

ENGINEERING & INDUSTRIAL TECHNOLOGY PATHWAY

Career Cluster Areas

Manufacturing
Transportation, Distribution & Logistics
Architecture & Construction
Engineering

Do you enjoy working with your hands, building and fixing things? Would you describe yourself as practical and logical? Are you interested in studying science, drafting, robotics, woodworking or math? In your free time, do like to use technology, work on cars or mechanical things? If you answered yes to some of these questions, then a career in Engineering and Industrial Technology might be right for you.

For additional information related to these Career Clusters, visit <https://www.pacareerzone.org/clusters>

Northwest PA

(Clarion, Crawford, Erie, Forest, Venango and Warren counties)

Select High Priority Jobs, Educational Attainment & Average Entry-Level Wages (2021)

Related Work Experience / Post-Secondary / Associate Degree

Supervisors - Construction & Extraction Workers \$31,530
Automotive Service Technicians & Mechanics \$25,310
Tool & Die Makers \$33,810
Heavy & Tractor-Trailer Truck Drivers \$31,970
Architectural & Civil Drafters \$34,630

Short or Moderate-Term OJT

| | |
|--------------------------------------|---------------------------------------|
| Construction Laborers | Elec. & Electromechanical Assemblers |
| \$24,790 | \$21,300 |
| Painters, Construction & Maintenance | Maintenance & Repair Workers, General |
| \$26,960 | \$23,300 |
| CNC Machine Tool Operators | Welders, Cutters, Solderers & Brazers |
| \$26,550 | \$31,930 |

Long Term OJT / Apprenticeship

| | |
|-------------------------------------|---|
| Industrial Machinery Mechanics | Machinists |
| \$33,080 | \$31,300 |
| Automotive Body & Related Repairers | Bus & Truck Mechanics & Diesel Engine Specialists |
| \$29,120 | \$30,140 |
| Carpenters | Electricians |
| \$32,870 | \$39,640 |

Bachelor / Graduate Degree

Cost Estimators* \$46,950
Industrial Engineers* \$60,600
Civil Engineers* \$56,750
Construction Managers* \$60,840
Mechanical Engineers* \$59,060
Surveyors* \$37,380

* Not on NWPA High Priority Occupations List, but identified as statewide need on the PA In-Demand Occupations List (PA IDOL)

For a list of Top 50 Employers by county, visit: <http://bit.ly/Top50Emp>

ENGINEERING & INDUSTRIAL TECHNOLOGY PATHWAY

This Pathway is designed to cultivate individuals' interest, awareness and application to careers related to technologies necessary to design, develop, install, and maintain physical systems.

| Are you interested in... | Are you able to... | Do you enjoy... |
|---|---|--|
| Building and construction Tools, equipment and materials Woodworking Math and science classes How things work Precision work Design and architecture Engineering Computer technology Production management | Apply science and math to the real world Read and understand directions Solve problems Understand and read maps Organize reports and people See a task through to completion Use a computer | Travel Working with your hands Designing and working with projects, models, and prototypes Working in a lab Working on a team Operating tools and equipment Paying close attention to detail |

If you answered "yes" to many of these questions, you might consider a future in one of the occupations listed on the front of this flyer, or below.

Additional PA In-Demand Occupations

| Short- or Moderate - Term OJT | Related Work Experience, Post-Secondary or Associate Degree | Long-Term OJT / Apprenticeship |
|---|--|--|
| Highway Maintenance Workers Industrial Truck & Tractor Operators Bus Drivers: School or Special Client Operating Engineers Cement Masons & Concrete Finishers Earth Drillers Food Batchmakers Helpers - Carpenters and Other Skilled Trades Helpers - Production Workers Landscaping & Groundskeeping Workers Light Truck Drivers Production, Planning & Expediting Clerks Roofers Rotary Drill Operators, Oil & Gas Security & Fire Alarm Systems Installers <i>And more...</i> | Supervisors, Mechanics, Installers & Repairers Supervisors, Production & Operating Workers Civil Engineering Technologists & Technicians CNC Machine Tool Programmers Construction & Building Inspectors Heating, A/C, Refrigeration Mech. & Installers <i>And more...</i> | Glaziers Maintenance Workers, Machinery Plumbers, Pipefitters & Steamfitters Tile & Stone Setters Electrical Power Line Installers & Repairers <i>And more...</i> |

Education/Training Resources

Adult Basic Education

Northwest Tri-County Intermediate Unit #5:

<https://www.iu5.org/community-services/adult-education>

Post-Secondary Education / Training Options

PA Eligible Training Provider List: <http://bit.ly/PACLETPL>

PA Colleges & Universities: <http://bit.ly/PACollegeandUniv>

To access the full **High Priority Occupations List for NWPA** and the **PA IDOL** list, visit: [https:// www.nwpajobconnect.org/resources/high-priority-occupations-hpo](https://www.nwpajobconnect.org/resources/high-priority-occupations-hpo)

To contact **Northwest PA CareerLink®**, call 1-844-333-5248.

Auxiliary aids and services are available upon request to individuals with disabilities.

Equal Opportunity Employer/Program EO Officer: 814-333-1286