Manufacturing 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.
Manufacturing Career Ladder

Entry Level
High School Diploma and On-the-Job Training

Mid-Career
Bachelor's Degree/ 5 Years or Less of Training

Advanced
Doctoral or professional degree/ 5+ Years of Training

- Engineering Technicians, Except Drafters, All Other
- Machinists
- Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
- Electrical and Electronics Engineering Technicians
- Mechanical Engineering Technicians
- Laborers and Freight, Stock, and Material Movers, Hand
- Electro-Mechanical Technicians
- Industrial Engineering Technicians
- Welders, Cutters, Solderers, and Brazers
- Sheet Metal Workers
- Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products
- Inspectors, Testers, Sorters, Samplers, and Weighers
- Electrical and Electronics Repairers, Commercial and Industrial Equipment
- Health and Safety Engineers, Except Mining Safety Engineers and Inspectors
- Materials Engineers
- Engineers, All Other
- Chemists
- First-Line Supervisors of Mechanics, Installers, and Repairers
- First-Line Supervisors of Production and Operating Workers
- Industrial Engineers
- Mechanical Drafters
- Sales Managers
- Industrial Production Managers
- Managers, All Other
- Commercial and Industrial Designers
- Occupational Health and Safety Specialists
- Chemical Engineers

The lines within this career lattice provide potential pathways that workers can follow within this industry ecosystem. The colors are simply to differentiate one pathway option from the other.
# Aircraft Structure, Surfaces, Rigging, and Systems Assemblers Occupational Profile

## MEDIAN SALARY & WAGES

$35.82/ Hour

## COMMON JOB TITLES

- Commercial License Drivers
- Aircraft Mechanics and Service Technicians
- Engine and Other Machine Assemblers
- Avionics Technicians

## REQUESTED EDUCATION

<table>
<thead>
<tr>
<th></th>
<th>High School or Less</th>
<th>Post-Secondary Certificate</th>
</tr>
</thead>
</table>

## COMMON KNOWLEDGE COMPETENCIES

- Mathematics
- Mechanical
- English Language
- Production and Processing

## TOP CERTIFICATIONS REQUESTED

- Product Certification
- Certified Quality Technician

## TOP SKILLS REQUESTED

- Quality Control Analysis
- Active Listening
- Critical Thinking
- Monitoring
- Reading Comprehension
- Speaking
- Complex Problem Solving
- Equipment Maintenance
- Judgement and Decision Making
- Time Management

## SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

Indicates an especially close similarity

---

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
# Chemists Occupational Profile

## MEDIAN SALARY & WAGES

$44.64/ Hour

## COMMON JOB TITLES

- Chemists
- Product Development Scientists
- Development Scientists
- Senior Scientists

## COMMON KNOWLEDGE COMPETENCIES

- Chemistry
- Mathematics
- Production and Processing
- Computers and Electronics

## TOP SKILLS REQUESTED

- Science
- Reading Comprehension
- Critical Thinking
- Active Listening
- Mathematics
- Complex Problem Solving
- Writing
- Speaking
- Active Learning
- Quality Control Analysis

## REQUESTED EDUCATION

<table>
<thead>
<tr>
<th>Level</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School or Less</td>
<td>Post-Secondary Certificate</td>
</tr>
<tr>
<td>Bachelor's</td>
<td></td>
</tr>
</tbody>
</table>

## TOTAL JOBS FOR 2024

1,406

## SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*Indicates an especially close similarity*
# Chemical Engineers Occupational Profile

## MEDIAN SALARY & WAGES

$43.11/Hour

## COMMON JOB TITLES

- Process Engineers
- Chemical Engineers
- Project Engineers
- Program Managers

## COMMON KNOWLEDGE COMPETENCIES

- Engineering and Technology
- Mathematics
- Chemistry
- Physics

## REQUESTED EDUCATION

<table>
<thead>
<tr>
<th>Level</th>
<th>Common Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School or Less</td>
<td>Post-Secondary Certificate</td>
</tr>
<tr>
<td>Bachelor's</td>
<td></td>
</tr>
</tbody>
</table>

## TOP CERTIFICATIONS REQUESTED

- Six Sigma Green Belt Certification
- Project Management Professional
- Certified Quality Engineer

## TOP SKILLS REQUESTED

- Science
- Reading Comprehension
- Critical Thinking
- Active Listening
- Mathematics
- Complex Problem Solving
- Writing
- Active Learning
- Systems Analysis
- Speaking

## SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*Indicates an especially close similarity*

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
## Commercial and Industrial Designers

### Occupational Profile

#### MEDIAN SALARY & WAGES

$35.78/ Hour

#### COMMON JOB TITLES

- Design Consultants
- Design Engineers
- Product Development Engineers
- Web Designers

#### REQUESTED EDUCATION

<table>
<thead>
<tr>
<th>High School or Less</th>
<th>Post-Secondary Certificate</th>
<th>Bachelor's</th>
</tr>
</thead>
</table>

#### TOTAL JOBS FOR 2024

415

#### COMMON KNOWLEDGE COMPETENCIES

- Design
- Engineering and Technology
- Production and Processing
- Mechanical

#### TOP CERTIFICATIONS REQUESTED

National Council For Interior Design Qualification

#### TOP SKILLS REQUESTED

- Active Listening
- Reading Comprehension
- Critical Thinking
- Complex Problem Solving
- Speaking
- Operation Analysis
- Judgement and Decision Making
- Time Management
- Writing
- Monitoring

### SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*Indicates an especially close similarity

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
Electrical And Electronics Engineering Technicians Occupational Profile

**MEDIAN SALARY & WAGES**
$31.55/Hour

**TOTAL JOBS FOR 2024**
1,541

**COMMON JOB TITLES**
- Engineering Technicians
- Electronics Technicians
- Engineering Interns
- Electrical Technicians

**REQUESTED EDUCATION**
- High School or Less
- Post-Secondary Certificate

**COMMON KNOWLEDGE COMPETENCIES**
- Engineering and Technology
- Computer and Electronics
- English Language
- Mathematics

**TOP SKILLS REQUESTED**
- Reading Comprehension
- Active Listening
- Critical Thinking
- Complex Problem Solving
- Monitoring
- Speaking
- Troubleshooting
- Active Learning
- Operation Monitoring
- Repairing

**TOP CERTIFICATIONS REQUESTED**
- Microsoft Certified Systems Engineer
- Cisco Certified Design Associate
- Cisco Certified Network Associate
- CompTIA Security+

**SIMILAR INDUSTRIES**
- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
Electrical and Electronics Repairers, Commercial and Industrial Equipment Occupational Profile

<table>
<thead>
<tr>
<th>MEDIAN SALARY &amp; WAGES</th>
<th>COMMON JOB TITLES</th>
<th>REQUESTED EDUCATION</th>
<th>TOP SKILLS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>$29.06/Hour</td>
<td>Electronics Technicians</td>
<td>High School or Less</td>
<td>Operation Monitoring</td>
</tr>
<tr>
<td></td>
<td>Instrument Technicians</td>
<td>Post-Secondary Certificate</td>
<td>Repairing</td>
</tr>
<tr>
<td></td>
<td>Maintenance Mechanics</td>
<td></td>
<td>Quality Control Analysis</td>
</tr>
<tr>
<td></td>
<td>Equipment Repairers</td>
<td></td>
<td>Troubleshooting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMON KNOWLEDGE COMPETENCIES</th>
<th>TOP CERTIFICATIONS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering and Technology</td>
<td>Commercial Driver's License</td>
</tr>
<tr>
<td>Computer and Electronics</td>
<td></td>
</tr>
<tr>
<td>English Language</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIMILAR INDUSTRIES</th>
</tr>
</thead>
</table>

TOTAL JOBS FOR 2024: 395

Indicates an especially close similarity
**Electro-Mechanical Technicians**

**Occupational Profile**

<table>
<thead>
<tr>
<th>MEDIAN SALARY &amp; WAGES</th>
<th>COMMON JOB TITLES</th>
<th>REQUESTED EDUCATION</th>
<th>TOP SKILLS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>$27.87/ Hour</td>
<td>Electro-Mechanical Technicians</td>
<td>High School or Less</td>
<td>Operation Monitoring</td>
</tr>
<tr>
<td></td>
<td>Instrument Technicians</td>
<td>Post-Secondary Certificate</td>
<td>Repairing</td>
</tr>
<tr>
<td></td>
<td>Automation Technicians</td>
<td></td>
<td>Quality Control Analysis</td>
</tr>
<tr>
<td></td>
<td>Building Engineers</td>
<td></td>
<td>Troubleshooting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMON KNOWLEDGE COMPETENCIES</th>
<th>TOP CERTIFICATIONS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical</td>
<td>Commercial Driver's License</td>
</tr>
<tr>
<td>Computer and Electronics</td>
<td></td>
</tr>
<tr>
<td>English Language</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIMILAR INDUSTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; Forestry</td>
</tr>
<tr>
<td>Energy Efficiency &amp; Storage</td>
</tr>
<tr>
<td>Environmental Protection &amp; Waste Reduction</td>
</tr>
<tr>
<td>Government &amp; Regulatory Administration</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Green Construction</td>
</tr>
<tr>
<td>Research, Design, Consulting, &amp; Supportive Services</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Renewable Energy Generation</td>
</tr>
</tbody>
</table>

**TOTAL JOBS FOR 2024**: 114

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
# Engineering Technicians, Except Drafters, All Other Occupational Profile

## MEDIAN SALARY & WAGES

$31.01/Hour

## COMMON JOB TITLES
- NDT Technicians
- NDT Inspectors
- Manufacturing Technicians
- Quality Inspectors

## REQUESTED EDUCATION
- High School or Less
- Post-Secondary Certificate

## COMMON KNOWLEDGE COMPETENCIES
- Engineering and Technology
- Mathematics
- Computers and Electronics
- Mechanical

## SIMILAR INDUSTRIES
- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

## TOP SKILLS REQUESTED
- Critical Thinking
- Reading Comprehension
- Active Listening
- Operation Monitoring
- Complex Problem Solving
- Monitoring
- Speaking
- Quality Control Analysis
- Active Learning
- Judgement and Decision Making

## MEDIAN SALARY & WAGES

$31.01/Hour

## TOTAL JOBS FOR 2024

656

## COMMON KNOWLEDGE COMPETENCIES

- Engineering and Technology
- Mathematics
- Computers and Electronics
- Mechanical

## TOP CERTIFICATIONS REQUESTED
- ASNT Non-Destructive Tester
- Certified Welding Inspector
- Radiologic Technicians
- American Registry of Radiologic Technologists

## REQUESTED EDUCATION

- High School or Less
- Post-Secondary Certificate

## SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

- Indicates an especially close similarity
Engineers, All Other Occupational Profile

**MEDIAN SALARY & WAGES**
$45.32/Hour

**TOTAL JOBS FOR 2024**
1,067

**COMMON JOB TITLES**
- Manufacturing Engineers
- Energy Efficiency
- Energy Consultants
- Design Engineers (Architecture and Engineering)

**COMMON KNOWLEDGE COMPETENCIES**
- Engineering and Technology
- Mathematics
- Design
- Computers and Electronics

**REQUESTED EDUCATION**
- High School or Less
- Post-Secondary Certificate
- Bachelor’s

**TOP CERTIFICATIONS REQUESTED**
- Commercial Driver’s License
- Journeyman Lineman

**TOP SKILLS REQUESTED**
- Reading Comprehension
- Critical Thinking
- Active Listening
- Writing
- Complex Problem Solving
- Speaking
- Judgement and Decision Making
- Mathematics
- Active Learning
- Monitoring

**SIMILAR INDUSTRIES**
- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

Indicates an especially close similarity

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
### First-Line Supervisors of Mechanics, Installers, and Repairers Occupational Profile

<table>
<thead>
<tr>
<th>MEDIAN SALARY &amp; WAGES</th>
<th>COMMON JOB TITLES</th>
<th>REQUESTED EDUCATION</th>
<th>TOP SKILLS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>$37.20/Hour</td>
<td>Maintenance Managers</td>
<td>High School or Less</td>
<td>Monitoring</td>
</tr>
<tr>
<td></td>
<td>Maintenance Supervisors</td>
<td>Post-Secondary Certificate</td>
<td>Management of Personnel Resources</td>
</tr>
<tr>
<td></td>
<td>Maintenance Mechanics</td>
<td></td>
<td>Quality Control Analysis</td>
</tr>
<tr>
<td></td>
<td>Maintenance Coordinators</td>
<td></td>
<td>Speaking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMON KNOWLEDGE COMPETENCIES</th>
<th>TOP CERTIFICATIONS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical</td>
<td>Automotive Service Excellence</td>
</tr>
<tr>
<td>Customer and Personal Service</td>
<td>Commercial Driver’s License</td>
</tr>
<tr>
<td>Administration and Management</td>
<td>EPA 608 Technician Certification</td>
</tr>
<tr>
<td>Public Safety and Security</td>
<td>CFC Refrigeration Certification</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL JOBS FOR 2024</th>
<th>SIMILAR INDUSTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,978</td>
<td>Agriculture &amp; Forestry</td>
</tr>
<tr>
<td></td>
<td>Energy Efficiency &amp; Storage</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection &amp; Waste Reduction</td>
</tr>
<tr>
<td></td>
<td>Government &amp; Regulatory Administration</td>
</tr>
<tr>
<td></td>
<td>Transportation</td>
</tr>
<tr>
<td></td>
<td>Green Construction</td>
</tr>
<tr>
<td></td>
<td>Research, Design, Consulting, &amp; Supportive Services</td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
</tr>
<tr>
<td></td>
<td>Renewable Energy Generation</td>
</tr>
</tbody>
</table>

- Indicates an especially close similarity

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
# First-Line Supervisors of Production and Operating Workers Occupational Profile

**COMMON JOB TITLES**
- Production Supervisors
- Operation Supervisors
- Production Leaders
- Manufacturing Supervisors

**COMMON KNOWLEDGE COMPETENCIES**
- Production and Processing
- Mechanical
- Administration and Management
- Personnel and Human Resources

**REQUESTED EDUCATION**
- High School or Less
- Post-Secondary Certificate

**TOP CERTIFICATIONS REQUESTED**
- Certified Forklift Operator
- Six Sigma Green Belt Certification
- Six Sigma Black Belt Certification

**TOP SKILLS REQUESTED**
- Active Listening
- Management of Personnel Resources
- Social Perceptiveness
- Speaking
- Critical Thinking
- Coordination
- Reading Comprehension
- Quality Control Analysis
- Time Management
- Judgement and Decision Making

**TOTAL JOBS FOR 2024**
- 8,270

**MEDIAN SALARY & WAGES**
- $36.60/Hour

**SIMILAR INDUSTRIES**
- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020*
# Health and Safety Engineers, Except Mining Safety Engineers and Inspectors Occupational Profile

## MEDIAN SALARY & WAGES

<table>
<thead>
<tr>
<th>Salary</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$47.76/ Hour</td>
<td></td>
</tr>
</tbody>
</table>

## COMMON JOB TITLES

<table>
<thead>
<tr>
<th>Job Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Managers</td>
</tr>
<tr>
<td>Safety Coordinators</td>
</tr>
<tr>
<td>Sergeants (Military)</td>
</tr>
<tr>
<td>Environmental, Health, and Safety (EHS) Managers</td>
</tr>
</tbody>
</table>

## COMMON KNOWLEDGE COMPETENCIES

<table>
<thead>
<tr>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering and Technology</td>
</tr>
<tr>
<td>English Language</td>
</tr>
<tr>
<td>Customer and Personal Service</td>
</tr>
<tr>
<td>Design</td>
</tr>
</tbody>
</table>

## REQUESTED EDUCATION

<table>
<thead>
<tr>
<th>Education Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School or Less</td>
</tr>
<tr>
<td>Post-Secondary Certificate</td>
</tr>
<tr>
<td>Bachelor's</td>
</tr>
</tbody>
</table>

## TOP SKILLS REQUESTED

<table>
<thead>
<tr>
<th>Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking</td>
</tr>
<tr>
<td>Reading Comprehension</td>
</tr>
<tr>
<td>Active Listening</td>
</tr>
<tr>
<td>Speaking</td>
</tr>
<tr>
<td>Writing</td>
</tr>
<tr>
<td>Systems Evaluation</td>
</tr>
<tr>
<td>Systems Analysis</td>
</tr>
<tr>
<td>Active Learning</td>
</tr>
<tr>
<td>Complex Problem Solving</td>
</tr>
<tr>
<td>Judgement and Decision Making</td>
</tr>
</tbody>
</table>

## TOP CERTIFICATIONS REQUESTED

<table>
<thead>
<tr>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified Safety Professional</td>
</tr>
<tr>
<td>Certified Hazardous Materials Manager</td>
</tr>
<tr>
<td>Master of Business Administration</td>
</tr>
<tr>
<td>Occupational Hygiene And Safety Technologist</td>
</tr>
</tbody>
</table>

## SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*Indicates an especially close similarity*
# Industrial Engineering Technicians

## Occupational Profile

### MEDIAN SALARY & WAGES

$28.99/ Hour

### TOTAL JOBS FOR 2024

996

### COMMON JOB TITLES
- Quality Assurance Engineers
- Production Technicians
- Engineering Interns
- Engineering Technicians

### COMMON KNOWLEDGE COMPETENCIES
- Mechanical
- Engineering and Technology
- Production and Processing
- Mathematics

### TOP SKILLS REQUESTED
- Critical Thinking
- Reading Comprehension
- Active Listening
- Speaking
- Writing
- Monitoring
- Systems Analysis
- Systems Evaluation
- Complex Problem Solving
- Time Management

### REQUESTED EDUCATION

| High School or Less | Post-Secondary Certificate |

### SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

 Indicates an especially close similarity

---

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
## Industrial Production Managers

### Occupational Profile

<table>
<thead>
<tr>
<th>MEDIAN SALARY &amp; WAGES</th>
<th>COMMON JOB TITLES</th>
<th>REQUESTED EDUCATION</th>
<th>TOP SKILLS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>$62.41/Hour</td>
<td>Quality Assurance Engineers</td>
<td>High School or Less</td>
<td>Speaking</td>
</tr>
<tr>
<td></td>
<td>Quality Assurance Managers</td>
<td>Post-Secondary Certificate</td>
<td>Critical Thinking</td>
</tr>
<tr>
<td></td>
<td>Production Managers</td>
<td>Bachelor's</td>
<td>Monitoring</td>
</tr>
<tr>
<td></td>
<td>Manufacturing Managers</td>
<td></td>
<td>Coordination</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMON KNOWLEDGE COMPETENCIES</th>
<th>TOP CERTIFICATIONS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration and Management</td>
<td>Six Sigma Green Belt</td>
</tr>
<tr>
<td>Customer and Personal Service</td>
<td>Master of Business Administration</td>
</tr>
<tr>
<td>Personnel and Human Resources</td>
<td>Six Sigma Black Belt</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Certified Quality Engineer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL JOBS FOR 2024</th>
<th>SIMILAR INDUSTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,899</td>
<td>Agriculture &amp; Forestry</td>
</tr>
<tr>
<td></td>
<td>Energy Efficiency &amp; Storage</td>
</tr>
<tr>
<td></td>
<td>Environmental Protection &amp; Waste Reduction</td>
</tr>
<tr>
<td></td>
<td>Government &amp; Regulatory Administration</td>
</tr>
<tr>
<td></td>
<td>Transportation</td>
</tr>
<tr>
<td></td>
<td>Green Construction</td>
</tr>
<tr>
<td></td>
<td>Research, Design, Consulting, &amp; Supportive Services</td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
</tr>
<tr>
<td></td>
<td>Renewable Energy Generation</td>
</tr>
</tbody>
</table>

**Indicates an especially close similarity**

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
### Inspectors, Testers, Sorters, Samplers, and Weighers Occupational Profile

#### MEDIAN SALARY & WAGES

$24.64/ Hour

#### COMMON JOB TITLES

- Quality Inspectors
- Quality Control Inspectors
- Materials Testers
- Product Sales Specialists

#### REQUESTED EDUCATION

- High School or Less
- Post-Secondary Certificate

#### TOTAL JOBS FOR 2024

7,292

#### COMMON KNOWLEDGE COMPETENCIES

- Production and Processing
- Mathematics
- English Language
- Computers and Electronics

#### TOP CERTIFICATIONS REQUESTED

- Product Certification
- American Society for Quality Certified
- Certified Quality Technician
- Certified Healthcare Emergency Professional

#### TOP SKILLS REQUESTED

- Quality Control Analysis
- Active Listening
- Reading Comprehension
- Speaking
- Critical Thinking
- Monitoring
- Coordination
- Operation Monitoring
- Judgement and Decision Making
- Writing

#### SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

Indicates an especially close similarity

---

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
## Laborers and Freight, Stock, and Material Movers, Hand Occupational Profile

<table>
<thead>
<tr>
<th>MEDIAN SALARY &amp; WAGES</th>
<th>COMMON JOB TITLES</th>
<th>REQUESTED EDUCATION</th>
<th>TOP SKILLS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15.68/Hour</td>
<td>Material Handlers</td>
<td>High School or Less</td>
<td>Operation and Control</td>
</tr>
<tr>
<td></td>
<td>Warehouse Workers</td>
<td></td>
<td>Active Listening</td>
</tr>
<tr>
<td></td>
<td>Package Handlers</td>
<td></td>
<td>Reading Comprehension</td>
</tr>
<tr>
<td></td>
<td>Product Specialists</td>
<td></td>
<td>Speaking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL JOBS FOR 2024</th>
<th>COMMON KNOWLEDGE COMPETENCIES</th>
<th>TOP CERTIFICATIONS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>29,720</td>
<td>English Language</td>
<td>Certified Forklift Operator</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td>Commercial Driver’s License</td>
</tr>
<tr>
<td></td>
<td>Transportation</td>
<td>Pallet Jack Certification</td>
</tr>
<tr>
<td></td>
<td>Mechanical</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIMILAR INDUSTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; Forestry</td>
</tr>
<tr>
<td>Energy Efficiency &amp; Storage</td>
</tr>
<tr>
<td>Environmental Protection &amp; Waste Reduction</td>
</tr>
<tr>
<td>Government &amp; Regulatory Administration</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Green Construction</td>
</tr>
<tr>
<td>Research, Design, Consulting, &amp; Supportive Services</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Renewable Energy Generation</td>
</tr>
</tbody>
</table>

Indicates an especially close similarity
Machinists Occupational Profile

**MEDIAN SALARY & WAGES**
$24.30/Hour

**COMMON JOB TITLES**
- CNC Machinists
- Tool Makers
- Machine Operators
- CNC Programmers

**REQUESTED EDUCATION**
- High School or Less
- Post-Secondary Certificate

**TOTAL JOBS FOR 2024**
7,759

**COMMON KNOWLEDGE COMPETENCIES**
- Mathematics
- Mechanical
- Production and Processing
- English Language

**TOP SKILLS REQUESTED**
- Operation Monitoring
- Critical Thinking
- Operation and Control
- Reading Comprehension
- Active Listening
- Monitoring
- Coordination
- Speaking
- Complex Problem Solving
- Equipment Selection

**SIMILAR INDUSTRIES**
- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*Indicates an especially close similarity*
Managers, All Other Occupational Profile

MEDIAN SALARY & WAGES
$62.37/Hour

TOTAL JOBS FOR 2024
6,713

COMMON JOB TITLES
- Project Managers
- Program Managers
- Supply Chain Managers
- Project Managers, Computer

COMMON KNOWLEDGE COMPETENCIES
- English Language
- Administration and Management
- Law and Government
- Customer and Personal Service

REQUESTED EDUCATION
- High School or Less
- Post-Secondary Certificate
- Bachelor’s

TOP SKILLS REQUESTED
- Speaking
- Critical Thinking
- Reading Comprehension
- Active Listening
- Writing
- Monitoring
- Judgement and Decision Making
- Coordination
- Complex Problem Solving
- Active Listening

TOP CERTIFICATIONS REQUESTED
- Master of Business Administration
- Certified Public Accountant
- Chartered Financial Analyst
- Certified Internal Auditor

SIMILAR INDUSTRIES
- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
# Materials Engineers Occupational Profile

**MEDIAN SALARY & WAGES**

$47.26/Hour

**TOTAL JOBS FOR 2024**

428

**COMMON JOB TITLES**

- Materials Engineers
- Engineering Fellows
- Optical Engineers
- Welding Engineers

**COMMON KNOWLEDGE COMPETENCIES**

- Engineering and Technology
- Mathematics
- Chemistry
- Physics

**REQUESTED EDUCATION**

- High School or Less
- Post-Secondary Certificate
- Bachelor’s

**TOP CERTIFICATIONS REQUESTED**

- Project Management Professional Certification
- American Society for Quality Certified

**TOP SKILLS REQUESTED**

- Reading Comprehension
- Critical Thinking
- Active Listening
- Writing
- Complex Problem Solving
- Speaking
- Science
- Mathematics
- Active Learning
- Monitoring

**SIMILAR INDUSTRIES**

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*Indicates an especially close similarity*
# Materials Engineers Occupational Profile

## Median Salary & Wages

$32.02/ Hour

## Common Job Titles

- Design Engineers
- Drafters
- Computer Aided Design Designers
- CAD Technicians

## Requested Education

<table>
<thead>
<tr>
<th>High School or Less</th>
<th>Post-Secondary Certificate</th>
</tr>
</thead>
</table>

## Total Jobs for 2024

708

## Common Knowledge Competencies

- Design
- Engineering and Technology
- Mechanical
- Mathematics

## Top Certifications Requested

- Project Management Professional Certification
- American Society for Quality Certified

## Top Skills Requested

- Reading Comprehension
- Critical Thinking
- Active Listening
- Writing
- Complex Problem Solving
- Speaking
- Science
- Mathematics
- Active Learning
- Monitoring

## Similar Industries

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

---

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
# Mechanical Engineering Technicians

## Occupational Profile

<table>
<thead>
<tr>
<th>MEDIAN SALARY &amp; WAGES</th>
<th>COMMON JOB TITLES</th>
<th>REQUESTED EDUCATION</th>
<th>TOP SKILLS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>$33.61/Hour</td>
<td>Mechanical Technicians</td>
<td>High School or Less</td>
<td>Reading Comprehension</td>
</tr>
<tr>
<td></td>
<td>Engineering Technicians</td>
<td>Post-Secondary Certificate</td>
<td>Active Listening</td>
</tr>
<tr>
<td></td>
<td>Engineering Interns</td>
<td></td>
<td>Critical Thinking</td>
</tr>
<tr>
<td></td>
<td>Electrical Technicians</td>
<td></td>
<td>Operation Monitoring</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMON KNOWLEDGE COMPETENCIES</th>
<th>TOP CERTIFICATIONS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering and Technology</td>
<td>None</td>
</tr>
<tr>
<td>Design</td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIMILAR INDUSTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; Forestry</td>
</tr>
<tr>
<td>Energy Efficiency &amp; Storage</td>
</tr>
<tr>
<td>Environmental Protection &amp; Waste Reduction</td>
</tr>
<tr>
<td>Government &amp; Regulatory Administration</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Green Construction</td>
</tr>
<tr>
<td>Research, Design, Consulting, &amp; Supportive Services</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Renewable Energy Generation</td>
</tr>
</tbody>
</table>

- Indicates an especially close similarity

**TOTAL JOBS FOR 2024**: 457

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
# Occupational Health and Safety Specialists

## Occupational Profile

<table>
<thead>
<tr>
<th>MEDIAN SALARY &amp; WAGES</th>
<th>COMMON JOB TITLES</th>
<th>REQUESTED EDUCATION</th>
<th>TOP SKILLS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>$40.22/Hour</td>
<td>Environmental Specialists</td>
<td>High School or Less</td>
<td>Speaking</td>
</tr>
<tr>
<td></td>
<td>Health and Safety Officers</td>
<td>Post-Secondary Certificate</td>
<td>Reading Comprehension</td>
</tr>
<tr>
<td></td>
<td>Safety Managers</td>
<td>Bachelor's</td>
<td>Complex Problem Solving</td>
</tr>
<tr>
<td></td>
<td>Safety Specialists</td>
<td></td>
<td>Writing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMON KNOWLEDGE COMPETENCIES</th>
<th>TOP CERTIFICATIONS REQUESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language</td>
<td>Automotive Service Excellence</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Commercial Driver’s License</td>
</tr>
<tr>
<td>Public Safety and Security</td>
<td>EPA 608 Technician Certification</td>
</tr>
<tr>
<td>Law and Government</td>
<td>CFC Refrigeration Certification</td>
</tr>
</tbody>
</table>

| TOTAL JOBS FOR 2024 | 771 |

<table>
<thead>
<tr>
<th>SIMILAR INDUSTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; Forestry</td>
</tr>
<tr>
<td>Energy Efficiency &amp; Storage</td>
</tr>
<tr>
<td>Environmental Protection &amp; Waste Reduction</td>
</tr>
<tr>
<td>Government &amp; Regulatory Administration</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Green Construction</td>
</tr>
<tr>
<td>Research, Design, Consulting, &amp; Supportive Services</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Renewable Energy Generation</td>
</tr>
</tbody>
</table>

Indicates an especially close similarity

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
# Sales Managers Occupational Profile

## MEDIAN SALARY & WAGES
$69.19/Hour

## COMMON JOB TITLES
- Sales Managers
- Sales Directors
- Account Managers
- Sales Managers

## COMMON KNOWLEDGE COMPETENCIES
- Sales and Marketing
- Customer and Personal Service
- English Language
- Administration and Management

## REQUESTED EDUCATION
<table>
<thead>
<tr>
<th>Top Certification Requested</th>
<th>Education Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Business Administration</td>
<td>Post-Secondary Certificate</td>
</tr>
<tr>
<td>Project Management Professional</td>
<td>Bachelor's</td>
</tr>
<tr>
<td>Series 7 General Securities Representative License</td>
<td>Series 6 Investment Company And Variable Contracts License</td>
</tr>
</tbody>
</table>

## TOTAL JOBS FOR 2024
6,775

## SIMILAR INDUSTRIES
- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

**Indicates an especially close similarity**
# Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products Occupational Profile

## MEDIAN SALARY & WAGES

$50.85/Hour

## COMMON JOB TITLES

- Sales Representatives
- Medical Sales Representatives
- Sales Specialists
- Account Executives

## COMMON KNOWLEDGE COMPETENCIES

- Customer and Personal Service
- Sales and Marketing
- English Language
- Administration and Management

## REQUESTED EDUCATION

<table>
<thead>
<tr>
<th>Level</th>
<th>Bachelor’s</th>
<th>Post-Secondary Certificate</th>
<th>High School or Less</th>
</tr>
</thead>
</table>

## TOP SKILLS REQUESTED

- Speaking
- Persuasion
- Active Listening
- Negotiation
- Social Perceptiveness
- Reading Comprehension
- Service Orientation
- Coordination
- Active Learning
- Writing

## TOP CERTIFICATIONS REQUESTED

- Automotive Service Excellence
- Certified Pharmacy Technician
- Certified Professional Coder
- Certified Forklift Operator

## TOTAL JOBS FOR 2024

2,906

## MEDIAN SALARY & WAGES

$50.85/Hour

## COMMON JOB TITLES

- Sales Representatives
- Medical Sales Representatives
- Sales Specialists
- Account Executives

## COMMON KNOWLEDGE COMPETENCIES

- Customer and Personal Service
- Sales and Marketing
- English Language
- Administration and Management

## REQUESTED EDUCATION

<table>
<thead>
<tr>
<th>Level</th>
<th>Bachelor’s</th>
<th>Post-Secondary Certificate</th>
<th>High School or Less</th>
</tr>
</thead>
</table>

## TOP SKILLS REQUESTED

- Speaking
- Persuasion
- Active Listening
- Negotiation
- Social Perceptiveness
- Reading Comprehension
- Service Orientation
- Coordination
- Active Learning
- Writing

## TOP CERTIFICATIONS REQUESTED

- Automotive Service Excellence
- Certified Pharmacy Technician
- Certified Professional Coder
- Certified Forklift Operator

## SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*Indicates an especially close similarity*
# Sheet Metal Workers Occupational Profile

## MEDIAN SALARY & WAGES

$26.77/ Hour

## COMMON JOB TITLES

- Sheet Metal Mechanics
- Sheet Metal Workers
- Sheet Metal Fabricators
- Heating, Ventilation, and Air Conditioning (HVAC) Sheet Metal Installers

## COMMON KNOWLEDGE COMPETENCIES

- Mechanical
- Mathematics
- Building and Construction
- Administration and Management

## REQUESTED EDUCATION

<table>
<thead>
<tr>
<th>High School or Less</th>
<th>Post-Secondary Certificate</th>
</tr>
</thead>
</table>

## TOP CERTIFICATIONS REQUESTED

- Certified Forklift Manager
- Apple Certified Macintosh Technician
- Commercial Driver’s License

## TOP SKILLS REQUESTED

- Critical Thinking
- Reading Comprehension
- Speaking
- Mathematics
- Monitoring
- Coordination
- Judgement and Decision Making
- Time Management
- Active Listening
- Complex Problem Solving

## TOTAL JOBS FOR 2024

1,275

## SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
# Welders, Cutters, Solderers, and Brazers
## Occupational Profile

### MEDIAN SALARY & WAGES

$25.44/ Hour

### COMMON JOB TITLES

- Welding Supervisors
- Welders
- Fabricators
- Foremen

### COMMON KNOWLEDGE COMPETENCIES

- Production and Processing
- Mechanical
- Design
- Mathematics

### REQUESTED EDUCATION

- High School or Less
- Post-Secondary Certificate

### TOP SKILLS REQUESTED

- Monitoring
- Quality Control Analysis
- Critical Thinking
- Active Listening
- Operation Monitoring
- Reading Comprehension
- Speaking
- Judgement and Decision Making
- Operation and Control
- Time Management

### TOTAL JOBS FOR 2024

2,606

### SIMILAR INDUSTRIES

- Agriculture & Forestry
- Energy Efficiency & Storage
- Environmental Protection & Waste Reduction
- Government & Regulatory Administration
- Transportation
- Green Construction
- Research, Design, Consulting, & Supportive Services
- Manufacturing
- Renewable Energy Generation

*State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020*
## Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>Aircraft Structure, Surfaces, Rigging, and Systems Assemblers</th>
<th>Biochemical Engineers</th>
<th>Chemists</th>
<th>Commercial and Industrial Designers</th>
<th>Electrical and Electronics Repairers, Commercial and Industrial Equipment</th>
</tr>
</thead>
</table>
| Bristol Technical Education Center Gateway Community College  | University of Connecticut, Storrs Campus | Albertus Magnus College  
Asnuntuck Community College  
Capital Community College  
Central Connecticut State University  
Connecticut College  
Fairfield University  
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  
Quinnipiac University  
Sacred Heart University  
Southern Connecticut State University  
Three Rivers Community College  
Trinity College  
Tunxis Community College  
University of Connecticut, Storrs Campus  
University of Hartford  
University of New Haven  
University of Saint Joseph  
Wesleyan University  
Western Connecticut State University  
Yale University | Capital Community College  
Central Connecticut State University  
Eversource Energy- Gas Operations  
Gateway Community College  
Housatonic Community College  
Manchester Community College  
Middlesex Community College  
Mitchell College  
Naugatuck Valley Community College  
Northwestern Connecticut Community College  
Norwalk Community College  
Paier College of Art  
Three Rivers Community College  
Tunxis Community College  
University of Bridgeport  
University of Connecticut, Storrs Campus  
University of New Haven | Capital Community College  
Central Connecticut State University  
Eversource Energy- Gas Operations  
Gateway Community College  
Housatonic Community College  
Manchester Community College  
Middlesex Community College  
Mitchell College  
Naugatuck Valley Community College  
Northwestern Connecticut Community College  
Norwalk Community College  
Paier College of Art  
Three Rivers Community College  
Tunxis Community College  
University of Bridgeport  
University of Connecticut, Storrs Campus  
University of New Haven | Bristol Technical Education Center  
Patrick’s Academy |
## Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>Electrical Engineering Technicians</th>
<th>Electromechanical Engineering Technologists</th>
<th>Electromechanical Technicians</th>
<th>Electronics Engineering Technologists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asnuntuck Community College</td>
<td>AAA Refrigeration</td>
<td>Asnuntuck Community College</td>
<td>AAA Refrigeration</td>
</tr>
<tr>
<td>Central Connecticut State University</td>
<td>AGS HVAC Services</td>
<td>Central Connecticut State University</td>
<td>AGS HVAC Services</td>
</tr>
<tr>
<td>Gateway Community College</td>
<td>Air TempMechanical Services</td>
<td>Dominion Nuclear Connecticut Inc- Apprenticeship</td>
<td>Air TempMechanical Services</td>
</tr>
<tr>
<td>Housatonic Community College</td>
<td>Arbor Energy</td>
<td>Goodwin College</td>
<td>Arbor Energy</td>
</tr>
<tr>
<td>Naugatuck Valley Community College</td>
<td>B T Lindsay &amp; CO Inc.</td>
<td>Tunxis Community College</td>
<td>Eversource Energy- Gas Operations</td>
</tr>
<tr>
<td>Northwestern Connecticut Community College</td>
<td>Bristol Technical Education Center</td>
<td>University of Hartford</td>
<td>Gateway Community College</td>
</tr>
<tr>
<td>Patrick's Academy</td>
<td>Cordone &amp; Tonucci Plumbing, Heating and</td>
<td>Institute of Environmental</td>
<td>Lennox National Account Services</td>
</tr>
<tr>
<td>Three Rivers Community College</td>
<td>Maintenance Contractors, Inc.</td>
<td>Management and Technology, Inc.</td>
<td>Lincoln Technical Institute</td>
</tr>
<tr>
<td>University of Hartford</td>
<td>CT Plumbers &amp; Pipe Fitters UA LU 777JACT</td>
<td></td>
<td>Middlesex Community College</td>
</tr>
<tr>
<td></td>
<td>Devine Bros., Inc</td>
<td></td>
<td>Naugatuck Valley Community College</td>
</tr>
<tr>
<td></td>
<td>Eversource Energy- Gas Operations</td>
<td></td>
<td>New England Mechanical Services, INC.</td>
</tr>
<tr>
<td></td>
<td>Gateway Community College</td>
<td></td>
<td>New England Technical Institute</td>
</tr>
<tr>
<td></td>
<td>Lennox National Account Services</td>
<td></td>
<td>Nutmeg Mechanical Services, Inc.</td>
</tr>
<tr>
<td></td>
<td>Lincoln Technical Institute</td>
<td></td>
<td>Otto Company AKA The Otto Company</td>
</tr>
<tr>
<td></td>
<td>Middlesex Community College</td>
<td></td>
<td>R.A. Levine Company</td>
</tr>
<tr>
<td></td>
<td>Naugatuck Valley Community College</td>
<td></td>
<td>Thomaston Comfort Control, Inc.</td>
</tr>
<tr>
<td></td>
<td>New England Mechanical Services, INC.</td>
<td></td>
<td>Tunxis Community College</td>
</tr>
<tr>
<td></td>
<td>New England Technical Institute</td>
<td></td>
<td>Wilcox Energy</td>
</tr>
<tr>
<td></td>
<td>Nutmeg Mechanical Services, Inc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>First-Line Supervisors of Mechanics, Installers, and Repairers</th>
<th>First-Line Supervisors of Production and Operating Workers</th>
<th>Industrial Engineering Technicians</th>
<th>Industrial Engineering Technologists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asnuntuck Community College</td>
<td>Asnuntuck Community College</td>
<td>Asnuntuck Community College</td>
<td>Goodwin College</td>
</tr>
<tr>
<td>Central Connecticut State University</td>
<td>Central Connecticut State University</td>
<td>Central Connecticut State University</td>
<td></td>
</tr>
<tr>
<td>Eversource (Convex Operating Group)- OJT</td>
<td>Eversource (Convex Operating Group)- OJT</td>
<td>Gateway Community College</td>
<td></td>
</tr>
<tr>
<td>Gateway Community College</td>
<td>Gateway Community College</td>
<td>Goodwin College</td>
<td></td>
</tr>
<tr>
<td>Goodwin College</td>
<td>Goodwin College</td>
<td>Manchester Community College</td>
<td></td>
</tr>
<tr>
<td>Southern Connecticut State University</td>
<td>Southern Connecticut State University</td>
<td>Naugatuck Valley Community College</td>
<td></td>
</tr>
<tr>
<td>University of New Haven</td>
<td>University of New Haven</td>
<td>Northwestern Connecticut Community College</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Three Rivers Community College</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>University of Connecticut, Storrs Campus</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>University of New Haven</td>
<td></td>
</tr>
</tbody>
</table>
# Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>Industrial Production Managers</th>
<th>Industrial Safety and Health Engineers</th>
<th>Inspectors, Testers, Sorters, Samplers, and Weighers</th>
<th>Machinists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albertus Magnus College</td>
<td>Connecticut College</td>
<td>Asnuntuck Community College</td>
<td>Bristol Technical Education Center</td>
</tr>
<tr>
<td>Asnuntuck Community College</td>
<td>University of Connecticut, Storrs Campus</td>
<td>Central Connecticut State University</td>
<td>General Dynamics Electric Boat Division</td>
</tr>
<tr>
<td>Capital Community College</td>
<td>University of Hartford</td>
<td>Gateway Community College</td>
<td>Housatonic Community College</td>
</tr>
<tr>
<td>Central Connecticut State University</td>
<td>University of New Haven</td>
<td>Goodwin College</td>
<td>Manufacturing Alliance Service Corporation, Inc.</td>
</tr>
<tr>
<td>Charter Oak State College</td>
<td>Yale University</td>
<td>Naugatuck Valley Community College</td>
<td>Middlesex Community College</td>
</tr>
<tr>
<td>Eastern Connecticut State University</td>
<td>Eversource (Convex Operating Group)- OJT</td>
<td>Quinebaug Valley Community College</td>
<td>Naugatuck Valley Community College</td>
</tr>
<tr>
<td>Gateway Community College</td>
<td></td>
<td>Tunxis Community College</td>
<td>Pa-Ted Spring Company, LLC.</td>
</tr>
<tr>
<td>Goodwin College</td>
<td></td>
<td></td>
<td>Quinebaug Valley Community College</td>
</tr>
<tr>
<td>Housatonic Community College</td>
<td></td>
<td></td>
<td>Renichel Tool Inc.</td>
</tr>
<tr>
<td>Manchester Community College</td>
<td></td>
<td></td>
<td>TRUMPF Inc.</td>
</tr>
<tr>
<td>Middlesex Community College</td>
<td></td>
<td></td>
<td>Tunxis Community College</td>
</tr>
<tr>
<td>Mitchell College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naugatuck Valley Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Horizons Computer Learning Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwestern Connecticut Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norwalk Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quinnipiac University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacred Heart University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Connecticut State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three Rivers Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tunxis Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States Coast Guard Academy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Bridgeport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Connecticut - Waterbury Campus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Connecticut, School of Business</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Connecticut, Stamford</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Connecticut, Storrs Campus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Connecticut, Tri-Campus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Hartford</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of New Haven</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Saint Joseph</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Connecticut State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yale University</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>Manufacturing Engineering Technologists</th>
<th>Manufacturing Engineers</th>
<th>Manufacturing Production Technicians</th>
<th>Materials Engineers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gateway Community College</td>
<td>Quinebaug Valley Community College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goodwin College</td>
<td>Three Rivers Community College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute of Environmental Management and Technology, Inc.</td>
<td>University of Connecticut, Storrs Campus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middlesex Community College</td>
<td>University of Hartford</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naugatuck Valley Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tunxis Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

State of Connecticut Department of Labor, Office of Workforce Competitiveness, Spring 2020
### Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>Mechanical Drafters</th>
<th>Mechatronics Engineers</th>
<th>Medical Engineering Technologists</th>
<th>Microsystems Engineers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gateway Community College</td>
<td>Manufacturing Alliance Service Corporation, Inc.</td>
<td>Eversource Energy- Gas Operations</td>
<td>Quinebaug Valley Community College</td>
</tr>
<tr>
<td>General Dynamics Electric Boat Division</td>
<td>Quinebaug Valley Community College</td>
<td>Gateway Community College</td>
<td>University of Hartford</td>
</tr>
<tr>
<td>Manchester Community College</td>
<td>Three Rivers Community College</td>
<td>Middlesex Community College</td>
<td></td>
</tr>
<tr>
<td>Naugatuck Valley Community College</td>
<td>University of Connecticut, Storrs Campus</td>
<td>Naugatuck Valley Community College</td>
<td></td>
</tr>
<tr>
<td>Patrick's Academy</td>
<td>University of Hartford</td>
<td>Tunxis Community College</td>
<td></td>
</tr>
<tr>
<td>Quinebaug Valley Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three Rivers Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tunxis Community College</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


## Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>Nanosystems Engineers</th>
<th>Occupational Health and Safety Specialists</th>
<th>Occupational Health and Safety Technicians</th>
<th>Photonics Engineers</th>
</tr>
</thead>
</table>
| Southern Connecticut State University  
University of Connecticut, Storrs Campus  
Yale University | Central Connecticut State University  
Institute of Environmental Management and Technology, Inc.  
University of Connecticut, Storrs Campus | Central Connecticut State University  
Institute of Environmental Management and Technology, Inc. | Southern Connecticut State University  
University of Connecticut, Storrs Campus  
Yale University |
## Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>Photonics Technicians</th>
<th>Robotics Engineers</th>
<th>Robotics Technicians</th>
<th>Sheet Metal Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Community College</td>
<td>Guinebaug Valley Community College</td>
<td>Asnuntuck Community College</td>
<td>Air Temp Mechanical Services</td>
</tr>
<tr>
<td>Norwalk Community College</td>
<td>University of Hartford</td>
<td>Central Connecticut State University</td>
<td>Construction Education Center, Inc.</td>
</tr>
<tr>
<td>Three Rivers Community College</td>
<td></td>
<td>Goodwin College</td>
<td>New England Mechanical Services, INC.</td>
</tr>
<tr>
<td>University of Hartford</td>
<td></td>
<td>Tunxis Community College</td>
<td>Sheet Metal Workers, Local Union 40, JACT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>University of Hartford</td>
<td>Three Rivers Community College</td>
</tr>
</tbody>
</table>
## Education & Training Institutions Offerings

<table>
<thead>
<tr>
<th>Solderers and Brazers</th>
<th>Supply Chain Managers</th>
<th>Validation Engineers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asnuntuck Community College</td>
<td>Albertus Magnus College</td>
<td>Advanced Electrical Services, Inc.</td>
</tr>
<tr>
<td>Bristol Technical Education Center</td>
<td>Asnuntuck Community College</td>
<td>Asnuntuck Community College</td>
</tr>
<tr>
<td>Goodwin College</td>
<td>Capital Community College</td>
<td>Construction Education Center, Inc.</td>
</tr>
<tr>
<td>Lincoln Technical Institute</td>
<td>Central Connecticut State University</td>
<td>Dominion Nuclear Connecticut Inc- Apprenticeship</td>
</tr>
<tr>
<td>Naugatuck Valley Community College</td>
<td>Charter Oak State College</td>
<td>Dubaldo Electric Co</td>
</tr>
<tr>
<td></td>
<td>Connecticut College</td>
<td>Eversource (Convex Operating Group)- OJT</td>
</tr>
<tr>
<td></td>
<td>Eastern Connecticut State University</td>
<td>Fairfield University</td>
</tr>
<tr>
<td></td>
<td>Fairfield University</td>
<td>Gateway Community College</td>
</tr>
<tr>
<td></td>
<td>Gateway Community College</td>
<td>Griffin Electrical Contractors, Inc.</td>
</tr>
<tr>
<td></td>
<td>Goodwin College</td>
<td>Haskins Electric, LLC</td>
</tr>
<tr>
<td></td>
<td>Housatonic Community College</td>
<td>Housatonic Community College</td>
</tr>
<tr>
<td></td>
<td>Manchester Community College</td>
<td>Manchester Community College</td>
</tr>
<tr>
<td></td>
<td>Middlesex Community College</td>
<td>Manufacturing Alliance Service Corporation, Inc.</td>
</tr>
<tr>
<td></td>
<td>Mitchell College</td>
<td>Middlesex Community College</td>
</tr>
<tr>
<td></td>
<td>Naugatuck Valley Community College</td>
<td>National Electrical Contractors Associates NECA &amp; Local 90</td>
</tr>
<tr>
<td></td>
<td>New Horizons Computer Learning Center</td>
<td>JATC</td>
</tr>
<tr>
<td></td>
<td>Northwestern Connecticut Community College</td>
<td>Naugatuck Valley Community College</td>
</tr>
<tr>
<td></td>
<td>Norwalk Community College</td>
<td>Northwestern Connecticut Community College</td>
</tr>
<tr>
<td></td>
<td>Patrick’s Academy</td>
<td>Norwalk Community College</td>
</tr>
<tr>
<td></td>
<td>Post University</td>
<td>Quinebaug Valley Community College</td>
</tr>
<tr>
<td></td>
<td>Quinipiac University</td>
<td>Ray Brown Electric, LLC</td>
</tr>
<tr>
<td></td>
<td>Sacred Heart University</td>
<td>Sacred Heart University</td>
</tr>
<tr>
<td></td>
<td>Southern Connecticut State University</td>
<td>Southern Connecticut State University</td>
</tr>
<tr>
<td></td>
<td>Three Rivers Community College</td>
<td>Three Rivers Community College</td>
</tr>
<tr>
<td></td>
<td>Tunxis Community College</td>
<td>Trinity College</td>
</tr>
<tr>
<td></td>
<td>United States Coast Guard Academy</td>
<td>Tunxis Community College</td>
</tr>
<tr>
<td></td>
<td>University of Bridgeport</td>
<td>United States Coast Guard Academy</td>
</tr>
<tr>
<td></td>
<td>University of Connecticut - Waterbury Campus</td>
<td>University of Bridgeport</td>
</tr>
<tr>
<td></td>
<td>University of Connecticut, School of Business</td>
<td>University of Connecticut, Storrs Campus</td>
</tr>
<tr>
<td></td>
<td>University of Connecticut, Stamford</td>
<td>University of Hartford</td>
</tr>
<tr>
<td></td>
<td>University of Connecticut, Storrs Campus</td>
<td>University of New Haven</td>
</tr>
<tr>
<td></td>
<td>University of Connecticut, Tri-Campus</td>
<td>Yale University</td>
</tr>
<tr>
<td></td>
<td>University of Hartford</td>
<td>Yale University</td>
</tr>
<tr>
<td></td>
<td>University of New Haven</td>
<td></td>
</tr>
</tbody>
</table>
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 accreditoring 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.