

Construction Trades



Recommendations for Success:

- Size and shape discrimination
- Able to withstand outside elements and tolerate heights
- Structural and mechanical visualization/reasoning skills
- Manual dexterity including fine motor skills
- Excellent eye-hand-foot coordination
- Physical stamina; able to lift 50 lbs or more
- Tolerate loud working environments
- Able to work in confined spaces
- Follow safety rules and precautions
- Reasoning skills – both inductive and deductive
- Good attendance
- Homework completion
- Measure in both fractions and decimals
- Ability to tolerate cold and hot temperatures



Lenape Technical School	Construction Technology
Objective of field	The Construction Technology curriculum provides excellent preparation for those whose career goals include becoming a Carpenter, Electrician, Plumber, Mason, HVAC Technician, Equipment Operator, Architect, Foreman, Project Manager, Estimator, Project Engineer, Heavy Highway Worker, and Business Owner.
Job Duties	<ul style="list-style-type: none"> • Students will work in groups to build a one-story home • Students will also work on various projects from cabinetry to assorted types of finish work
Classroom Tests	<p>Year 1: 22 safety tests, 9 chapter tests, and reviews*</p> <p>Year 2: 9 chapter tests and reviews*</p> <p>Year 3: 8 chapter tests and reviews*</p> <p><i>*This number is approximate and subject to change</i></p>
Certification Tests	<p>10 Hour Construction OSHA Card</p> <p>10 Hour General Industry OSHA Card</p> <p>EPA 608</p> <p>EPA 609</p> <p>EPA 410A</p> <p>EPA Maintenance Tech</p> <p>EPA Indoor Air Quality Tech</p> <p>EPA Green Tech</p> <p>Forklift Certification</p> <p>National Home Builders Association</p>
Books	<p><u>NCCER Residential Construction</u></p> <p><u>International Residential Code Book 2009</u></p>
Lecture Time	<p>Year 1: 45 minutes, four times a week*</p> <p>Year 2: 45 minutes, four times a week*</p> <p>Year 3: 30 minutes, four times a week*</p> <p><i>*This number is approximate and subject to change</i></p>
Co-op/Clinical	<ul style="list-style-type: none"> • Student must complete 80% of competency list • Student must receive approval from all members of the professional staff • Student must have a "B" grade or higher in all subjects • Student must have a satisfactory discipline record • Student must maintain passing grades while they are in the co-op program • Student must maintain strong attendance record and demonstrate punctuality • Student must provide their own transportation to and from work
Homework	<ul style="list-style-type: none"> • Chapter reviews • Essays • Research papers
Task Lists	<p>Year 1 – 10 tasks*</p> <p>Year 2 – 15 tasks*</p> <p>Year 3 – 18 tasks*</p> <ul style="list-style-type: none"> • Students enrolled in the Carpentry/Construction program will participate in hand and power tool safety, set up and layout of job sites, concrete, framing, roofing, interior finish, and exterior finish all within our state building code requirements. <p><i>*This number is approximate and subject to change</i></p>

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Planned Courses	<ul style="list-style-type: none"> • Safety • Tool Safety • Materials and Fasteners • Blueprints • Concrete • Framing • Roofing • Exterior Finish • Interior Finish • Stair Framing • Cabinets and Countertops • Residential Electrical • Residential Plumbing • Masonry • HVAC
Academic Skills	<p>High School Reading Level</p> <p>Math Skills:</p> <ul style="list-style-type: none"> • Fractions/decimals (add, subtract, multiply, divide) • Order of operations • Sine, cosine, tangent • Pythagorean Theorem • Special triangles • Application of trigonometry/geometry • Formulas • Conversion of linear measurement: US Customary to metric and vice versa
Soft Skills	<ul style="list-style-type: none"> • Communication • Patience • Ability to pace work • Team work • Listening • Critical thinking • Reasoning
Computer Skills	<ul style="list-style-type: none"> • Microsoft Word and PowerPoint
Physical Requirements	<ul style="list-style-type: none"> • Lift 50 pounds • Toleration of extreme temperature changes • No fear of heights • Hand-eye-foot coordination • Manual dexterity • Tolerate loud noise levels • Work in confined spaces
Vocational Testing Essential Aptitudes for lab recommended levels	<ul style="list-style-type: none"> • Structural mechanical visualization/reasoning • Discrimination by size/shape • Gross/fine motor skills • Manual dexterity • Retention of mechanical and structural detail
Training	<p>Lenape Tech's Carpentry/Construction Technology program covers the NAHB curriculum and works with our state and local building codes. Upon completion of this course, you will be prepared to apply for our union trades, go straight to the work force, or pursue post-secondary education.</p>

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Uniform Requirements Uniform Requirements Continued	Student's Expense: <ul style="list-style-type: none"> • Work boots or Work Shoes (steel toes are recommended) NO TENNIS SHOES • 100% cotton clothing <ul style="list-style-type: none"> • Shop shirt • Heavy cotton work pants • T-shirts (no sleeveless tank tops) • Lenape Tech polo • No baggy clothing in shop • All shop gear tucked in and buttoned 							
Articulation/Agreements	This is a program of study (POS) with a state-wide articulation agreement with post-secondary institutions. To find these, please see: www.collegetransfer.net for this CIP Code: 46.0201							
Employment/Job Outlook	<p>Employment in the Construction Trades is projected to grow 20 percent from 2010 to 2020, faster than the average for all occupations. Population growth should result in new-home construction—the largest segment employing carpenters—which will stimulate the need for many new workers. Demand for Contractors and Technicians is expected to be driven by home remodeling needs as well.</p> <p>The need to repair and replace roads and bridges also will spur some employment growth for those in the trades. Much of this growth, however, depends on spending by federal and state governments as they attempt to upgrade existing infrastructure.</p> <p>Construction of factories and powerplants also may result in some new jobs.</p> <table border="1" data-bbox="479 976 1518 1346"> <thead> <tr> <th data-bbox="479 976 824 1039">Industry</th> <th data-bbox="824 976 1170 1039">2-Year Associates Degree</th> <th data-bbox="1170 976 1518 1039">4-Year Union Apprentice</th> </tr> </thead> <tbody> <tr> <td data-bbox="479 1039 824 1346"> Entry-Level Carpenter Roofer Framing Carpenter Finish Carpenter Foreman/Manager Drywaller Mason Electrician Plumber HVAC Technician </td> <td data-bbox="824 1039 1170 1346"> Building Construction Technology Architectural Designs </td> <td data-bbox="1170 1039 1518 1346"> Operator Commercial Carpenter Residential Carpenter Drywaller/Steel Framing Mason Floor Layer Piledriver Steamfitters HVAC Pipefitters </td> </tr> </tbody> </table>		Industry	2-Year Associates Degree	4-Year Union Apprentice	Entry-Level Carpenter Roofer Framing Carpenter Finish Carpenter Foreman/Manager Drywaller Mason Electrician Plumber HVAC Technician	Building Construction Technology Architectural Designs	Operator Commercial Carpenter Residential Carpenter Drywaller/Steel Framing Mason Floor Layer Piledriver Steamfitters HVAC Pipefitters
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How to find out more?	http://www.bls.gov/ooh/Construction-and-Extraction/Carpenters.htm#tab-1							