-Entry Option:</b> BTC Building Construction Technology graduates are afforded an interview with Apprenticeship Committee upon submitting application & letter of recommendation. Every effort will be made to place individuals in the industry.  <hr/> Construction Industry Training Council-WA 1930 – 116 <sup>th</sup> Ave. NE – Suite 201 Bellevue, WA 98004 425-285-2324  North Puget Sound Carpenter Training Center 401 East Hickox Road Mt. Vernon, WA 98273-4506 360-428-2933	To complete a transfer degree option, students must also take:  ENGL& 101 English Composition – 5 cr MATH& 141 Precalculus I – 5 cr <i>OR</i> MATH& 107 Math in Society – 5 cr PSYC& 100 General Psychology – 5 cr  Plus 5 credits from the list of courses “generally accepted in transfer list” by other institutions in Washington. These will vary by field degree area.  <hr/> <b>Earn a Bachelor’s Degree</b>  Construction Management, Project Management, Business Administration  DeVry Peninsula City University  For current information, go to BTC’s website. Select <i>Student Services and Transfer Options:</i> <a href="http://www.btc.ctc.edu">http://www.btc.ctc.edu</a>

An entry level salary range in construction is \$30,000 per year for full-time employment; with a wage potential of up to \$60,000. Employment opportunities include carpenter, contractor, building designer, building maintenance, cabinet maker, installer, painter, salesperson, and line foreman.