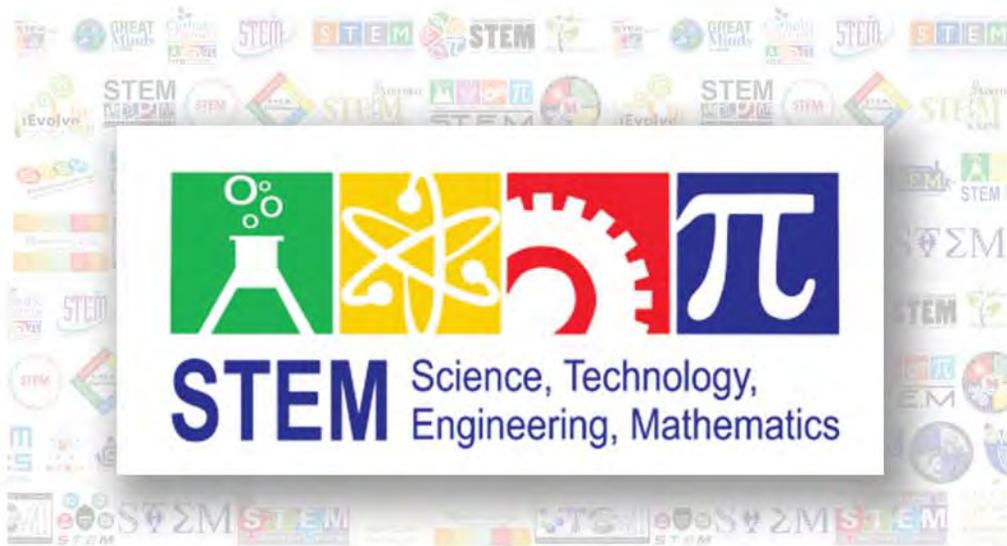


CONNECTICUT'S STEM AND MANUFACTURING JOBS



OTHER RELATED OFFICE OF RESEARCH PRODUCTS

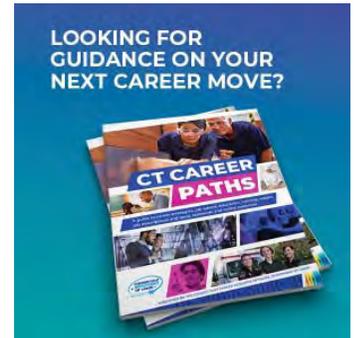
www1.ctdol.state.ct.us/lmi/publications.asp



CONNECTICUT CAREER PATHS

Choosing a career is one of the most important decisions you will ever make. The Connecticut Department of Labor's latest resource guide can help with this effort, providing job strategies, education and training advice, wage guidelines, and local, statewide and online resources.

The 56-page guide is well organized for quick references that include the locations and contact information for the American Job Centers, Labor Department's Job Bank-CTHires.com, Career and Educational Resources, and Government Resources in Connecticut. Articles in the guide also provide information on advanced manufacturing, apprenticeship, core components of student success plans, employment of minors, résumé design basics, and steps to become a teacher. It also contains data on more than 360 occupations in the state, including narrative descriptions, number of individuals currently employed, annual job openings, salary information, required training and basic skills sought by employers. www1.ctdol.state.ct.us/lmi/careerpaths.asp



CONNECTICUT EDUCATION & TRAINING CONNECTION

Intended for use by students, teachers, counselors, job seekers, job developers, and others in need of information on education and training. It offers several search options to explore the world of Education & Training in Connecticut - find providers in your area, locate providers that offer the program or course you are interested in, or find out which programs or courses are related to the occupation you are interested in. www.cttraining.info



CONNECTICUT CAREER POSTERS - JOB JOURNEYS

Job Seekers, Students, Career Counselors, Teachers, Education/Training Administrators, and Workforce Professionals.

Connecticut Career Posters offer colorful, at-a-glance illustrations of job journeys in each of Connecticut's 16 career clusters.

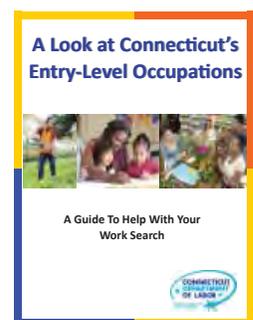
Each poster includes information on some of Connecticut's in-demand occupations within each career cluster, grouped by level of education or training required and average annual wage. www1.ctdol.state.ct.us/lmi/careerposters.asp



A LOOK AT CONNECTICUT'S ENTRY-LEVEL OCCUPATIONS

The Connecticut Department of Labor's Office of Research has prepared this document for people who want or need to find work immediately, but don't know where to start.

To give jobseekers an idea of the wage they can expect, a range of statewide hourly wages is provided. This is not a guarantee that you would automatically make this amount, merely a guideline as to what you may reasonably expect to be paid. www1.ctdol.state.ct.us/lmi/entlev.asp



CONNECTICUT'S STEM & MANUFACTURING JOBS

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Connecticut Department of Labor Data Sources:

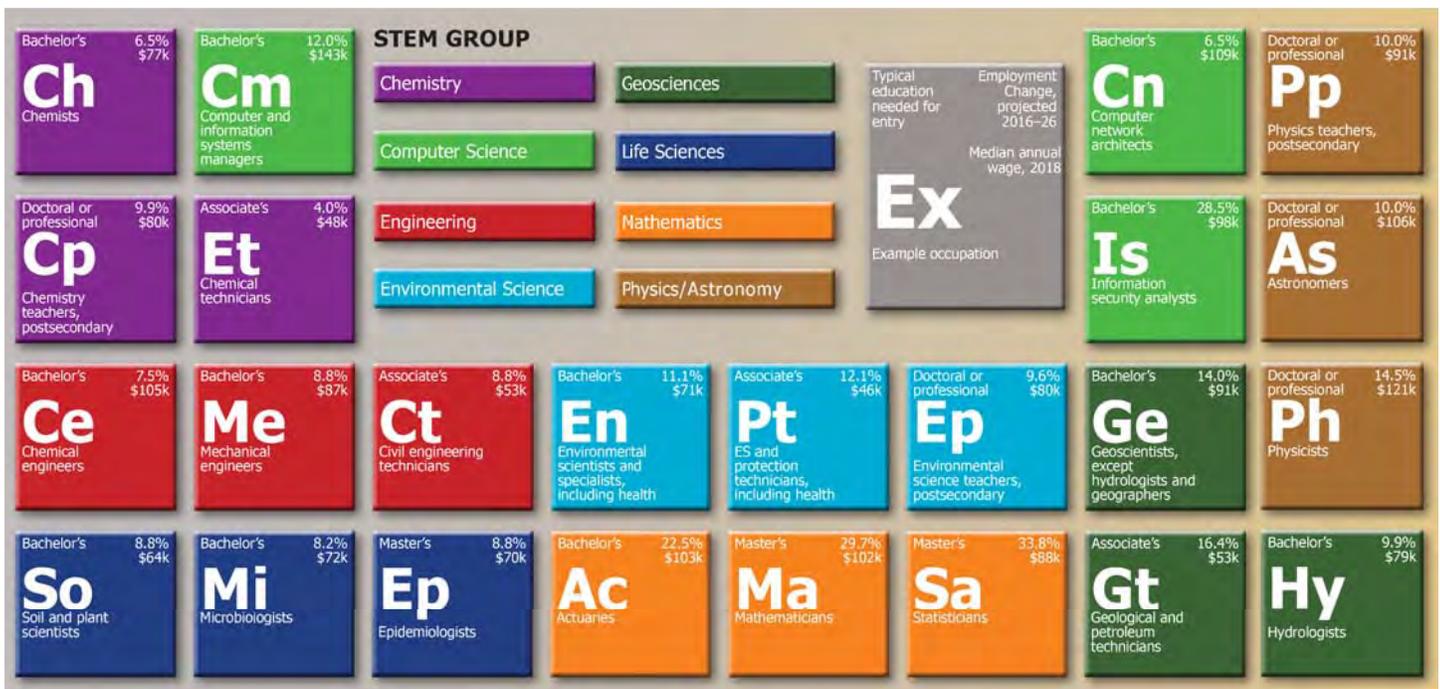
- Job outlook, annual openings and growth rank is based on the 2016-2026 projection data
- Hourly and annual wages are based on First Quarter of 2019
- Information on job ads and job titles is sourced from the Conference Board's Help Wanted OnLine
- Information on additional careers and training is available at www1.ctdol.state.ct.us/lmi/careerpaths.asp

Kurt Westby, Labor Commissioner
 Andrew Condon, Director of Research
 Jessy P. George, Program Manager



Connecticut Department of Labor
 200 Folly Brook Boulevard
 Wethersfield, Connecticut 06109

BLS periodic table of science, technology, engineering and mathematics (STEM) occupations.



BLS would like to thank the Nebraska Department of Labor for the original idea for this table

What is STEM?

Science: Science technicians collect samples, conduct experiments, and do other tasks to assist scientists in those efforts. For example, the life sciences study the living world, such as plants or the human body; disciplines include ecology, genetics, neuroscience, pathology, and nutrition.

Technology: Technology workers use science and engineering to create and troubleshoot computer and information systems. For example, some tech workers develop software applications and build and maintain computer networks and databases. Disciplines in computer and information sciences, including those related to operating systems, artificial intelligence, programming, cryptography, and mobile computing.

Engineering: Engineers and engineering technicians use math, science, and technology to solve real-world problems. The work often involves developing systems, structures, products, or materials. Disciplines in engineering are often categorized by industry, such as aerospace, petroleum, or textiles. Major disciplines include civil, mechanical, industrial, electrical, and materials engineering.

Mathematics: Math workers use numerical, spatial, and logical relationships to study and solve problems. For example, an operations research analyst helps organizations identify practices that improve efficiency, and a mathematical technician applies standard formulas to technological problems in engineering and physical sciences. Disciplines in math include algebra, statistics, calculus, game theory, and geometry.

SOURCE: "STEM 101: Intro to Tomorrow's Jobs" U.S. Bureau of Labor Statistics

AEROSPACE ENGINEERS

Job Description

Aerospace engineers design primarily aircraft, spacecraft, satellites, and missiles. In addition, they create and test prototypes to make sure that they function according to design.

They are employed in industries whose workers design or build aircraft, missiles, systems for national defense, or spacecraft. Aerospace engineers are employed primarily in manufacturing, analysis and design, research and development, and the federal government.



Employment

Current estimated employment in Connecticut is 1,799 for this occupation. Employment for this occupation is projected to be 2,161 in 2026.

Job Openings

An average of 152 job openings per year is estimated for this occupation.

Employment of aerospace engineers is projected to grow much faster than the average for all occupations from 2016-2026.

Wages: Hourly / Annual

Starting wage: \$32.16 / \$66,895

Average wage: \$52.23 / \$108,649

Education/OJT Training Requirements

Aerospace engineers must have a bachelor's degree in aerospace engineering or another field of engineering or science related to aerospace systems. Aerospace engineers who work on projects that are related to national defense may need a security clearance. Entry-level aerospace engineers usually need a bachelor's degree. High school students interested in studying aerospace engineering should take courses in chemistry, physics, advanced math, and computer programming and computer languages.

HELP WANTED INFORMATION

Common job titles for this occupation

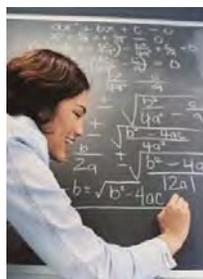
Aerospace Project Engineer
Repair Development Engineer
Entry Level Engineer
Senior Engineer, Design Engineer
HSE Durability Engineer

Locations with the most job ads

East Hartford, CT
Windsor Locks, CT
Windsor, CT
Middletown, CT
Bridgeport, CT

Employers with the most job ads

United Technologies Corporation
US Air Force
Lockheed Martin Corporation
Quest Global
Kemtah Group Incorporated



ARCHITECTURAL AND ENGINEERING MANAGERS

Job Description

Architectural and engineering managers plan, direct, and coordinate activities in architectural and engineering companies.

They may direct and coordinate building activities at construction sites or activities related to production, operations, quality assurance, testing, or maintenance at manufacturing sites.



Employment

Current estimated employment in Connecticut is 3,403 for this occupation. Employment for this occupation is projected to be 3,933 in 2026.

Job Openings

An average of 303 job openings per year is estimated for this occupation.

Employment of architectural and engineering managers is projected to grow much faster than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$48.26 / \$100,378

Average wage: \$70.53 / \$146,708

Education/OJT Training Requirements

Architectural and engineering managers typically need at least a bachelor's degree and considerable work experience as an architect or engineer. Most have at least a bachelor's degree in an engineering specialty or a master's degree in architecture. Managers advance to their positions after years of employment as an architect or engineer. They usually have experience working on difficult or complex projects, developing designs, solving problems, and making decisions. Before moving up to a management position, they also typically gain experience leading engineering teams.



HELP WANTED INFORMATION

Common job titles for this occupation

Project Engineer
Engineering Manager
Chief Engineer
Senior Project Engineer
Laser Engineering Manager

Locations with the most job ads

East Hartford, CT
Windsor Locks, CT
Hartford, CT
Windsor, CT
Stamford, CT

Employers with the most job ads

United Technologies Corporation
Triumph Group Incorporated
Kemtah Group Incorporated
Eversource Energy
BI Companies

COMPUTER NUMERICALLY CONTROLLED (CNC) MACHINE TOOL PROGRAMMERS

Job Description

Computer Numerically Controlled Machine Tool Programmers operate computer controlled machines or robots to perform one or more machine functions on metal or plastic work pieces. Workers in many different occupations, including machinists, computer controlled machine tool operators, assemblers, welders, quality control inspectors, and industrial production managers, are involved in manufacturing the turbine components.



Employment

Current estimated employment in Connecticut is 756 for this occupation. Employment for this occupation is projected to be 1,009 in 2026.

Job Openings

An average of 111 job openings per year is estimated for this occupation.

Employment of Computer Numerically Controlled Machine Tool Programmers is projected to grow much faster than the average for all occupations from 2016 to 2026..

Wages: Hourly / Annual

Starting wage: \$21.02 / \$43,716

Average wage: \$32.24 / \$67,057

Education/OJT Training Requirements

Machine operator trainees usually begin by watching and helping experienced workers on the job. The complexity of the equipment usually determines the time required to become an operator.

Some employers prefer to hire workers who either have completed or are enrolled in a training program (www.ct.edu/makeithere).

HELP WANTED INFORMATION

Common job titles for this occupation

CNC Programmer
CNC Operator/Programmer
5 Axis Mill-Turn CNC Programmer
Applications Engineer
CNC Applications Engineer

Locations with the most job ads

Windsor, CT
New Britain, CT
Hartford, CT
Chester, CT
Danbury, CT

Employers with the most job ads

Franklin Russell Associates
Rbc Bearings Incorporated
Kemtah Group Incorporated
Beacon Industries
CNC Incorporated

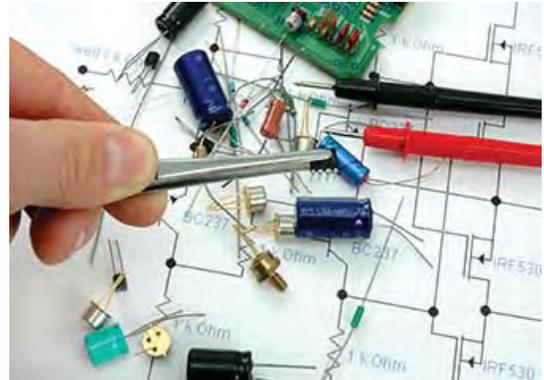


ELECTRICAL AND ELECTRONICS ENGINEERING TECHNICIANS

Job Description

Electrical and electronics engineering technicians help engineers design and develop computers, communications equipment, medical monitoring devices, navigational equipment, and other electrical and electronic equipment. They often work in product evaluation and testing, and use measuring and diagnostic devices to adjust, test, and repair equipment. They are also involved in the manufacture and deployment of equipment for automation.

These technicians often need to read blueprints, schematic drawings, and engineering instructions for assembling electronic units.



Employment

Current estimated employment in Connecticut is 1,516 for this occupation. Employment for this occupation is projected to be 1,700 in 2026.

Job Openings

An average of 154 job openings per year is estimated for this occupation.

Employment of Electrical and Electronics Engineering Technicians is projected to grow faster than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$21.84 / \$45,438

Average wage: \$32.10 / \$66,773

Education/OJT Training Requirements

Programs for electrical and electronics engineering technicians usually lead to an associate's degree in electrical or electronics engineering technology. Vocational-technical schools include postsecondary institutions that serve local students and emphasize training needed by local employers.

Prospective electrical and electronics engineering technicians usually take courses in programming languages, chemistry, physics, logical processors, and circuitry.

HELP WANTED INFORMATION

Common job titles for this occupation

Electronics Technician
 Test Technician
 Electromechanical Technician
 Electronic Technician
 Electrical Technician

Locations with the most job ads

Hartford, CT
 Windsor Locks, CT
 Bloomfield, CT
 Wallingford, CT
 North Haven, CT

Employers with the most job ads

United Technologies Corporation
 Jones Lang Lasalle Incorporated
 Rogers Corporation
 Kimberly-Clark
 Coherent Group



INDUSTRIAL ENGINEERS

Job Description

Industrial engineers find ways to eliminate wastefulness in production processes. They devise efficient systems that integrate workers, machines, materials, information, and energy to make a product or provide a service.

Industrial engineers apply their skills to many different situations, from manufacturing to healthcare systems to business administration. They focus on how to get the work done most efficiently, balancing many factors, such as time, number of workers needed, available technology, actions workers need to take, achieving the end product with no errors, workers' safety, environmental concerns, and cost.

Employment

Current estimated employment in Connecticut is 4,582 for this occupation. Employment for this occupation is projected to be 5,478 in 2026.

Job Openings

An average of 410 job openings per year is estimated for this occupation.

Employment of Industrial Engineers is projected to grow much faster than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$31.48 / \$65,470

Average wage: \$43.94 / \$91,394

Education/OJT Training Requirements

Industrial engineers need a bachelor's degree, typically in industrial engineering. Many companies will be seeking to make use of new technologies to automate production processes in many different kinds of industries, including manufacturing industries. Those with knowledge of manufacturing engineering may find better prospects for employment.

Bachelor's degree programs include lectures in classrooms and practice in laboratories. Courses include statistics, production systems planning, and manufacturing systems design, among others.



HELP WANTED INFORMATION

Common job titles for this occupation

Supplier Quality Engineer
Industrial Engineer
Continuous Improvement Engineer
Engineer I - Supplier Quality
Production Engineer

Locations with the most job ads

Wilton, CT
Windsor Locks, CT
East Hartford, CT
Groton, CT
North Haven, CT

Employers with the most job ads

United Technologies Corporation
General Dynamics
ASML United States Incorporated
Kaman Corporation



INDUSTRIAL ENGINEERING TECHNICIANS

Job Description

Industrial engineering technicians help industrial engineers implement designs to use personnel, materials, and machines effectively in factories, stores, healthcare organizations, repair shops, and offices. They prepare machinery and equipment layouts, plan workflows, conduct statistical production studies, and analyze production costs.



Employment

Current estimated employment in Connecticut is 1,060 for this occupation. Employment for this occupation is projected to be 1,211 in 2026.

Job Openings

An average of 111 job openings per year is estimated for this occupation.

Employment of Industrial Engineering Technicians is projected to grow faster than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$21.03 / \$43,749

Average wage: \$29.49 / \$61,350

Education/OJT Training Requirements

Industrial engineering technicians typically need an associate's degree or a postsecondary certificate. Community colleges or technical institutes typically offer associate's degree programs, and vocational-technical schools offer certificate programs.

HELP WANTED INFORMATION

Common job titles for this occupation

Engineering Technician
Industrial Engineering Analyst
Industrial Engineering Technician
Manufacturing Technician
Methods Engineer

Locations with the most job ads

Hartford, CT
Milford, CT
Bloomfield, CT
South Windsor, CT
East Hartford, CT

Employers with the most job ads

Praxair
State of Connecticut DOT
State of Connecticut DEEP
Niagara Bottling LLC
United Technologies Corporation
Legrand



INDUSTRIAL MACHINERY MECHANICS

Job Description

Industrial machinery mechanics and machinery maintenance workers maintain and repair factory equipment and other industrial machinery, such as conveying systems, production machinery, and packaging equipment.

Industrial machinery mechanics, also called maintenance machinists, keep machines in working order by detecting and correcting errors before the machine or the products it produces are damaged.



Employment

Current estimated employment in Connecticut is 2,455 for this occupation. Employment for this occupation is projected to be 2,809 in 2026.

Job Openings

An average of 260 job openings per year is estimated for this occupation.

Employment of Industrial machinery mechanics is projected to grow much faster than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$20.46 / \$42,552

Average wage: \$29.87 / \$62,121

HELP WANTED INFORMATION

Common job titles for this occupation

Maintenance Mechanic
Mechanic
Preventative Maintenance Mechanic
Meter Service Mechanic
Senior Maintenance Mechanic Millwright

Locations with the most job ads

East Hartford, CT
Middletown, CT
Wallingford, CT
New Haven, CT
Bloomfield, CT

Employers with the most job ads

United Technologies Corporation
Oldcastle Precast Incorporated
Eversource Energy
Ametek Incorporated
Kimberly-Clark

Education/OJT Training Requirements

Industrial machinery mechanics, machinery maintenance workers, and millwrights need a high school diploma. They also usually need a year or more of training after high school.

Industrial machinery mechanics and machinery maintenance workers typically receive more than a year of on-the-job training and learn how to perform routine tasks, such as setting up, cleaning, lubricating, and starting machinery.



MACHINISTS

Job Description

Machinists and tool and die makers set up and operate a variety of computer-controlled and mechanically controlled machine tools to produce precision metal parts, instruments, and tools. Some of their duties include: work from blueprints, sketches, or computer-aided design (CAD) and computer-aided manufacturing (CAM) files; set up, operate, and disassemble manual, automatic, and computer-numeric-controlled (CNC) machine tools; align, secure, and adjust cutting tools and workpieces; monitor the feed and speed of machines.

Employment

Current estimated employment in Connecticut is 7,847 for this occupation. Employment for this occupation is projected to be 8,871 in 2026.

Job Openings

An average of 936 job openings per year is estimated for this occupation.

Employment of Machinists is projected to grow faster than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$17.10 / \$35,574

Average wage: \$24.85 / \$51,694

Education/OJT Training Requirements

Machinists train in apprenticeship programs, vocational schools, or community or technical colleges, or on the job. Good math and problem-solving skills, in addition to familiarity with computer software, are important. A high school diploma or equivalent is necessary.



HELP WANTED INFORMATION

Common job titles for this occupation

Machinist
Manual Machinist
Machining Support
Precision Machining
Tool and Die Machinist

Locations with the most job ads

Danbury, CT
Windsor, CT
Manchester, CT
Middletown, CT
Bloomfield, CT

Employers with the most job ads

EDAC Technologies
United Technologies Corporation
Kaman Corporation
Kemtah Group Incorporated
Luk USA LLC



MECHANICAL DRAFTERS

Job Description

Drafters use software to convert the designs of engineers and architects into technical drawings. Most workers specialize in architectural, civil, electrical, or mechanical drafting and use technical drawings to help design everything from microchips to skyscrapers. Mechanical drafters prepare layouts that show the details for a wide variety of machinery and mechanical tools and devices, such as medical equipment.



Employment

Current estimated employment in Connecticut is 1,977 for this occupation. Employment for this occupation is projected to be 2,548 in 2026.

Job Openings

An average of 246 job openings per year is estimated for this occupation.

Employment of Mechanical Drafters is projected to grow much faster than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$21.55 / \$44,827

Average wage: \$32.58 / \$67,749

HELP WANTED INFORMATION

Common job titles for this occupation

Drafter
Mechanical Designer
CAD Drafter
Mechanical Drafter
CAD Drafter

Locations with the most job ads

Windsor, CT
Bristol, CT
Windsor Locks, CT
Norwich, CT
Wallingford, CT

Employers with the most job ads

Kemtah Group Incorporated
United Technologies Corporation
American Systems Corporation
General Dynamics
Avangrid

Education/OJT Training Requirements

Drafters typically need specialized training, which can be accomplished through a technical program that leads to a certificate or an associate's degree in drafting. The American Design Drafting Association (ADDA) offers certification for drafters in several specialties, including architectural, civil, and mechanical drafting. Although not mandatory, certification demonstrates competence and knowledge of nationally recognized practices.



MECHANICAL ENGINEERS

Job Description

Mechanical engineers design, develop, build, and test mechanical and thermal sensors and devices, including tools, engines, and machines. They design power-producing machines, such as electric generators, internal combustion engines, and steam and gas turbines, as well as power-using machines, such as refrigeration and air-conditioning systems.

Mechanical engineers design other machines inside buildings, such as elevators and escalators. They also design material-handling systems, such as conveyor systems and automated transfer stations.

Employment

Current estimated employment in Connecticut is 6,206 for this occupation. Employment for this occupation is projected to be 5,779 in 2026.

Job Openings

An average of 578 job openings per year is estimated for this occupation.

Employment of Mechanical Engineers is projected to grow much faster than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$31.90 / \$66,356

Average wage: \$46.11 / \$95,911

Education/OJT Training Requirements

Mechanical engineers typically need a bachelor's degree in mechanical engineering or mechanical engineering technology. Mechanical engineers who sell services publicly must be licensed in all states and the District of Columbia. Mechanical engineering programs usually include courses in mathematics and life and physical sciences, as well as engineering and design.



HELP WANTED INFORMATION

Common job titles for this occupation

Mechanical Engineer
Component Engineer
Mechanical Design Engineer
Senior Mechanical Engineer
Senior Design Engineer

Locations with the most job ads

East Hartford, CT
Wilton, CT
Middletown, CT
Windsor Locks, CT
Groton, CT

Employers with the most job ads

United Technologies Corporation
General Dynamics
Kemtah Group Incorporated
ASML United States Incorporated
Rolls Royce Plc



MECHANICAL ENGINEERING TECHNICIANS

Job Description

Mechanical engineering technicians help mechanical engineers design, develop, test, and manufacture mechanical devices, including tools, engines, and machines. They may make sketches and rough layouts, record and analyze data, make calculations and estimates, and report their findings. Some mechanical engineering technicians test and inspect machines and equipment, or work with engineers to eliminate production problems.



Employment

Current estimated employment in Connecticut is 982 for this occupation. Employment for this occupation is projected to be 1,218 in 2026.

Job Openings

An average of 117 job openings per year is estimated for this occupation.

Employment of Mechanical Engineering Technicians is projected to grow much faster than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$24.50 / \$50,962

Average wage: \$34.20 / \$71,117

Education/OJT Training Requirements

Most employers prefer to hire candidates with an associate's degree or other postsecondary training in mechanical engineering technology. Prospective engineering technicians should take as many science and math courses as possible while in high school.

Mechanical engineering technicians typically need an associate's degree or a certificate from a community college or vocational-technical school. Explore training options at: www.CTtraining.info.

HELP WANTED INFORMATION

Common job titles for this occupation

Mechanical Technician
Mechanical Inspector
Engineering Technician
Technical Field Advisory - Mechanical
Customer Technical Services,
Mechanical Systems

Locations with the most job ads

East Hartford, CT
Hartford, CT
Danbury, CT
New Haven, CT
Milford, CT

Employers with the most job ads

Kentah Group Incorporated
United Technologies Corporation
American Systems Corporation
General Dynamics
Avangrid



QUALITY CONTROL INSPECTORS

Job Description

Quality control inspectors examine products and materials for defects or deviations from specifications.

Quality control inspectors monitor quality standards for nearly all manufactured products, including foods, textiles, clothing, glassware, motor vehicles, electronic components, computers, and structural steel. Specific job duties vary across the wide range of industries in which these inspectors work. Inspectors in some industries may be on their feet all day and may have to lift heavy items. In other industries, workers may sit during their shift and read electronic printouts of data.

Employment

Current estimated employment in Connecticut is 8,229 for this occupation. Employment for this occupation is projected to be 7,695 in 2026.

Job Openings

An average of 888 job openings per year is estimated for this occupation.

Employment of Quality Control Inspectors is projected to grow slower than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$15.57 / \$32,373

Average wage: \$25.20 / \$52,430

Education/OJT Training Requirements

Most quality control inspectors need a high school diploma and receive on-the-job training that typically lasts as little as 1 month or up to 1 year.

Training for new inspectors may cover the use of special meters, gauges, computers, and other instruments; quality control techniques such as Six Sigma; blueprint reading; safety; and reporting requirements. Some postsecondary training programs exist, but many employers prefer to train inspectors on the job.



HELP WANTED INFORMATION

Common job titles for this occupation

Quality Inspector
Quality Control Inspector
Quality Technician
Quality Assurance Specialist
Quality Assurance Inspector

Locations with the most job ads

East Hartford, CT
Manchester, CT
Hartford, CT
Windsor, CT

Employers with the most job ads

United Technologies Corporation
Kemtah Group Incorporated
US Department of Defense
Triumph Group Incorporated
Timken Company



TOOL AND DIE MAKERS

Job Description

Tool and die makers read blueprints, sketches, specifications, or CAD and CAM files for making tools and dies; compute and verify dimensions, sizes, shapes, and tolerances of workpieces; set up, operate, and disassemble conventional, manual, and CNC machine tools; file, grind, and adjust parts; test completed tools and dies; smooth and polish the surfaces of tools and dies.



Employment

Current estimated employment in Connecticut is 2,097 for this occupation. Employment for this occupation is projected to be 2,146 in 2026.

Job Openings

An average of 203 job openings per year is estimated for this occupation.

Employment of Tool and Die Makers is projected to grow slower than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$22.44 / \$46,672

Average wage: \$31.30 / \$65,113

HELP WANTED INFORMATION

Common job titles for this occupation

Tool and Die Maker
Tool Maker
Aerospace Tool Maker
Manual Toolmaker
Senior Tool Maker

Locations with the most job ads

Danbury, CT
Farmington, CT
New Britain, CT
West Hartford, CT
Bridgeport, CT

Employers with the most job ads

Barden Incorporated
Click Bond
Legrand
Schaeffler Group
Altra Industrial Motion

Education/OJT Training Requirements

To become a fully trained tool and die maker takes several years of technical instruction and on-the-job training. Good math and problem-solving skills, in addition to familiarity with computer software, are important. A high school diploma or equivalent is necessary.



SOFTWARE DEVELOPERS, APPLICATIONS

Job Description

Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May analyze and design databases within an application area, working individually or coordinating database development as part of a team. May supervise computer programmers.



Employment

Current estimated employment in Connecticut is 9,492 for this occupation. Employment for this occupation is projected to be 12,275 in 2026.

Job Openings

An average of 961 job openings per year is estimated for this occupation.

Employment of Software Developers, Applications is projected to grow much faster than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$34.34 / \$71,432

Average wage: \$51.60 / \$107,337

Education/OJT Training Requirements

Software Developers, Applications typically need a Bachelor's degree. They also usually need several years of training after college.

Software Developers, Applications workers typically receive more than a year of on-the-job training and learn how to using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.

HELP WANTED INFORMATION

Common job titles for this occupation

Software Development Engineer
Software Developer
Applications Developer
.Net Developer
Development Associate

Locations with the most job ads

East Hartford, CT
Hartford, CT
Bloomfield, CT
Groton, CT
Farmington, CT

Employers with the most job ads

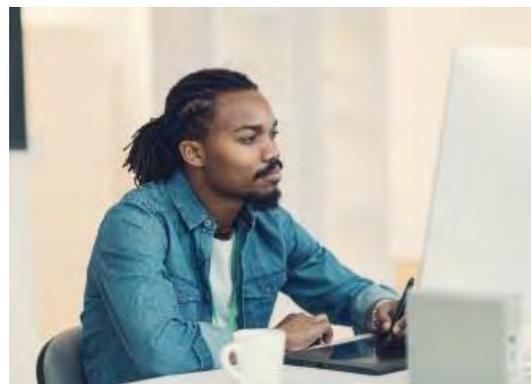
United Technologies Corporation
General Dynamics
Pratt & Whitney
Pitney Bowes
3M Company



WEB DEVELOPERS

Job Description

Web developers design and create web sites. They are responsible for the look of the site. They are also responsible for the site's technical aspects, such as its performance and capacity, which are measures of a website's speed and how much traffic the site can handle. In addition, web developers may create content for the site.



Employment

Current estimated employment in Connecticut is 1,870 for this occupation. Employment for this occupation is projected to be 2,153 in 2026.

Job Openings

An average of 168 job openings per year is estimated for this occupation.

Employment of Web Developers is projected to grow much faster than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$23.39 / \$48,653

Average wage: \$38.25 / \$79,562

HELP WANTED INFORMATION

Common job titles for this occupation

Software Development Engineer
Java Developer
Software Developer
.Net Developer
Applications Developer

Locations with the most job ads

Hartford, CT
Stamford, CT
Bloomfield, CT
Windsor, CT
Farmington, CT

Employers with the most job ads

United Technologies Corporation
UnitedHealth Group
U.S. Bancorp
Cynet Systems Inc
The Travelers Indemnity Company

Education/OJT Training Requirements

The typical education needed to become a web developer is an associate's degree in web design or related field. Web developers need knowledge of both programming and graphic design. Some employers prefer web developers who have both a computer degree and coursework in graphic design, especially if the developer will be heavily involved in the website's visual appearance.



ENVIRONMENTAL SCIENTISTS AND SPECIALISTS

Job Description

Environmental scientists and specialists use their knowledge of the natural sciences to protect the environment and human health. They may clean up polluted areas, advise policymakers, or work with industry to reduce waste.

Many environmental scientists and specialists analyze environmental problems and develop solutions to them. For example, they work to reclaim lands and waters that have been contaminated by pollution.



Employment

Current estimated employment in Connecticut is 764 for this occupation. Employment for this occupation is projected to be 876 in 2026.

Job Openings

An average of 85 job openings per year is estimated for this occupation.

Environmental Scientists and Specialists is projected to grow much faster than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$25.72 / \$53,506

Average wage: \$40.71 / \$84,669

Education/OJT Training Requirements

For most entry-level jobs, environmental scientists and specialists must have a bachelor's degree in environmental science or a science-related field, such as biology, chemistry, physics, geosciences, or engineering. However, a master's degree may be needed for advancement.

Students should look for classes and internships that include work in computer modeling, data analysis, and Geographic Information Systems (GIS).

HELP WANTED INFORMATION

Common job titles for this occupation

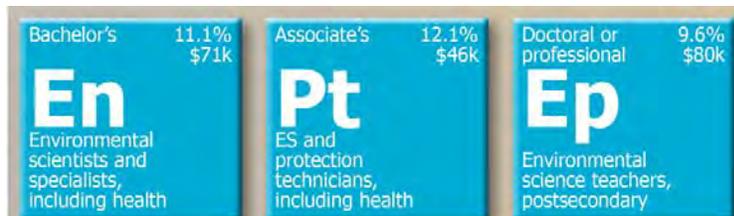
Environmental Scientist
Environmental Specialist
Environmental Consultant
Geologist/Environmental Scientist
Entry Level Geologist/Environmental Scientist

Locations with the most job ads

New Haven, CT
Hartford, CT
Rocky Hill, CT
Danbury, CT
Berlin, CT

Employers with the most job ads

The Kleinfelder Group, Inc
Resource Options Incorporated
Yale University
Arcadis
CDM Smith



BIOCHEMISTS AND BIOPHYSICISTS

Job Description

Biochemists and biophysicists study the chemical and physical principles of living things and of biological processes, such as cell development, growth, heredity, and disease. They use advanced technologies, such as lasers and fluorescent microscopes, to conduct scientific experiments and analyses.

They also use x-rays and computer modeling software to determine the three-dimensional structures of proteins and other molecules. Biochemists and biophysicists involved in biotechnology research use chemical enzymes to synthesize recombinant DNA.



Employment

Current estimated employment in Connecticut is 421 for this occupation. Employment for this occupation is projected to be 465 in 2026.

Job Openings

An average of 41 job openings per year is estimated for this occupation.

Employment of biochemists and biophysicists is projected to grow faster than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Nationally, the median annual wage for biochemists and biophysicists was \$93,280 in May 2018. Wage information is not available for Connecticut.

Education/OJT Training Requirements

Biochemists and biophysicists need a Ph.D. to work in independent research-and-development positions. High school students can prepare for college by taking classes related to the natural and physical sciences, as well as math and computer science. Students in bachelor's degree programs in biochemistry or a related field typically take courses in math, physics, and computer science in addition to courses in the biological and chemical sciences.

HELP WANTED INFORMATION

Common job titles for this occupation

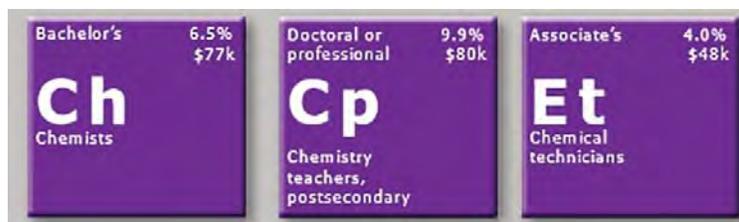
Biochemist
Particle Toxicologist
Senior Technical Expert
Formulation Scientist
Scientist III/IV - Integrative Toxicology

Employers with the most job ads

New Haven, CT
East Hartford, CT
Branford, CT
Stamford, CT
Ridgefield, CT

Locations with the most job ads

United Technologies Corporation
Chemours
Pfizer
Loxo Oncology, Inc
Glaxosmithkline



CHEMICAL ENGINEERS

Job Description

Chemical engineers apply the principles of chemistry, biology, physics, and math to solve problems that involve the production or use of chemicals, fuel, drugs, food, and many other products. They design processes and equipment for large-scale manufacturing, plan and test production methods and byproducts treatment, and direct facility operations.

Chemical engineers also conduct research in the life sciences, biotechnology, and business services.



Employment

Current estimated employment in Connecticut is 276 for this occupation. Employment for this occupation is projected to be 305 in 2026.

Job Openings

An average of 21 job openings per year is estimated for this occupation.

Employment of Chemical Engineers is projected to grow faster than the average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$31.94 / \$66,417

Average wage: \$43.86 / \$91,221

Education/OJT Training Requirements

Chemical engineers must have a bachelor's degree in chemical engineering or a related field. Programs in chemical engineering usually take 4 years to complete and include classroom, laboratory, and field studies. High school students interested in studying chemical engineering will benefit from taking science courses, such as chemistry, physics, and biology. They also should take math courses, including algebra, trigonometry, and calculus. Employers also value practical experience, so internships and cooperative engineering programs, in which students earn college credit and experience, can be helpful.

HELP WANTED INFORMATION

Common job titles for this occupation

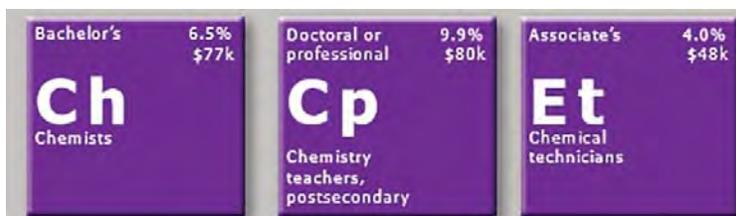
Process Engineer
Senior Process Engineer
Injection Molding Process Engineer
Senior Scientist
Plant Process Engineer

Locations with the most job ads

Groton, CT
Ridgefield, CT
Windsor Locks, CT
East Hartford, CT
Hartford, CT

Employers with the most job ads

United Technologies Corporation
Pfizer
Boehringer Ingelheim
General Dynamics
Henkel



CHEMICAL TECHNICIANS

Job Description

Chemical technicians use laboratory instruments and techniques to help chemists and chemical engineers research, develop, produce, and test chemical products and processes.

Chemical technicians can be exposed to health or safety hazards when handling certain chemicals and plant equipment, but there is little risk if proper procedures are followed.



Employment

Current estimated employment in Connecticut is 788 for this occupation. Employment for this occupation is projected to be 845 in 2026.

Job Openings

An average of 81 job openings per year is estimated for this occupation.

Employment of Chemical technicians is projected to have average growth from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$16.77 / \$34,867

Average wage: \$25.25 / \$52,539

Education/OJT Training Requirements

Chemical technicians need an associate's degree or 2 years of postsecondary education for most jobs. Most chemical technicians also receive on-the-job training.

Many technical and community colleges offer programs in applied sciences or chemical technology. Students typically take classes in math, physics, and biology, in addition to chemistry courses. Coursework in statistics and computer science is also useful because technicians routinely do data analysis and modeling.

HELP WANTED INFORMATION

Common job titles for this occupation

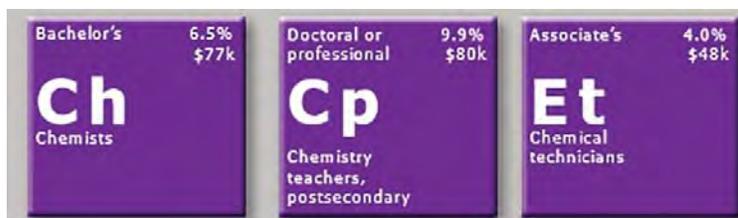
Chemical Technician
Quality Control Chemist
Nuclear Chemistry Technician T2
Member Technical Staff, Systems
Fiber Engineering

Locations with the most job ads

Waterford, CT
New Milford, CT
New London, CT
New Haven, CT
Middlefield, CT

Employers with the most job ads

Liquidpiston
Legrand North America, Llc
Dominion Energy Incorporated
Alexion Pharmaceuticals
University of Connecticut



MICROBIOLOGISTS

Job Description

Microbiologists study microorganisms such as bacteria, viruses, algae, fungi, and some types of parasites. They try to understand how these organisms live, grow, and interact with their environments.

Many microbiologists work in research and development conducting basic research or applied research. They use computers and a wide variety of sophisticated laboratory instruments to do their experiments. Electron microscopes are used to study bacteria, and advanced computer software is used to analyze the growth of microorganisms found in samples.

Employment

Current estimated employment in Connecticut is 538 for this occupation. Employment for this occupation is projected to be 594 in 2026.

Job Openings

An average of 54 job openings per year is estimated for this occupation.

Employment of Microbiologists is projected to grow much faster than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$26.53 / \$55,195

Average wage: \$36.89 / \$76,723

Education/OJT Training Requirements

Microbiologists need at least a bachelor's degree in microbiology or a closely related program that offers substantial coursework in microbiology, such as biochemistry or cell biology. Many microbiology Ph.D. holders begin their careers in temporary postdoctoral research positions.



HELP WANTED INFORMATION

Common job titles for this occupation

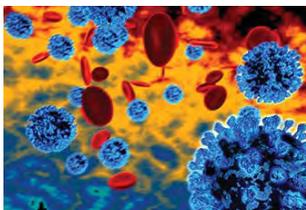
Microbiologist-Sterilization
Microbiologist
Microbiologist/Cell Biologist
Development Microbiologist, Anti-Infective
Laboratory Supervisor, Microbiology

Locations with the most job ads

North Haven, CT
Rocky Hill, CT
Groton, CT
New Haven, CT
Hamden, CT

Employers with the most job ads

Pfizer
Yale-New Haven Health System
Vanessa Research, Inc.
State of Connecticut Dept of Health
Medtronic
Fairfield University



VETERINARY TECHNOLOGISTS AND TECHNICIANS

Job Description

Veterinary technologists and technicians perform medical tests under the supervision of a licensed veterinarian to assist in diagnosing the injuries and illnesses of animals. They also provide nursing care or emergency first aid to recovering or injured animals; bathe, clip nails or claws, and brush or cut hair; administer anesthesia and monitor; prepare animals and instruments for surgery; administer medications, vaccines, and treatments prescribed by a veterinarian.



Employment

Current estimated employment in Connecticut is 1,704 for this occupation. Employment for this occupation is projected to be 1,978 in 2026.

Job Openings

An average of 169 job openings per year is estimated for this occupation.

Employment of Veterinary Technologists and Technicians is projected to grow much faster than average for all occupations from 2016 to 2026.

Wages: Hourly / Annual

Starting wage: \$15.77 / \$32,801

Average wage: \$21.20 / \$44,095

HELP WANTED INFORMATION

Common job titles for this occupation

Veterinary Technician
Animal Technician
Animal Technician, Animal
Veterinary Assistant
Veterinary Technologist, Ed

Locations with the most job ads

New Haven, CT
Norwalk, CT
Cromwell, CT
Groton, CT
Milford, CT

Employers with the most job ads

Petvet Care Centers
Vca Antech Incorporated
Animal Hospital Of Old Saybrook
Bethel Village Square Animal Hospital
Brookfield Animal Hospital

Education/OJT Training Requirements

Veterinary technologists and technicians must complete a postsecondary program in veterinary technology. Technologists need a 4-year bachelor's degree, and technicians need a 2-year associate's degree. Typically, both technologists and technicians must take a credentialing exam and must become registered, licensed, or certified, depending on the requirements of the state in which they work.



Manufacturing



High School + On-the-job Training

Computer-Controlled Machine Tool Operators, Metal and Plastic ^[51-4011]

Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.

EMPLOYED/ANNUAL TOTAL OPENINGS: **2,295 / 270**
 AVERAGE ANNUAL/HOURLY WAGES: **\$46,919 / \$22.56**
 SKILLS [INTERESTS]: **OC, CT, QCA, M, OM [R, C]**

HOT JOB HS OJT

Electric Motor, Power Tool and Related Repairers ^[49-2092]

Repair, maintain, or install electric motors, wiring, or switches.

EMPLOYED/ANNUAL TOTAL OPENINGS: **181 / 20**
 AVERAGE ANNUAL/HOURLY WAGES: **\$58,555 / \$28.15**
 SKILLS [INTERESTS]: **CT, CPS, ES, EM, QCA, T, Rpr [R, C]**

HOT JOB HS OJT

Industrial Machinery Mechanics ^[49-9041]

Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems.

EMPLOYED/ANNUAL TOTAL OPENINGS: **2,455 / 260**
 AVERAGE ANNUAL/HOURLY WAGES: **\$60,566/\$29.12**
 SKILLS [INTERESTS]: **OC, QCA, T, OM, EM, Rpr [R, I, C]**

HOT JOB HS OJT

Machinists ^[51-4041]

Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, mathematics, metal properties, layout, and machining procedures.

EMPLOYED/ANNUAL TOTAL OPENINGS: **7,847 / 936**
 AVERAGE ANNUAL/HOURLY WAGES: **\$51,884 / \$24.94**
 SKILLS [INTERESTS]: **M, Co, AL, RC, CT, OC, OM [R, I, C]**

HOT JOB HS OJT

Maintenance Workers, Machinery ^[49-9043]

Lubricate machinery, change parts, or perform other routine machinery maintenance.

EMPLOYED/ANNUAL TOTAL OPENINGS: **1,178 / 143**
 AVERAGE ANNUAL/HOURLY WAGES: **\$50,350 / \$24.21**
 SKILLS [INTERESTS]: **QCA, OC, T, Rpr, OM, EM [R, I, C]**

HOT JOB HS OJT

Outdoor Power Equipment and Other Small Engine Mechanics ^[49-3053]

Diagnose, adjust, repair, or overhaul small engines used to power lawn mowers, chain saws, recreational sporting equipment and related equipment.

EMPLOYED/ANNUAL TOTAL OPENINGS: **971 / 113**
 AVERAGE ANNUAL/HOURLY WAGES: **\$48,573 / \$23.36**
 SKILLS [INTERESTS]: **CT, QCA, OM, OC, T, EM, Rpr [R, E, C]**

HOT JOB HS OJT

Painters, Transportation Equipment ^[51-9122]

Operate or tend painting machines to paint surfaces of transportation equipment, such as automobiles, buses, trucks, trains, boats, and airplanes. Includes painters in auto body repair facilities.

EMPLOYED/ANNUAL TOTAL OPENINGS: **592 / 80**
 AVERAGE ANNUAL/HOURLY WAGES: **\$63,440 / \$30.50**
 SKILLS [INTERESTS]: **CT, QCA, J, Co, OM, AL, S, M, OC [R, C]**

HOT JOB HS OJT

Production, Planning, Expediting Clerks

Coordinate and expedite the flow of work and materials within or between departments of an establishment according to production schedule. Duties include reviewing and distributing production, work, and shipment schedules; conferring with department supervisors to determine progress of work and completion dates; and compiling reports on progress of work, inventory levels, costs, and production problems. ^[43-5061]

EMPLOYED/ANNUAL TOTAL OPENINGS: **4,635 / 544**
 AVERAGE ANNUAL/HOURLY WAGES: **\$55,182 / \$26.53**
 SKILLS [INTERESTS]: **W, CT, M, TM, S, AL, RC [E, C]**

HOT JOB HS OJT

SKILLS LEGEND

AL - Active Listening, ALearn - Active Learning, Co - Coordination, CPS - Complex Problem Solving, CT - Critical Thinking, EM - Equipment Maintenance, LS - Learning Strategies, J - Judgment and Decision Making, M - Monitoring, OA - Operations Analysis, OC - Operation and Control, OM - Operation Monitoring, QCA - Quality Control Analysis, RC - Reading Comprehension, Rpr - Repairing, S - Speaking, SO - Service Orientation, SP - Social Perceptiveness, T - Troubleshooting, TM - Time Management, W - Writing

Separating, Filtering, Clarifying, Precipitating, Still Machine Setters, Operators, and Tenders

Set up, operate, or tend continuous flow or vat-type equipment; filter presses; shaker screens; centrifuges; condenser tubes; precipitating, fermenting, or evaporating tanks; scrubbing towers; or batch stills. These machines extract, sort, or separate liquids, gases, or solids from other materials to recover a refined product. Includes dairy processing equipment operators. ^[51-9012]

EMPLOYED/ANNUAL TOTAL OPENINGS: **366 / 48**
 AVERAGE ANNUAL/HOURLY WAGES: **\$33,818 / \$16.25**
 SKILLS [INTERESTS]: **CPS, M, OC, OM [R, I, C]**

HOT JOB HS OJT

Tool Grinders, Filers & Sharpeners ^[51-4194]

Perform precision smoothing, sharpening, polishing, or grinding of metal objects.

EMPLOYED/ANNUAL TOTAL OPENINGS: **146 / 23**
 AVERAGE ANNUAL/HOURLY WAGES: **\$43,163 / \$20.75**
 SKILLS [INTERESTS]: **M, T, EM, OC, QCA, Rpr, OM [R, C]**

HOT JOB HS OJT

Welders, Cutters, Solderers, and Brazers ^[51-4121]

Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.

EMPLOYED/ANNUAL TOTAL OPENINGS: **2,449 / 303**
 AVERAGE ANNUAL/HOURLY WAGES: **\$51,310 / \$24.67**
 SKILLS [INTERESTS]: **M, RC, CT, OC**

HOT JOB HS OJT

High School + Certificate

Electrical and Electronics Repairers, Commercial and Industrial Equipment ^[49-2094]

Repair, test, adjust, or install electronic equipment, such as industrial controls, transmitters, and antennas.

EMPLOYED/ANNUAL TOTAL OPENINGS: **430 / 44**
 AVERAGE ANNUAL/HOURLY WAGES: **\$63,217 / \$30.39**
 SKILLS [INTERESTS]: **CT, EM, OM, T, QCA, Rpr [R, I, C]**

HOT JOB **OJT**

Careers after college

Medical Equipment Repairers ^[49-9062]

Test, adjust, or repair biomedical or electromedical equipment.

EMPLOYED/ANNUAL TOTAL OPENINGS: **393 / 39**
 AVERAGE ANNUAL/HOURLY WAGES: **\$54,727 / \$26.31**
 SKILLS [INTERESTS]: **QCA, OM, EM, T, Rpr [R, I, C]**

HOT JOB AD OJT

Nuclear Technicians ^[19-4051]

Assist nuclear physicists, nuclear engineers, or other scientists in laboratory or production activities. May operate, maintain, or provide quality control for nuclear testing and research equipment. May monitor radiation.

EMPLOYED/ANNUAL TOTAL OPENINGS: **134 / 19**
 AVERAGE ANNUAL/HOURLY WAGES: **\$77,846 / \$37.43**
 SKILLS [INTERESTS]: **RC, M, OM, CT [R, I, C]**

HOT JOB AD

Science, Technology, Engineering and Mathematics (STEM)



Careers after college

Aerospace Engineers [17-2011]

Perform engineering duties in designing, constructing, and testing aircraft, missiles, and spacecraft. May conduct basic and applied research to evaluate adaptability of materials and equipment to aircraft design and manufacture. May recommend improvements in testing equipment and techniques.

EMPLOYED/ANNUAL TOTAL OPENINGS: 1,799 / 152
AVERAGE ANNUAL/HOURLY WAGES: \$114,788 / \$55.18
SKILLS [INTERESTS]: S, AL, CPS, OA, RC, CT [R, I]

HOT JOB BD

Architectural and Engineering Managers

Plan, direct, or coordinate activities in such fields as architecture and engineering or research and development in these fields. [11-9041]

EMPLOYED/ANNUAL TOTAL OPENINGS: 3,403 / 303
AVERAGE ANNUAL/HOURLY WAGES: \$152,214 / \$73.18
SKILLS [INTERESTS]: CPS, S, J, Co, TM, AL, CT, RC [R, I, E, C]

HOT JOB BD OJT

Chemical Engineers [17-2041]

Design chemical plant equipment and devise processes for manufacturing chemicals and products, such as gasoline, synthetic rubber, plastics, detergents, cement, paper, and pulp, by applying principles and technology of chemistry, physics, and engineering.

EMPLOYED/ANNUAL TOTAL OPENINGS: 276 / 21
AVERAGE ANNUAL/HOURLY WAGES: \$99,739 / \$47.95
SKILLS [INTERESTS]: Ma, J, SA, CPS, CT, Sci [R, I]

HOT JOB BD

Chemists [19-2031]

Conduct qualitative and quantitative chemical analyses and experiments in laboratories for quality or process control or to develop new products or knowledge.

EMPLOYED/ANNUAL TOTAL OPENINGS: 1,438 / 144
AVERAGE ANNUAL/HOURLY WAGES: \$96,500 / \$46.40
SKILLS [INTERESTS]: CPS, AL, Ma, RC, CT, Sci [R, I, C]

BD

Computer Hardware Engineers [17-2061]

Research, design, develop, or test computer or computer-related equipment for commercial, industrial, military, or scientific use. May supervise the manufacturing and installation of computer or computer-related equipment and components.

EMPLOYED/ANNUAL TOTAL OPENINGS: 367 / 27
AVERAGE ANNUAL/HOURLY WAGES: \$103,446 / \$49.74
SKILLS [INTERESTS]: W, ALearn, AL, S, CT, RC [R, I, C]

HOT JOB BD

Electrical Engineers [17-2071]

Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use.

EMPLOYED/ANNUAL TOTAL OPENINGS: 2,360 / 179
AVERAGE ANNUAL/HOURLY WAGES: \$95,576 / \$45.95
SKILLS [INTERESTS]: W, CPS, AL, CT, RC [R, I, C]

HOT JOB BD

Environmental Scientists and Specialists, Including Health [19-2041]

Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population. Using knowledge of various scientific disciplines, may collect, synthesize, study, report, and recommend action based on data derived from measurements or observations of air, food, soil, water, and other sources.

EMPLOYED/ANNUAL TOTAL OPENINGS: 764 / 85
AVERAGE ANNUAL/HOURLY WAGES: \$81,887 / \$39.37
SKILLS [INTERESTS]: S, Sci, W, CT, AL, RC [R, I, C]

HOT JOB BD

INTERESTS LEGEND

R - Realistic occupations involve work activities that include practical hands-on problems and solutions.

I - Investigative occupations involve working with ideas, and require an extensive amount of thinking and searching for facts.

E - Enterprising occupations involve starting up and carrying out projects, often leading people to make (business) decisions.

C - Conventional occupations involve following set procedures and routines, working with details and data more than with ideas.

Health & Safety Engineers, Except Mining Safety Engineers & Inspectors [17-2111]

Promote worksite or product safety by applying knowledge of industrial processes, mechanics, chemistry, psychology, and industrial health and safety laws. Includes industrial product safety engineers.

EMPLOYED/ANNUAL TOTAL OPENINGS: 142 / 11
AVERAGE ANNUAL/HOURLY WAGES: \$100,998 / \$48.56
SKILLS [INTERESTS]: CPS, AL, S, CT, RC [R, I, C]

HOT JOB BD

Industrial Engineers [17-2121]

Design, develop, test, and evaluate integrated systems for managing industrial production processes, including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production coordination.

EMPLOYED/ANNUAL TOTAL OPENINGS: 4,582 / 410
AVERAGE ANNUAL/HOURLY WAGES: \$91,148 / \$43.83
SKILLS [INTERESTS]: S, CPS, CT, W, AL, RC [R, I, E, C]

HOT JOB BD

Marine Engineers and Naval Architects [17-2121]

Design, develop, and evaluate the operation of marine vessels, ship machinery, and related equipment, such as power supply and propulsion systems.

EMPLOYED/ANNUAL TOTAL OPENINGS: 266 / 26
SKILLS [INTERESTS]: S, CPS, RC, J, AL, Sci, CT [R, I]

HOT JOB BD

Materials Engineers [17-2131]

Evaluate materials and develop machinery and processes to manufacture materials for use in products that must meet specialized design and performance specifications. Develop new uses for known materials. Includes those engineers working with composite materials or specializing in one type of material, such as graphite, metal and metal alloys, ceramics and glass, plastics and polymers, and naturally occurring materials. Includes metallurgists and metallurgical engineers, ceramic engineers, and welding engineers.

EMPLOYED/ANNUAL TOTAL OPENINGS: 702 / 68
AVERAGE ANNUAL/HOURLY WAGES: \$108,290 / \$52.06
SKILLS [INTERESTS]: CPS, Sci, S, W, AL, CT, RC [R, I, E]

HOT JOB BD

Mechanical Engineers [17-2141]

Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems.

EMPLOYED/ANNUAL TOTAL OPENINGS: 6,206 / 578
AVERAGE ANNUAL/HOURLY WAGES: \$90,092 / \$43.32
SKILLS [INTERESTS]: Sci, Ma, RC, AL, J, CT, CPS [R, I, C]

HOT JOB BD

Microbiologists [19-1022]

Investigate the growth, structure, development, and other characteristics of microscopic organisms, such as bacteria, algae, or fungi. Includes medical microbiologists who study the relationship between organisms and disease or the effects of antibiotics on microorganisms.

EMPLOYED/ANNUAL TOTAL OPENINGS: 538 / 54
AVERAGE ANNUAL/HOURLY WAGES: \$79,745 / \$38.34
SKILLS [INTERESTS]: S, ALearn, AL, RC, W, CT, Sci [R, I]

HOT JOB BD

