

# Renewable Energy Generation Career Ladder

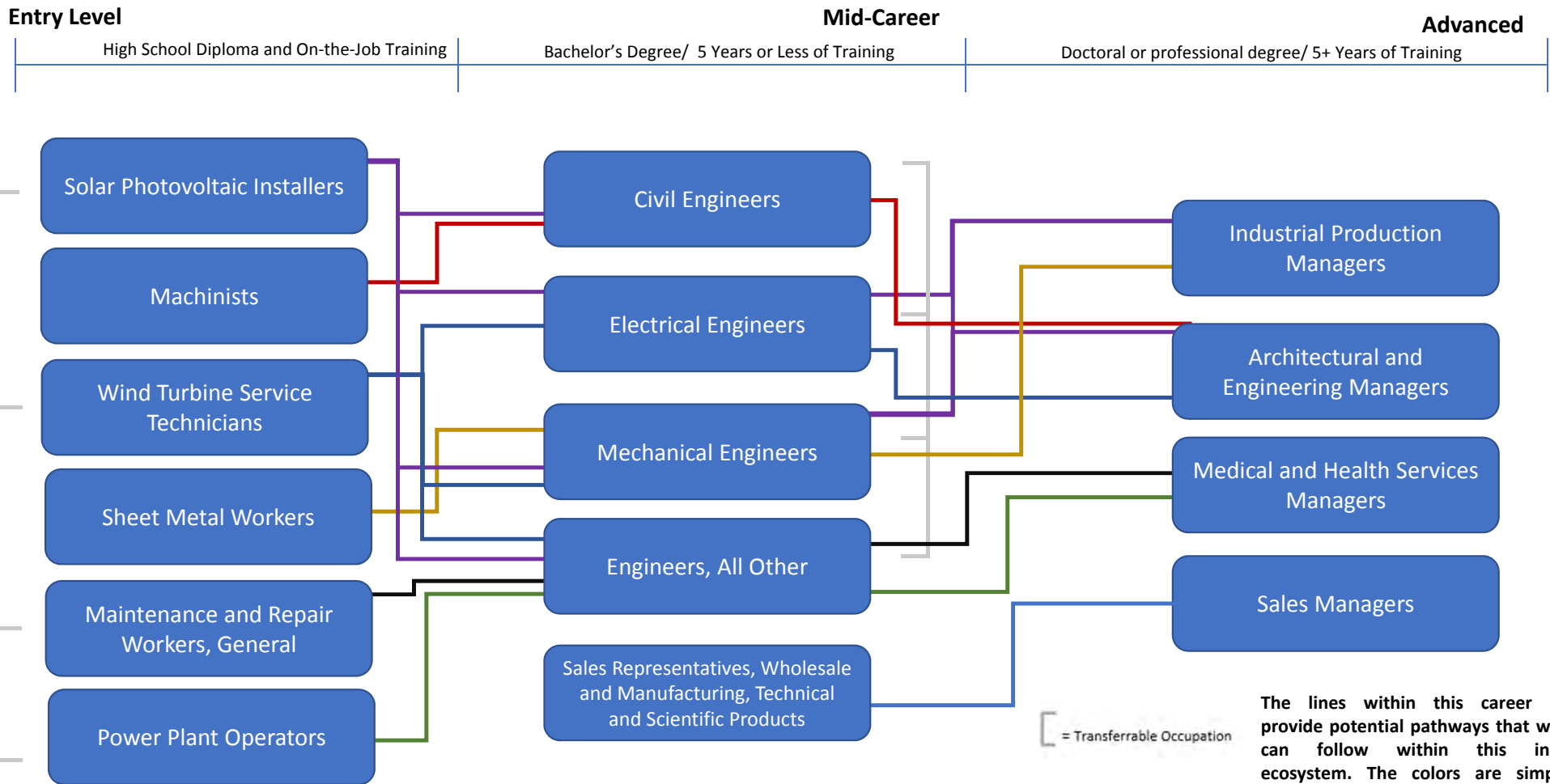


Prepared by AdvanceCT and Thomas P. Miller & Associates

To increase job opportunities in Connecticut's green technology sector, lower energy costs, improve energy efficiency and promote sustainability, the Office of Workforce Competitiveness, in consultation with other agencies, created a green jobs career ladder. This ladder is designed to link green jobs employers with technical education and career schools and institutions of higher education to foster coordination and grow the workforce in the sector.

The green jobs ladder includes components such as the scope of the industry and various occupations included, the skills and knowledge needed to succeed in those occupations, and the professional opportunities available at the entry, mid-career and advanced levels, along with the current salary ranges for each. To maintain this ladder as a comprehensive and useful resource for the green technology industry and its educational partners, it will be updated periodically as needed.

# Renewable Energy Generation Ladder




The lines within this career ladder provide potential pathways that workers can follow within this industry ecosystem. The colors are simply to differentiate one pathway option from the other.

# Architecture and Engineering Managers Occupational Profile

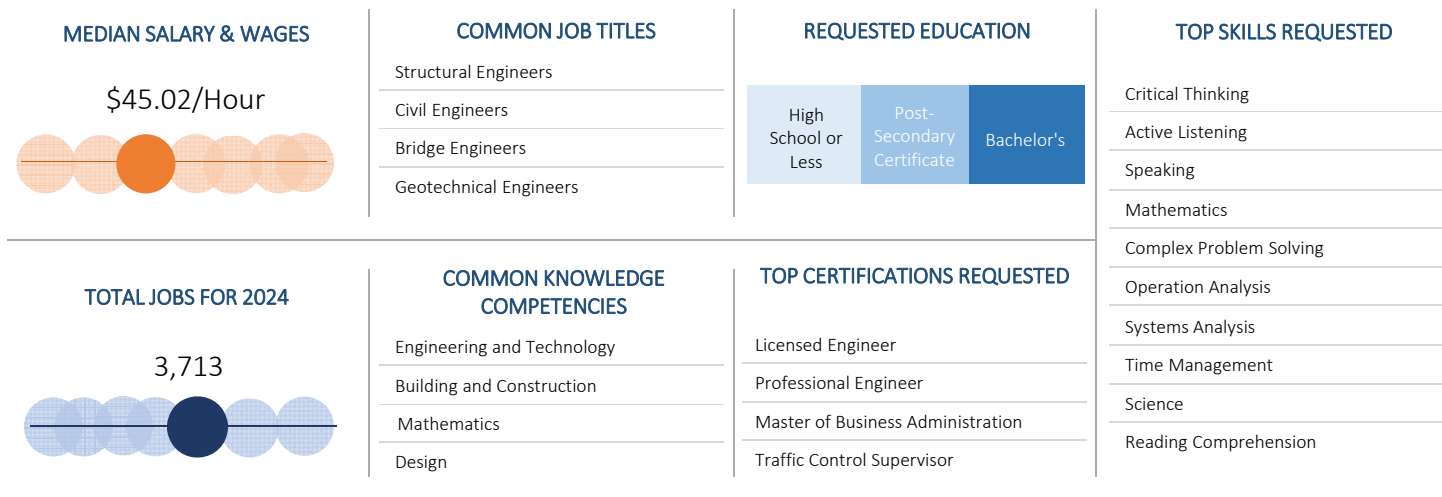


## SIMILAR INDUSTRIES

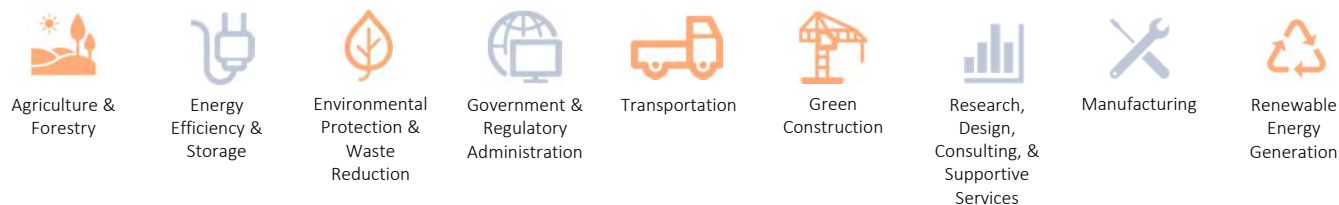


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# Civil Engineers Occupational Profile

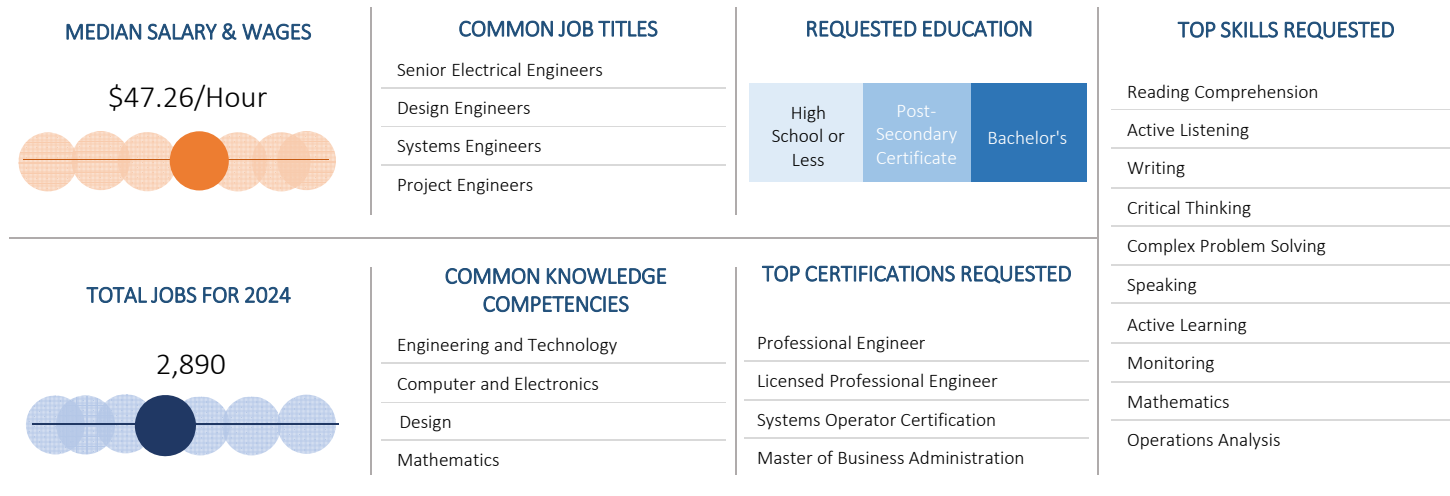


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# Electrical Engineers Occupational Profile

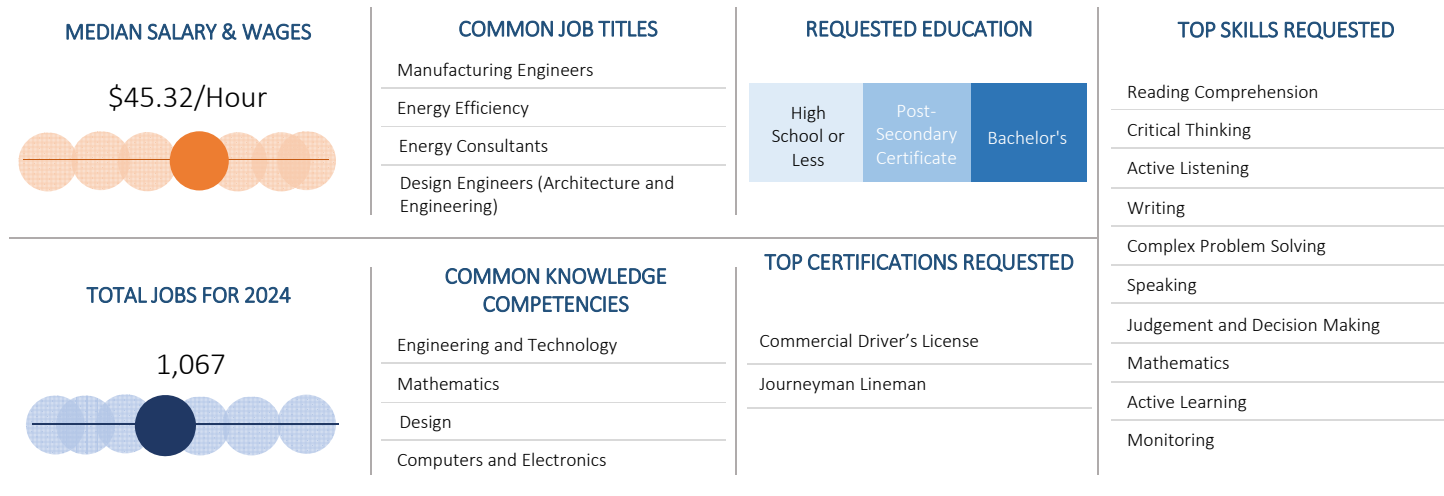


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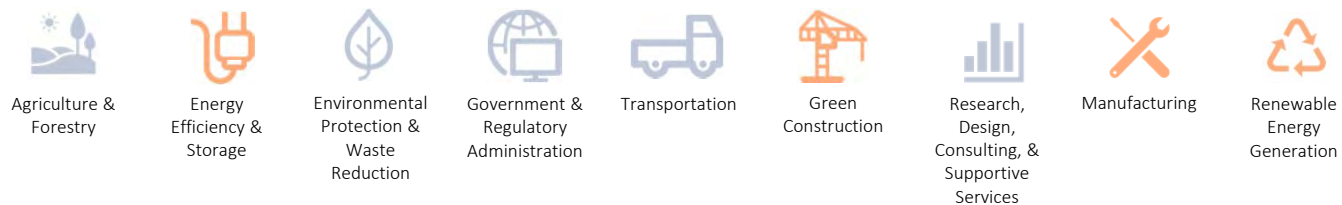


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# Engineers, All Other Occupational Profile



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# Industrial Production Managers Occupational Profile



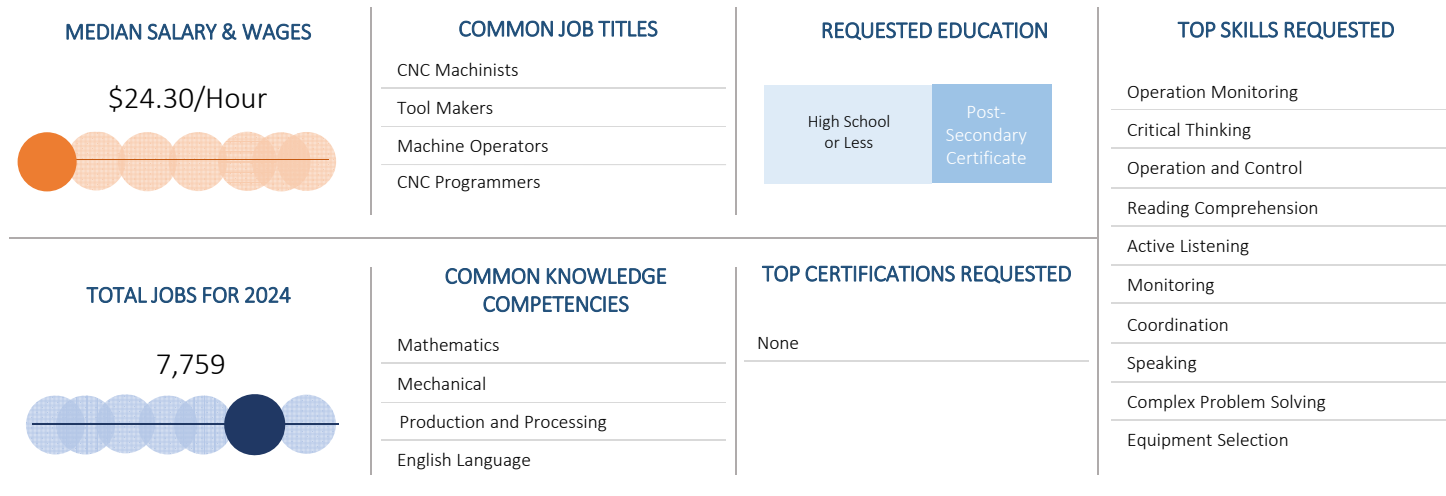
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# Machinists Occupational Profile

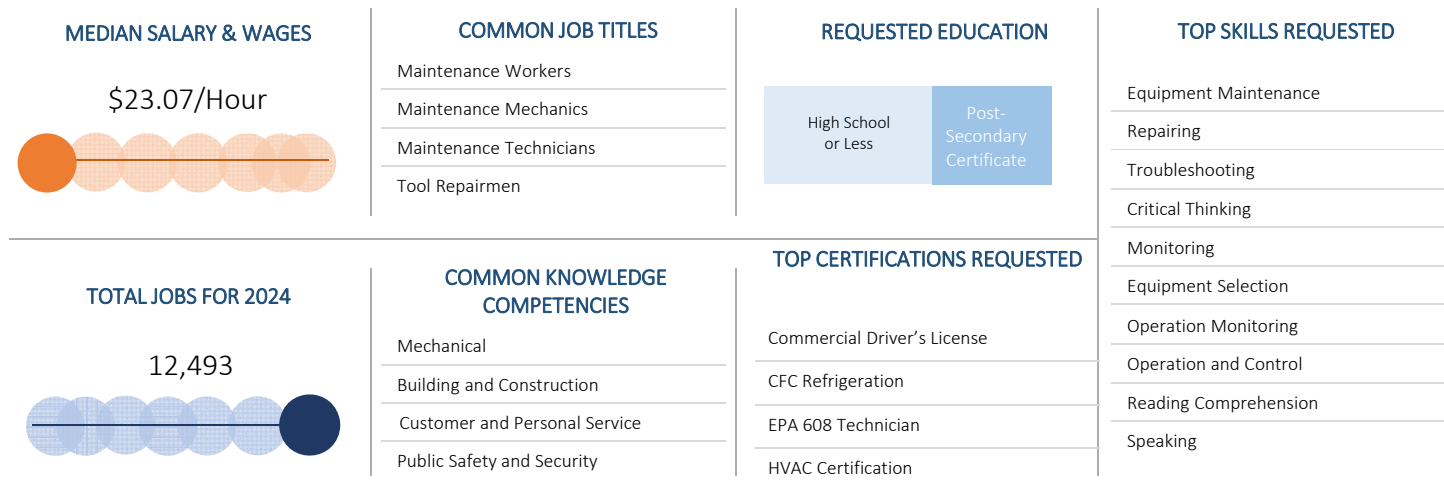


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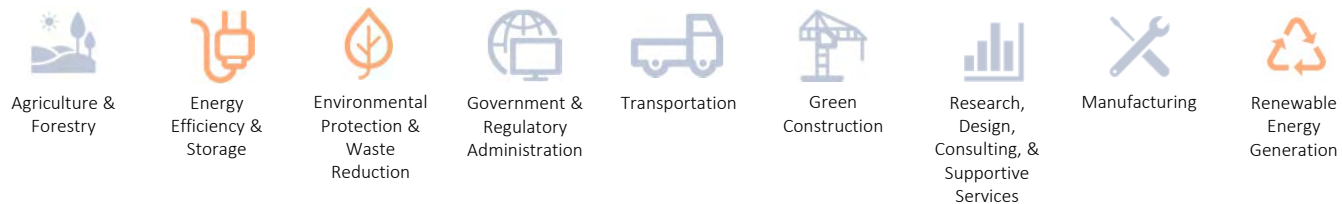


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# Maintenance and Repairer Workers, General Occupational Profile

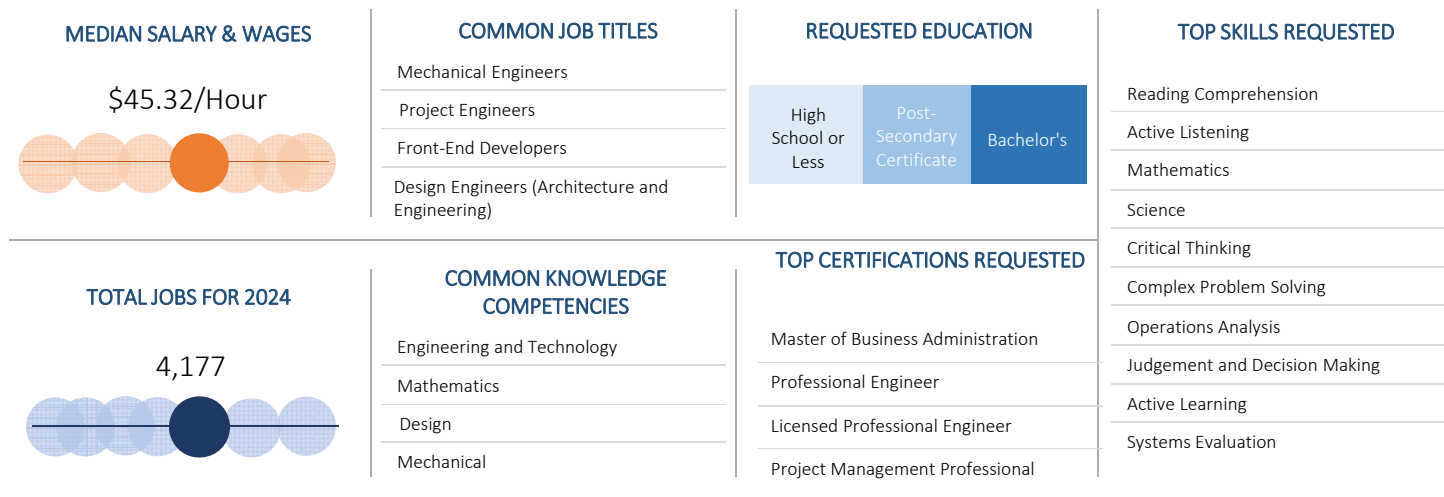


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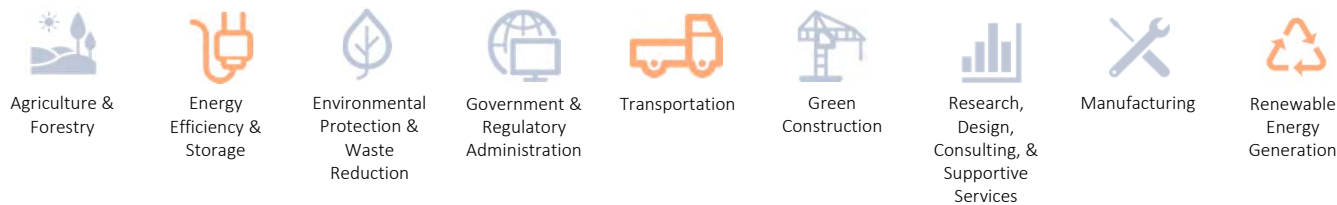


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# Mechanical Engineers Occupational Profile

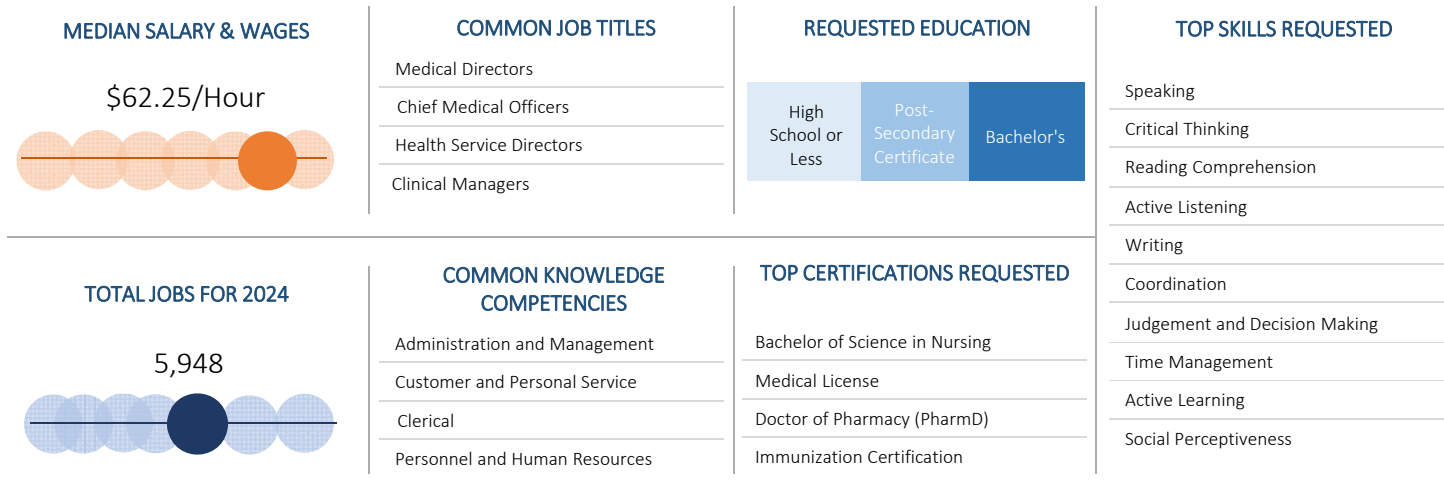


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# Medical and Health Service Managers Occupational Profile



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# Power Plant Operators Occupational Profile



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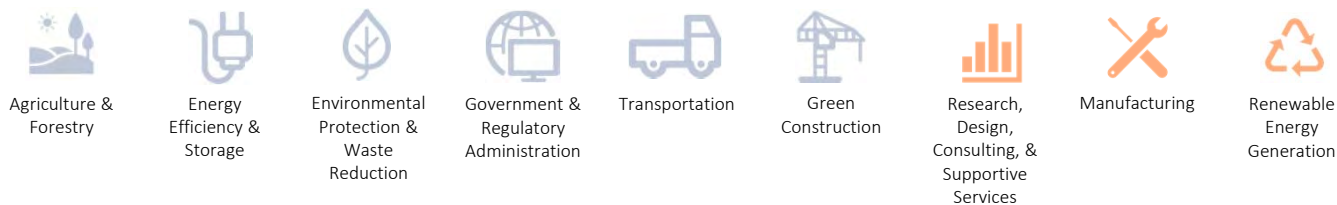



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# Sales Managers Occupational Profile

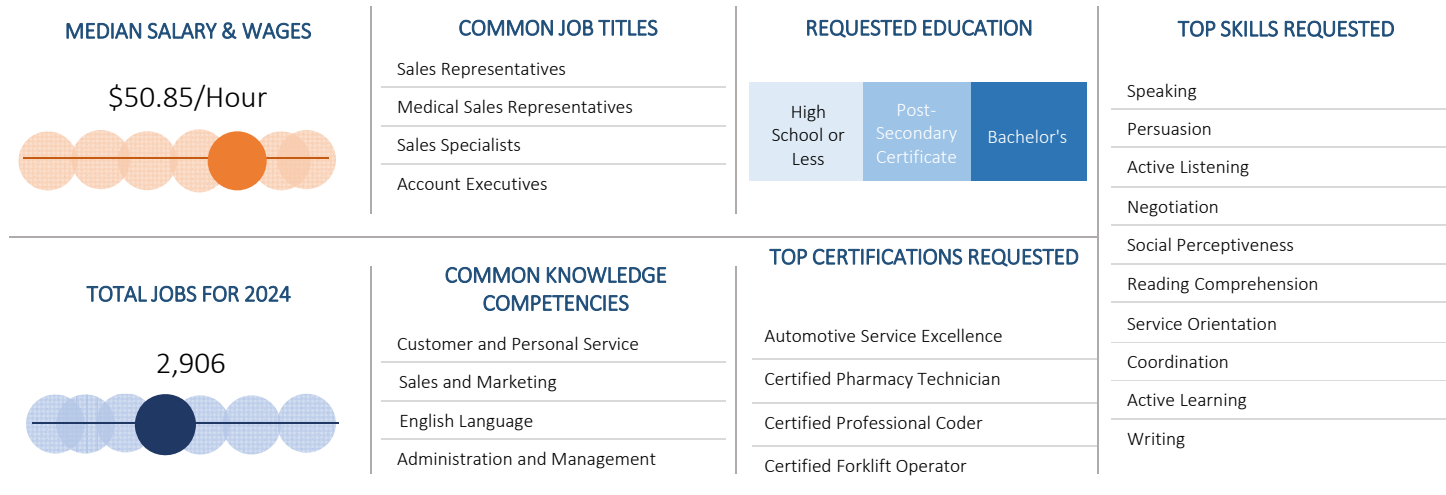


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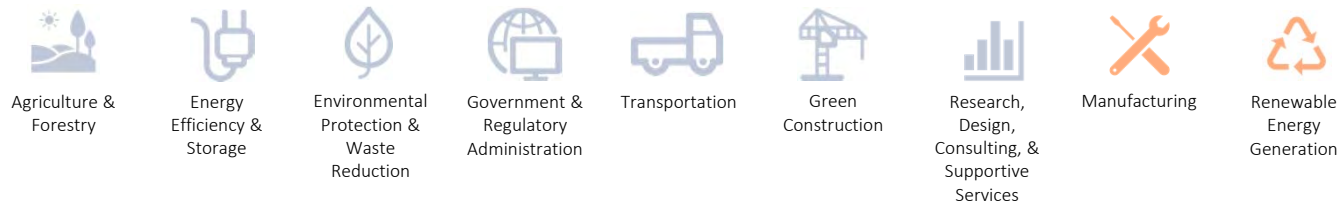


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# Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products Occupational Profile



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# Sheet Metal Workers Occupational Profile



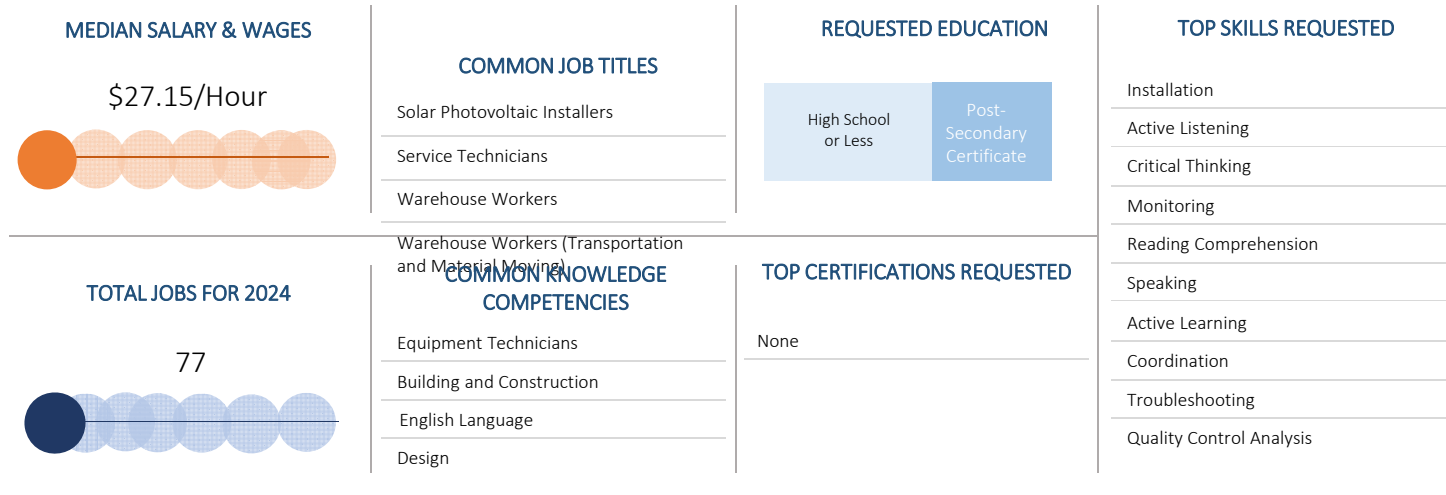
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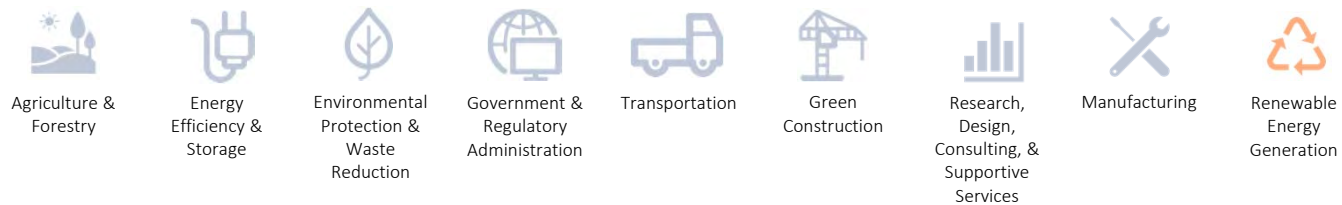
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# Solar Photovoltaic Installers Occupational Profile

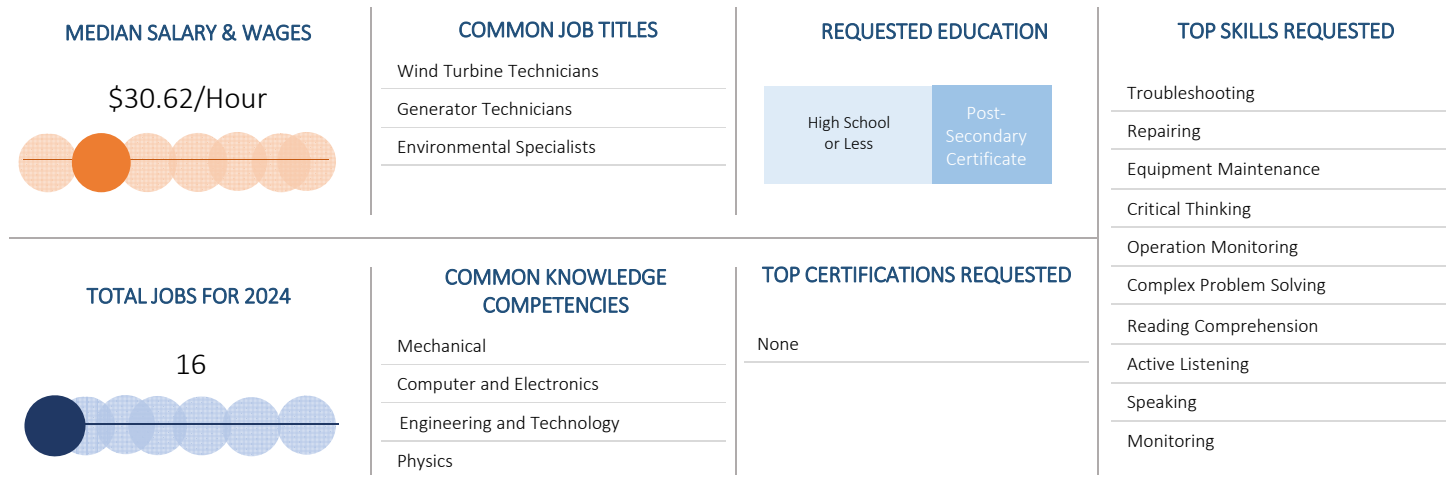


## SIMILAR INDUSTRIES



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# Wind Turbine Service Technicians Occupational Profile



## SIMILAR INDUSTRIES



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# Education & Training Institutions Offerings

<b>Biofuels/Biodiesel Technology and Product Development Managers</b>	<b>Biofuels Production Managers</b>	<b>Biomass Power Plant Managers</b>	<b>Civil Engineers</b>
Asnuntuck Community College Gateway Community College Housatonic Community College Manchester Community College Middlesex Community College Naugatuck Valley Community College Northwestern Connecticut Community College Norwalk Community College Quinebaug Valley Community College Three Rivers Community College Tunxis Community College University of Connecticut, Storrs Campus University of New Haven Yale University	Asnuntuck Community College Central Connecticut State University Eversource (Convex Operating Group)- OJT Fairfield University Gateway Community College Goodwin College Manchester Community College Naugatuck Valley Community College Quinnipiac University Southern Connecticut State University University of Connecticut, Storrs Campus University of Hartford University of New Haven	Asnuntuck Community College Central Connecticut State University Eversource (Convex Operating Group)- OJT Fairfield University Gateway Community College Goodwin College Manchester Community College Naugatuck Valley Community College Quinnipiac University Southern Connecticut State University University of Connecticut, Storrs Campus University of Hartford University of New Haven	Capital Community College Central Connecticut State University Quinnipiac University United States Coast Guard Academy University of Connecticut, Storrs Campus University of Hartford University of New Haven

# Education & Training Institutions Offerings

Electrical Engineers	Geothermal Production Managers	Hydroelectric Production Managers	Machinists
<p>Advanced Electrical Services, Inc.                      Dominion Nuclear Connecticut Inc- Apprenticeship                      Dubaldo Electric Co                      Eversource (Convex Operating Group)- OJT                      Fairfield University                      Griffin Electrical Contractors, Inc.                      Haskins Electric, LLC                      National Electrical Contractors Associates NECA &amp; Local 90 JATC                      Ray Brown Electric, LLC                      Sacred Heart University                      Trinity College                      United States Coast Guard Academy                      University of Bridgeport                      University of Connecticut, Storrs Campus                      University of Hartford                      University of New Haven                      Yale University</p>	<p>Asnuntuck Community College                      Central Connecticut State University                      Eversource (Convex Operating Group)- OJT                      Fairfield University                      Gateway Community College                      Goodwin College                      Manchester Community College                      Naugatuck Valley Community College                      Quinnipiac University                      Southern Connecticut State University                      University of Connecticut, Storrs Campus                      University of Hartford                      University of New Haven</p>	<p>Asnuntuck Community College                      Central Connecticut State University                      Eversource (Convex Operating Group)- OJT                      Fairfield University                      Gateway Community College                      Goodwin College                      Manchester Community College                      Naugatuck Valley Community College                      Quinnipiac University                      Southern Connecticut State University                      University of Connecticut, Storrs Campus                      University of Hartford                      University of New Haven</p>	<p>Bristol Technical Education Center                      General Dynamics Electric Boat Division                      Housatonic Community College                      Manufacturing Alliance Service Corporation, Inc.                      Middlesex Community College                      Naugatuck Valley Community College                      Pa-Ted Spring Company, LLC.                      Quinebaug Valley Community College                      Renchel Tool Inc.                      TRUMPF Inc.                      Tunxis Community College</p>

# Education & Training Institutions Offerings

Mechanical Engineers	Methane/Landfill Gas Collection System Operators	Sheet Metal Workers	Solar Energy Systems Engineers
Central Connecticut State University Fairfield University Quinnipiac University United States Coast Guard Academy University of Bridgeport University of Connecticut, Storrs Campus University of Hartford University of New Haven Yale University	Asnuntuck Community College Central Connecticut State University Eversource (Convex Operating Group)- OJT Fairfield University Gateway Community College Goodwin College Manchester Community College Naugatuck Valley Community College Quinnipiac University Southern Connecticut State University University of Connecticut, Storrs Campus University of Hartford University of New Haven	Air TempMechanical Services Construction Education Center, Inc. New England Mechanical Services, INC. Sheet Metal Workers, Local Union 40, JACT Three Rivers Community College	Asnuntuck Community College Capital Community College Gateway Community College Housatonic Community College Manchester Community College Middlesex Community College Naugatuck Valley Community College Northwestern Connecticut Community College Norwalk Community College Quinebaug Valley Community College Three Rivers Community College Tunxis Community College University of Connecticut, Storrs Campus Yale University

# Education & Training Institutions Offerings

Solar Photovoltaic Installers	Wind Energy Engineers	Wind Energy Operations Managers	Wind Energy Project Managers
<p>Construction Education Center, Inc. Gateway Community College</p>	<p>Asnuntuck Community College Capital Community College Gateway Community College Housatonic Community College Manchester Community College Middlesex Community College Naugatuck Valley Community College Northwestern Connecticut Community College Norwalk Community College Quinebaug Valley Community College Three Rivers Community College Tunxis Community College University of Connecticut, Storrs Campus Yale University</p>	<p>Albertus Magnus College Asnuntuck Community College Capital Community College Central Connecticut State University Charter Oak State College Eastern Connecticut State University Fairfield University Gateway Community College Goodwin College Housatonic Community College Manchester Community College Middlesex Community College Mitchell College Naugatuck Valley Community College New Horizons Computer Learning Center Northwestern Connecticut Community College Norwalk Community College Patrick's Academy Post University Quinebaug Valley Community College Quinnipiac University Sacred Heart University Southern Connecticut State University Three Rivers Community College Tunxis Community College United States Coast Guard Academy University of Bridgeport University of Connecticut - Waterbury Campus University of Connecticut, School of Business University of Connecticut, Stamford University of Connecticut, Storrs Campus University of Connecticut, Tri-Campus University of Hartford University of New Haven University of Saint Joseph Western Connecticut State University Yale University</p>	<p>Albertus Magnus College Capital Community College Central Connecticut State University Charter Oak State College Fairfield University Gateway Community College Goodwin College Mitchell College New Horizons Computer Learning Center Northwestern Connecticut Community College Patrick's Academy Post University Quinebaug Valley Community College Quinnipiac University Sacred Heart University Southern Connecticut State University United States Coast Guard Academy University of Bridgeport University of Connecticut - Waterbury Campus University of Connecticut, Stamford University of Connecticut, Storrs Campus University of Hartford University of New Haven University of Saint Joseph Western Connecticut State University Yale University</p>

# Glossary

**ABILITIES** – the proficiency, skills, or talent within a particular area.

**CAREER PATHWAY** – a career pathway means a combination of relevant, rigorous and high-quality education, training, and supportive services that aligns both vertically and horizontally across Secondary Education, Adult Basic Education, Workforce Training and Development, Career and Technical Education, and Postsecondary Education systems, pathways, and programs.

**CERTIFICATION** – third party accrediting or authorizing agency or person who assess, verifies, and provides an official documentation that attests a level of achievement.

**COMPETENCIES** – an individual’s ability to do a job properly through a set of behaviors.

**INDUSTRY-ALIGNED CREDENTIAL** – credentials whose standards are aligned to industry-recognized standards.

**INDUSTRY-ENDORSED CREDENTIAL** – credentials whose standards are aligned to and endorsed by industry.

**INDUSTRY-RECOGNIZED CREDENTIAL** – an industry-recognized credential is one that either is developed and offered by, or endorsed by a nationally-recognized industry association or organization representing a sizeable portion of the industry sector, or a credential that is sought or accepted by companies within the industry sector for purposes of hiring or recruitment which may include credentials from vendors of certain products.

**KNOWLEDGE** – the skills and information acquired through education or experience.

**MEDIAN HOURLY EARNINGS** – hourly earnings for the occupation reported at the 50th percentile.

**REQUESTED EDUCATION** – the highest level of education for workers within the given occupational category. Please note these are not the level of education of new incoming workers but of workers currently employed within these positions.

**SKILLS** – the ability or expertise to do something well.

**TOTAL JOBS** – estimated number of jobs in the given year, taken as average over a period of 12-months. This value includes both full- and part-time jobs.