



**Careers in designing, planning, managing, building and maintaining the built environment.**

PATHWAYS	SKILLS STANDARDS	CURRICULUM		ASSESSMENTS	
<p><b>Design/Pre-Construction</b></p>	<ul style="list-style-type: none"> <li>• Drafting:               <ul style="list-style-type: none"> <li>— Drafting Technician</li> <li>— Architectural Drafter</li> <li>— Mechanical Drafter</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Career Clusters: Architecture and Construction Cluster VHS and DVD</li> <li>• Basic Drafting</li> <li>• Environmental Technologies TLA</li> </ul>	<ul style="list-style-type: none"> <li>• Civil Technology Applications</li> <li>• Basic Surveying Technology</li> </ul>	<ul style="list-style-type: none"> <li>• Structural Engineering TLA</li> <li>• Problem Solving TLA</li> <li>• Drafting: Engineering Sketching TLA</li> </ul>	<ul style="list-style-type: none"> <li>• Drafting:               <ul style="list-style-type: none"> <li>— Drafting Technician</li> <li>— Architectural Drafter</li> <li>— Mechanical Drafter</li> </ul> </li> </ul>
<p><b>Construction</b></p>	<ul style="list-style-type: none"> <li>• Welding:               <ul style="list-style-type: none"> <li>— Shielded Metal Arc Welder</li> <li>— Gas Metal Arc Welder</li> <li>— Flux-Cored Arc Welder</li> <li>— Gas Tungsten Arc Welder</li> <li>— Cutting Process Operator</li> </ul> </li> <li>• Heating, Ventilation, Air Conditioning &amp; Refrigeration:               <ul style="list-style-type: none"> <li>— HVAC Technician</li> <li>— Refrigeration Technician</li> <li>— Sheet Metal Technician</li> <li>— Natural Gas Piping Technician</li> <li>— Process Piping Technician</li> </ul> </li> <li>• Electrical Trades:               <ul style="list-style-type: none"> <li>— Residential Electrician's Assistant</li> <li>— Commercial/Industrial Electrician's Assistant</li> </ul> </li> <li>• Cabinetmaking:               <ul style="list-style-type: none"> <li>— Cabinetmaker Helper</li> </ul> </li> <li>• Construction Trainee</li> <li>• Plumbing Apprentice Technician</li> <li>• Brick Masonry:               <ul style="list-style-type: none"> <li>— Mason Tender</li> <li>— Masonry Trainee</li> </ul> </li> <li>• Carpentry:               <ul style="list-style-type: none"> <li>— Form Carpenter</li> <li>— Finish Carpenter</li> <li>— Frame Carpenter</li> <li>— Drywall Installation Trainee</li> <li>— Roofer</li> </ul> </li> <li>• Landscape Maintenance Technician</li> </ul>	<ul style="list-style-type: none"> <li>• Career Clusters: Architecture and Construction Cluster VHS and DVD</li> <li>• Fundamentals of Air Conditioning and Refrigeration</li> <li>• Residential and Light Commercial Heating, Ventilation, Air Conditioning &amp; Refrigeration               <ul style="list-style-type: none"> <li>— System Design</li> <li>— Equipment Operation and Application</li> </ul> </li> <li>• Air Conditioning and Refrigeration: Electrical Components and Systems</li> <li>• Air Conditioning and Refrigeration: Domestic Refrigeration</li> <li>• Basic Electrical Wiring</li> <li>• Residential Wiring</li> <li>• Commercial and Industrial Wiring</li> <li>• Power Line Technician Training Series</li> <li>• Residential Plumbing</li> <li>• Wind Turbine Technician</li> <li>• Fundamentals of Carpentry</li> <li>• Residential and Commercial Carpentry Core</li> <li>• Residential Carpentry</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial Carpentry</li> <li>• Form Carpentry Video and DVD Series</li> <li>• Frame Carpentry Video and DVD Series</li> <li>• Interior Systems Video</li> <li>• Highway Bridge Carpentry</li> <li>• Fundamentals of Bricklaying</li> <li>• Brick and Block Masonry</li> <li>• Stone Masonry, Panel and Tile Installation</li> <li>• Concrete and Cement Masonry, Year I</li> <li>• Concrete and Cement Masonry, Year II</li> <li>• Concrete and Cement Masonry, Year III</li> <li>• OPCMIA: Cement Masons Job Corps Training Program</li> <li>• OPCMIA: Operative Plaster Job Corps</li> <li>• Concrete and Cement Masonry Video and CD-ROM Series</li> <li>• Concrete and Cement Masonry: Staining, Stenciling, and Imprinting DVDs</li> <li>• Millwright</li> <li>• Fundamentals of Construction</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Bricklaying</li> <li>• Introduction to Carpentry</li> <li>• Introduction to Concrete Finishing</li> <li>• Introduction to Construction Welding</li> <li>• Introduction to Drywall</li> <li>• Introduction to Electricity</li> <li>• Introduction to Heating, Ventilation, and Air Conditioning</li> <li>• Introduction to Highway-Bridge Construction</li> <li>• Introduction to Insulation</li> <li>• Introduction to Interior Systems</li> <li>• Introduction to Plumbing</li> <li>• Introduction to Roofing</li> <li>• Introduction to Sheet Metal</li> <li>• Heavy Equipment Operator Core</li> <li>• Heavy Equipment Operator: General Equipment</li> <li>• Heavy Equipment Mechanic</li> <li>• Residential Construction TLA</li> <li>• TechConnect Carpentry</li> <li>• TechConnect Concrete</li> <li>• Operative Plasterers Book One</li> </ul>	<ul style="list-style-type: none"> <li>• Welding:               <ul style="list-style-type: none"> <li>— Shielded Metal Arc Welder</li> <li>— Gas Metal Arc Welder</li> <li>— Flux-Cored Arc Welder</li> <li>— Gas Tungsten Arc Welder</li> <li>— Cutting Process Operator</li> </ul> </li> <li>• Heating, Ventilation, Air Conditioning &amp; Refrigeration:               <ul style="list-style-type: none"> <li>— HVAC Technician</li> <li>— Refrigeration Technician</li> <li>— Sheet Metal Technician</li> <li>— Natural Gas Piping Technician</li> </ul> </li> <li>• Electrical Trades:               <ul style="list-style-type: none"> <li>— Residential Electrician's Assistant</li> <li>— Commercial/Industrial Electrician's Assistant</li> </ul> </li> <li>• Cabinetmaker Helper</li> <li>• Construction Trainee</li> <li>• Plumbing Apprentice Technician</li> <li>• Brick Masonry:               <ul style="list-style-type: none"> <li>— Mason Tender</li> <li>— Masonry Trainee</li> </ul> </li> <li>• Carpentry:               <ul style="list-style-type: none"> <li>— Form Carpenter</li> <li>— Finish Carpenter</li> <li>— Frame Carpenter</li> <li>— Drywall Installation Trainee</li> <li>— Roofer</li> </ul> </li> <li>• Landscape Maintenance Technician</li> </ul>



(Continued)

PATHWAYS	SKILLS STANDARDS	CURRICULUM		ASSESSMENTS	
<b>Construction</b> (continued)	<ul style="list-style-type: none"> <li>• Heavy Equipment Operation:               <ul style="list-style-type: none"> <li>— Backhoe Operator</li> <li>— Dozer Operator</li> <li>— Scraper Operator</li> <li>— Loader Operator</li> <li>— Grader Operator</li> <li>— Hydraulic Excavator Operator</li> <li>— Forklift Operator</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Operative Plasterers Book Two</li> <li>• Oxyacetylene Welding and Oxyfuel Cutting</li> <li>• SMAW: Shielded Metal Arc Welding and Carbon Arc Cutting – Arc</li> <li>• GMAW: Gas Metal Arc Welding and FCAW: Flux-Cored Arc Welding</li> <li>• GTAW: Gas Tungsten Arc Welding and Plasma Arc Cutting</li> </ul>	<ul style="list-style-type: none"> <li>• TechConnect Introduction to Sheet Metal</li> <li>• TechConnect Introduction to Welding</li> </ul>	<ul style="list-style-type: none"> <li>• Dozer Operator</li> <li>• Heavy Equipment Operator</li> </ul>	
<b>Maintenance/Operations</b>	<ul style="list-style-type: none"> <li>• Building Maintenance Technology:               <ul style="list-style-type: none"> <li>— Carpentry</li> <li>— Plumbing</li> <li>— Heating, Ventilation, Air Conditioning &amp; Refrigeration</li> <li>— Electrical</li> </ul> </li> <li>• Welding:               <ul style="list-style-type: none"> <li>— Shielded Metal Arc Welder</li> <li>— Gas Metal Arc Welder</li> <li>— Flux-Cored Arc Welder</li> <li>— Gas Tungsten Arc Welder</li> <li>— Cutting Process Operator</li> </ul> </li> <li>• Heating, Ventilation, Air Conditioning &amp; Refrigeration:               <ul style="list-style-type: none"> <li>— HVAC Technician</li> <li>— Refrigeration Technician</li> <li>— Sheet Metal Technician</li> <li>— Natural Gas Piping Technician</li> </ul> </li> <li>• Electrical Trades:               <ul style="list-style-type: none"> <li>— Residential Electrician's Assistant</li> <li>— Commercial/Industrial Electrician's Assistant</li> </ul> </li> <li>• Cabinetmaking:               <ul style="list-style-type: none"> <li>— Cabinetmaker Helper</li> </ul> </li> <li>• Construction Trainee</li> <li>• Plumbing Apprentice Technician</li> <li>• Brick Masonry:               <ul style="list-style-type: none"> <li>— Mason Tender</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Career Clusters: Architecture and Construction Cluster VHS and DVD</li> <li>• Fundamentals of Air Conditioning and Refrigeration</li> <li>• Residential and Light Commercial Heating, Ventilation, Air Conditioning &amp; Refrigeration               <ul style="list-style-type: none"> <li>— System Design</li> <li>— Equipment Operation and Application</li> </ul> </li> <li>• Air Conditioning and Refrigeration: Electrical Components and Systems</li> <li>• Air Conditioning and Refrigeration: Domestic Refrigeration</li> <li>• Basic Electrical Wiring</li> <li>• Residential Wiring</li> <li>• Commercial and Industrial Wiring</li> <li>• A Contractor's Guide to Building a Safe Room</li> <li>• Power Line Technician Training Series</li> <li>• Residential Plumbing</li> <li>• Wind Turbine Technician</li> <li>• Fundamentals of Carpentry</li> </ul>	<ul style="list-style-type: none"> <li>• Residential and Commercial Carpentry Core Modules</li> <li>• Residential Carpentry</li> <li>• Commercial Carpentry</li> <li>• Form Carpentry Video and DVD Series</li> <li>• Frame Carpentry Video and DVD Series</li> <li>• Interior Systems Video Series</li> <li>• Highway Bridge Carpentry</li> <li>• Fundamentals of Bricklaying</li> <li>• Brick and Block Masonry</li> <li>• Stone Masonry, Panel and Tile Installation</li> <li>• Millwright</li> <li>• Concrete and Cement Masonry, Year I</li> <li>• Concrete and Cement Masonry, Year II</li> <li>• Concrete and Cement Masonry, Year III</li> <li>• OPCMIA: Cement Masonry Video and CD-ROM Series</li> <li>• Fundamentals of Construction</li> <li>• Concrete and Cement Masonry: Staining, Stenciling, and Imprinting DVDs</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Bricklaying</li> <li>• Introduction to Carpentry</li> <li>• Introduction to Concrete Finishing</li> <li>• Introduction to Concrete Reinforcing</li> <li>• Introduction to Heating, Ventilation, and Air Conditioning</li> <li>• Introduction to Highway-Bridge Construction</li> <li>• Introduction to Insulation</li> <li>• Introduction to Interior Systems</li> <li>• Introduction to Plumbing</li> <li>• Introduction to Roofing</li> <li>• Introduction to Sheet Metal</li> <li>• Heavy Equipment Operator Core</li> <li>• Heavy Equipment Operator: General Equipment &amp; DVD</li> <li>• Heavy Equipment Mechanic</li> <li>• Operative Plasterers Book One</li> <li>• Operative Plasterers Book Two</li> </ul>	<ul style="list-style-type: none"> <li>• Building Maintenance Technology:               <ul style="list-style-type: none"> <li>— Carpentry</li> <li>— Plumbing</li> <li>— Heating, Ventilation, Air Conditioning &amp; Refrigeration</li> <li>— Electrical</li> </ul> </li> <li>• Shielded Metal Arc Welder</li> <li>• Gas Metal Arc Welder</li> <li>• Flux-Cored Arc Welder</li> <li>• Gas Tungsten Arc Welder</li> <li>• Cutting Process Operator</li> <li>• Heating, Ventilation, Air Conditioning &amp; Refrigeration Technician</li> <li>• Heating, Ventilation, Air Conditioning &amp; Refrigeration:               <ul style="list-style-type: none"> <li>— Refrigeration Technician</li> <li>— Sheet Metal Technician</li> <li>— Natural Gas Piping Technician</li> </ul> </li> <li>• Residential Electrician's Assistant</li> <li>• Commercial/Industrial Electrician's Assistant</li> <li>• Cabinetmaker Helper</li> <li>• Construction Trainee</li> <li>• Plumbing Apprentice Technician</li> </ul>



(Continued)

PATHWAYS	SKILLS STANDARDS	CURRICULUM	ASSESSMENTS
<b>Maintenance/Operations</b> (continued)	<ul style="list-style-type: none"> <li>— Masonry Trainee</li> <li>• Carpentry:               <ul style="list-style-type: none"> <li>— Form Carpenter</li> <li>— Finish Carpenter</li> <li>— Frame Carpenter</li> <li>— Drywall Installation Trainee</li> <li>— Roofer</li> </ul> </li> <li>• Construction Trainee</li> <li>• Plumbing Apprentice Technician</li> <li>• Landscape Maintenance Technician</li> <li>• Heavy Equipment Operation:               <ul style="list-style-type: none"> <li>— Backhoe Operator</li> <li>— Dozer Operator</li> <li>— Scraper Operator</li> <li>— Loader Operator</li> <li>— Grader Operator</li> <li>— Hydraulic Excavator Operator</li> <li>— Backhoe Operator</li> <li>— Forklift Operator</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• TechConnect Introduction to Sheet Metal</li> <li>• Oxyacetylene Welding and Oxyfuel Cutting</li> <li>• SMAW: Shielded Metal Arc Welding and Carbon Arc Cutting – Arc</li> <li>• GMAW: Gas Metal Arc Welding and FCAW: Flux-Cored Arc Welding</li> <li>• GTAW: Gas Tungsten Arc Welding and Plasma Arc Cutting</li> <li>• TechConnect Introduction to Welding</li> </ul>	<ul style="list-style-type: none"> <li>• Brick Masonry:               <ul style="list-style-type: none"> <li>— Mason Tender</li> <li>— Masonry Trainee</li> </ul> </li> <li>• Carpentry:               <ul style="list-style-type: none"> <li>— Form Carpenter</li> <li>— Finish Carpenter</li> <li>— Frame Carpenter</li> <li>— Drywall Installation Trainee</li> <li>— Roofer</li> </ul> </li> <li>• Landscape Maintenance Technician</li> <li>• Heavy Equipment Operator</li> </ul>