Green Jobs

Regional Program Demand Report

Hawaii Community College, Hawaii, Hawaii



Introduction and Contents

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Purpose and Goals

This report is designed to integrate and analyze data from multiple sources to help educational institutions discover regional labor market needs for certain postsecondary programs of study. The overall goal is to help a college align their program offerings the economy and labor market of its service region. To do this, the report selects a set of focus occupations, determines the regional job outlook for them, and compares this to the number of recent graduates in related programs at regional educational institutions. While this is a first step toward a supply/demand analysis, for increased accuracy it could be extended with survey-based information from local employers regarding their hiring outlook and recruitment sources.

The occupation employment and wage numbers are from EMSI's national Complete Employment database, which is built using numerous published data sources from the federal Bureau of Labor Statistics, Bureau of Economic Analysis, and Bureau of the Census. In addition, the report uses industry/occupation data and projections created by the State of AnyState. The completions-by-program and program-to-occupation links use data from the U.S. Department of Education.

These data sources have been specially processed and harmonized to provide more complete and detailed data than any individual source used. For more information, see the final page of this report.

Focus College

Hawaii Community College

Region Definition

Hawaii

Key Terms and Concepts

Programs: Courses of postsecondary study defined by CIP (Classification of Instructional Programs) codes.

Occupation: A category of workers defined by the Standard Occupational Classification (SOC).

Relating occupations to Programs: EMSI determines these links using information from the U.S. Department of Education.

Replacement Jobs: The estimated number of job openings in an occupation due to retirement, turnover, and other factors aside from job growth. Based on national percentages by occupation.

Annual openings: The sum of new jobs and estimated replacement jobs for a given occupation, divided by the number of years in the timeframe.

Earnings: For industries, total annual earnings per worker is reported; these earnings include wages, salaries, profits, and benefits. Occupational earnings are reported as median hourly wage only.

Jobs: Full-time and part-time positions held by proprietors and payroll employees in the public or private sector. May exceed actual worker count.

Projections: Estimates of future job or population numbers based on (1) recent historical regional trends and (2) published forecasts created by a consensus of state and federal agencies.

Executive Summary

Overview

This report focuses on **113 occupations** which are expected to provide **597 annual job openings** from 2009-2014 in the Hawaii, Hawaii 1-county area. Meanwhile, in 2008, area colleges produced **305 graduates** in **349 programs** related to these occupations. The numbers indicate an opportunity for area colleges to expand their offerings in this field.¹

Focus Occupations

The following occupations were selected for analysis in this report:²

- · General and operations managers
- · Marketing managers
- Industrial production managers
- Transportation, storage, and distribution managers
- Farmers and ranchers
- · Construction managers
- · Engineering managers
- Natural sciences managers
- Purchasing agents and buyers, farm products
- Wholesale and retail buyers, except farm products
- · Training and development specialists
- · Financial analysts
- Personal financial advisors
- · Computer software engineers, systems software
- Architects, except landscape and naval
- · Landscape architects
- Aerospace engineers
- · Chemical engineers
- · Civil engineers
- · Electrical engineers
- · Electronics engineers, except computer
- · Environmental engineers
- Health and safety engineers, except mining safety engineers and inspectors
- · Industrial engineers

- Mechanical engineers
- · Nuclear engineers
- · Architectural and civil drafters
- Electrical and electronic engineering technicians
- · Electro-mechanical technicians
- · Environmental engineering technicians
- · Industrial engineering technicians
- · Zoologists and wildlife biologists
- · Conservation scientists
- · Atmospheric and space scientists
- Chemists
- · Materials scientists
- · Environmental scientists and specialists, including health
- · Geoscientists, except hydrologists and geographers
- Hydrologists
- Urban and regional planners
- · Agricultural and food science technicians
- · Chemical technicians
- · Geological and petroleum technicians
- Nuclear technicians
- Environmental science and protection technicians, including health
- · Forest and conservation technicians
- · Arbitrators, mediators, and conciliators
- Farm and home management advisors
- Commercial and industrial designers
- · Reporters and correspondents
- · Public relations specialists
- · Occupational health and safety specialists
- Occupational health and safety technicians
- · Fish and game wardens
- Sales representatives, wholesale and manufacturing, technical and scientific products
- · Customer service representatives
- Dispatchers, except police, fire, and ambulance
- · Production, planning, and expediting clerks
- · Shipping, receiving, and traffic clerks
- · Supervisors, farming, fishing, and forestry workers
- · Agricultural inspectors
- Forest and conservation workers
- Boilermakers
- Carpenters
- Cement masons and concrete finishers
- · Construction laborers
- Operating engineers and other construction equipment operators
- · Electricians
- Insulation workers, floor, ceiling, and wall
- · Plumbers, pipefitters, and steamfitters
- Roofers
- Sheet metal workers
- · Structural iron and steel workers
- Helpers, carpenters
- Construction and building inspectors
- Hazardous materials removal workers

^{1.} Annual job openings: new plus replacement jobs divided by years in the timeframe. Note that openings may be filled from various sources besides new graduates, and that graduates may work in occupations unrelated to their degree.

^{2.} Occupations are defined by the federal SOC system.
3. Programs are defined by the federal CIP system. The

occupation-program crosswalk is based on the CIP-SOC crosswalk published by the U.S. Department of Education.

- Rail-track laying and maintenance equipment operators
- · Service unit operators, oil, gas, and mining
- Continuous mining machine operators
- First-line supervisors/managers of mechanics, installers, and repairers
- Electrical and electronics repairers, commercial and industrial equipment
- Automotive service technicians and mechanics
- Heating, air conditioning, and refrigeration mechanics and installers
- · Industrial machinery mechanics
- · Maintenance and repair workers, general
- · Millwrights
- · Helpers--Installation, maintenance, and repair workers
- First-line supervisors/managers of production and operating workers
- Aircraft structure, surfaces, rigging, and systems assemblers
- · Electrical and electronic equipment assemblers
- · Engine and other machine assemblers
- · Structural metal fabricators and fitters
- · Team assemblers
- Computer-controlled machine tool operators, metal and plastic
- Cutting, punching, and press machine setters, operators, and tenders, metal and plastic
- Drilling and boring machine tool setters, operators, and tenders, metal and plastic
- Machinists
- Welders, cutters, solderers, and brazers
- Nuclear power reactor operators
- Power plant operators
- Chemical plant and system operators
- Chemical equipment operators and tenders
- Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders
- Mixing and blending machine setters, operators, and tenders
- · Inspectors, testers, sorters, samplers, and weighers
- · Bus drivers, transit and intercity
- · Truck drivers, heavy and tractor-trailer
- · Locomotive engineers and operators
- · Railroad conductors and yardmasters
- · Transportation inspectors

- Industrial truck and tractor operators
- · Laborers and freight, stock, and material movers, hand
- · Refuse and recyclable material collectors

Focus Programs

The key occupations above correspond to the following standard postsecondary program titles:³

- · Agricultural Business and Management, General
- · Agriculture, General
- · Agribusiness/Agricultural Business Operations
- · Farm/Farm and Ranch Management
- · Agricultural/Farm Supplies Retailing and Wholesaling
- Agricultural Business and Management, Other
- · Agricultural Production Operations, General
- · Animal/Livestock Husbandry and Production
- Aquaculture
- Crop Production
- · Dairy Husbandry and Production
- · Horse Husbandry/Equine Science and Management
- · Agricultural Production Operations, Other
- · Agricultural and Food Products Processing
- · Agricultural and Domestic Animal Services, Other
- Ornamental Horticulture
- Greenhouse Operations and Management
- Plant Nursery Operations and Management
- · Agricultural and Extension Education Services
- · Agricultural Communication/Journalism
- · Agricultural Public Services, Other
- Animal Sciences, General
- · Agricultural Animal Breeding
- · Animal Nutrition
- Dairy Science
- · Livestock Management
- Poultry Science
- Food Science
- · Plant Sciences, General
- Agronomy and Crop Science
- · Horticultural Science
- Plant Protection and Integrated Pest Management
- Range Science and Management
- Agriculture, Agriculture Operations, and Related Sciences, Other
- · Natural Resources/Conservation, General
- Environmental Studies
- Environmental Science
- Natural Resources Conservation and Research, Other
- Natural Resources Management and Policy
- Natural Resource Economics
- Water, Wetlands, and Marine Resources Management
- Land Use Planning and Management/Development
- Natural Resources Management and Policy, Other
- Fishing and Fisheries Sciences and Management
- · Forestry, General

- · Forest Sciences and Biology
- · Forest Management/Forest Resources Management
- Urban Forestry
- Wood Science and Wood Products/Pulp and Paper Technology
- Forest Resources Production and Management
- · Forest Technology/Technician
- · Forestry, Other
- · Wildlife and Wildlands Science and Management
- · Natural Resources and Conservation, Other
- · Architecture (BArch, BA/BS, MArch, MA/MS, PhD)
- · City/Urban, Community and Regional Planning
- · Environmental Design/Architecture
- · Interior Architecture
- Landscape Architecture (BS, BSLA, BLA, MSLA, MLA, PhD)
- · Architectural History and Criticism, General
- · Architectural Technology/Technician
- · Architecture and Related Services, Other
- Communication Studies/Speech Communication and Rhetoric
- Mass Communication/Media Studies
- · Communication and Media Studies, Other
- Journalism
- · Broadcast Journalism
- Photojournalism
- · Journalism, Other
- · Radio, Television, and Digital Communication, Other
- · Organizational Communication, General
- Public Relations/Image Management
- · Political Communication
- · Health Communication
- Public Relations, Advertising, and Applied Communication, Other
- · Artificial Intelligence and Robotics
- Information Technology
- Information Science/Studies
- · Computer Science
- · Engineering, General
- Aerospace, Aeronautical and Astronautical Engineering
- · Agricultural/Biological Engineering and Bioengineering
- · Architectural Engineering
- Biomedical/Medical Engineering
- · Ceramic Sciences and Engineering
- · Chemical Engineering
- · Civil Engineering, General
- · Geotechnical Engineering
- Structural Engineering
- · Transportation and Highway Engineering
- · Water Resources Engineering
- · Civil Engineering, Other
- · Computer Engineering, General
- Computer Hardware Engineering
- Computer Software Engineering
- Computer Engineering, Other
- · Electrical, Electronics and Communications Engineering

- · Engineering Mechanics
- · Engineering Physics
- · Engineering Science
- Environmental/Environmental Health Engineering
- · Materials Engineering
- Mechanical Engineering
- · Metallurgical Engineering
- Mining and Mineral Engineering
- Naval Architecture and Marine Engineering
- Nuclear Engineering
- · Ocean Engineering
- · Petroleum Engineering
- · Systems Engineering
- · Textile Sciences and Engineering
- · Materials Science
- · Polymer/Plastics Engineering
- · Construction Engineering
- · Forest Engineering
- Industrial Engineering
- · Manufacturing Engineering
- Operations Research
- Surveying Engineering
- · Geological/Geophysical Engineering
- · Engineering, Other
- Electrical, Electronic and Communications Engineering Technology/Technician
- Telecommunications Technology/Technician
- Electrical and Electronic Engineering Technologies/Technicians, Other
- Heating, Air Conditioning and Refrigeration Technology/Technician (ACH/ACR/ACHR/HRAC/HVAC/AC Technology)
- Solar Energy Technology/Technician
- Environmental Engineering Technology/Environmental Technology
- Hazardous Materials Management and Waste Technology/Technician
- Industrial Technology/Technician
- · Manufacturing Technology/Technician
- · Industrial Production Technologies/Technicians, Other
- Occupational Safety and Health Technology/Technician
- Quality Control Technology/Technician
- · Industrial Safety Technology/Technician
- Hazardous Materials Information Systems Technology/Technician
- Quality Control and Safety Technologies/Technicians, Other
- Automotive Engineering Technology/Technician
- · Mining Technology/Technician
- Petroleum Technology/Technician
- · Construction Engineering Technology/Technician
- Engineering Technology, General
- Computer Engineering Technology/Technician
- · Computer Technology/Computer Systems Technology
- Computer Engineering Technologies/Technicians, Other

- Drafting and Design Technology/Technician, General
- CAD/CADD Drafting and/or Design Technology/Technician
- Architectural Drafting and Architectural CAD/CADD
- · Civil Drafting and Civil Engineering CAD/CADD
- · Nuclear Engineering Technology/Technician
- · Engineering/Industrial Management
- · Engineering Technologies/Technicians, Other
- · Family and Consumer Sciences/Human Sciences, General
- · Business Family and Consumer Sciences/Human Sciences
- Family and Consumer Sciences/Human Sciences Communication
- · Consumer Merchandising/Retailing Management
- Family and Consumer Sciences/Human Sciences Business Services, Other
- · Family Resource Management Studies, General
- · Consumer Economics
- Consumer Services and Advocacy
- Family and Consumer Economics and Related Services, Other
- · Housing and Human Environments, General
- · Home Furnishings and Equipment Installers
- · Housing and Human Environments, Other
- · Human Development and Family Studies, General
- · Adult Development and Aging
- · Family Systems
- · Child Development
- · Family and Community Services
- Human Development, Family Studies, and Related Services, Other
- · Apparel and Textiles, General
- Apparel and Textile Marketing Management
- · Family and Consumer Sciences/Human Sciences, Other
- · Technology Education/Industrial Arts
- · Pre-Law Studies
- Law (LL.B., J.D.)
- · Legal Professions and Studies, Other
- · Biology/Biological Sciences, General
- Biochemistry
- · Biophysics
- · Molecular Biology
- · Radiation Biology/Radiobiology
- · Botany/Plant Biology
- · Plant Pathology/Phytopathology
- Plant Physiology
- · Botany/Plant Biology, Other
- Cell/Cellular Biology and Histology
- Anatomy
- · Cell/Cellular Biology and Anatomical Sciences, Other
- · Microbiology, General
- · Medical Microbiology and Bacteriology
- Virology
- Parasitology
- Immunology
- · Zoology/Animal Biology

- Entomology
- Animal Physiology
- · Animal Behavior and Ethology
- Wildlife Biology
- · Zoology/Animal Biology, Other
- Animal Genetics
- Plant Genetics
- Pathology/Experimental Pathology
- Pharmacology
- Toxicology
- · Biometry/Biometrics
- Biostatistics
- Biotechnology
- Ecology
- · Marine Biology and Biological Oceanography
- · Evolutionary Biology
- Ecology, Evolution, Systematics and Population Biology, Other
- · Biological and Biomedical Sciences, Other
- · Mathematics, General
- · Algebra and Number Theory
- Analysis and Functional Analysis
- Geometry/Geometric Analysis
- Topology and Foundations
- Applied Mathematics
- Computational Mathematics
- · Applied Mathematics, Other
- Statistics, General
- · Mathematics and Statistics, Other
- Biological and Physical Sciences
- · Peace Studies and Conflict Resolution
- Systems Science and Theory
- · Mathematics and Computer Science
- Biopsychology
- · Science, Technology and Society
- · Natural Sciences
- Nutrition Sciences
- Neuroscience
- · Cognitive Science
- Logic
- · Physical Sciences
- Astronomy
- Astrophysics
- Planetary Astronomy and Science
- · Atmospheric Sciences and Meteorology, General
- Atmospheric Chemistry and Climatology
- Atmospheric Physics and Dynamics
- Meteorology
- · Atmospheric Sciences and Meteorology, Other
- Chemistry, General
- · Analytical Chemistry
- Inorganic Chemistry
- Organic Chemistry
- Physical and Theoretical Chemistry
- Polymer Chemistry

- · Chemical Physics
- · Chemistry, Other
- · Geology/Earth Science, General
- Geochemistry
- · Geophysics and Seismology
- Paleontology
- · Hydrology and Water Resources Science
- · Geochemistry and Petrology
- · Oceanography, Chemical and Physical
- Geological and Earth Sciences/Geosciences, Other
- · Physics, General
- · Atomic/Molecular Physics
- · Elementary Particle Physics
- Plasma and High-Temperature Physics
- · Nuclear Physics
- Optics/Optical Sciences
- · Solid State and Low-Temperature Physics
- Acoustics
- · Theoretical and Mathematical Physics
- · Physics, Other
- · Physical Sciences, Other
- Industrial Radiologic Technology/Technician
- · Nuclear/Nuclear Power Technology/Technician
- Nuclear and Industrial Radiologic Technologies/Technicians, Other
- · Chemical Technology/Technician
- · Physical Science Technologies/Technicians, Other
- · Science Technologies/Technicians, Other
- · Public Administration
- · Carpentry/Carpenter
- · Electrician
- · Concrete Finishing/Concrete Finisher
- · Building/Home/Construction Inspection/Inspector
- Roofer
- Metal Building Assembly/Assembler
- · Building/Construction Site Management/Manager
- · Pipefitting/Pipefitter and Sprinkler Fitter
- · Plumbing Technology/Plumber
- · Plumbing and Related Water Supply Services, Other
- · Construction Trades, Other
- Communications Systems Installation and Repair Technology
- · Computer Installation and Repair Technology/Technician
- Industrial Electronics Technology/Technician
- Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR, HVAC, HVACR)
- Heavy Equipment Maintenance Technology/Technician
- · Industrial Mechanics and Maintenance Technology
- Heavy/Industrial Equipment Maintenance Technologies, Other
- Automobile/Automotive Mechanics Technology/Technician
- Airframe Mechanics and Aircraft Maintenance Technology/Technician

- Aircraft Powerplant Technology/Technician
- Avionics Maintenance Technology/Technician
- Vehicle Emissions Inspection and Maintenance Technology/Technician
- Medium/Heavy Vehicle and Truck Technology/Technician
- Alternative Fuel Vehicle Technology/Technician
- Engine Machinist
- · Mechanic and Repair Technologies/Technicians, Other
- Machine Tool Technology/Machinist
- Machine Shop Technology/Assistant
- Sheet Metal Technology/Sheetworking
- · Welding Technology/Welder
- · Boilermaking/Boilermaker
- Aeronautics/Aviation/Aerospace Science and Technology, General
- Aviation/Airway Management and Operations
- Construction/Heavy Equipment/Earthmoving Equipment Operation
- Truck and Bus Driver/Commercial Vehicle Operation
- Mobil Crane Operation/Operator
- · Ground Transportation, Other
- · Transportation and Materials Moving, Other
- · Design and Visual Communications, General
- · Commercial and Advertising Art
- · Industrial Design
- Design and Applied Arts, Other
- · Radiation Protection/Health Physics Technician
- · Environmental Health
- · Occupational Health and Industrial Hygiene
- Business/Commerce, General
- · Business Administration and Management, General
- Logistics and Materials Management
- Operations Management and Supervision
- Transportation/Transportation Management
- · Accounting and Finance
- Accounting and Business/Management
- · Receptionist
- General Office Occupations and Clerical Services
- Parts, Warehousing, and Inventory Management Operations
- Traffic, Customs, and Transportation Clerk/Technician
- Customer Service Support/Call Center/Teleservice Operation
- · Entrepreneurship/Entrepreneurial Studies
- · Finance, General
- Financial Planning and Services
- Organizational Behavior Studies
- International Business/Trade/Commerce
- · Marketing/Marketing Management, General
- Marketing Research
- · International Marketing
- Marketing, Other
- · Sales, Distribution, and Marketing Operations, General
- Merchandising and Buying Operations
- Selling Skills and Sales Operations

- · Fashion Merchandising
- · Apparel and Accessories Marketing Operations
- Business, Management, Marketing, and Related Support Services, Other

Labor Market Outlook

Aggregated data for all focus occupations:

	Region	State[s]	U.S.
2009 total jobs	17,136	121,578	31,742,766
2014 total jobs	18,516	129,005	34,129,664
2009-2014 growth	1,377	7,428	2,386,895
2009-2014 repl. jobs	1,607	12,149	2,775,268
Median hourly earnings	\$18.31	\$22.05	\$19.66

Focus Program Completions

"Completions" represents the total number of students to attain an award or degree at each given level in all the above college programs.

Award Level	2008 Completions (Hawaii Community College)	2008 Completions (All Colleges in Region)
Award < 2 years	24	24
Associate's	68	68
Bachelor's	-	208
Postbaccalaureate Certificate	-	-
Master's	-	5
Doctor's	-	-
Professional	-	-
TOTAL	92	305

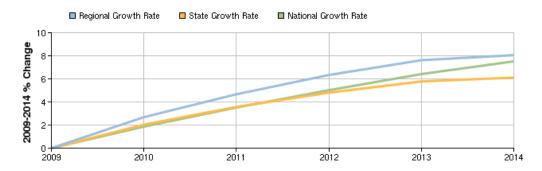
Source: U.S. Department of Education, National Center for Education Statistics: Integrated Postsecondary Education Data System (IPEDS).

EMSI

Job Outlook Summary

Percent Change in Employment, All Focus Occupations

This graph shows yearly percent growth compared to 2009.



The table summarizes the regional job outlook for the focus occupations using employment projections and current wage data, indicating the demand for these kinds of workers and their pay scale. Colleges which strive to be labor market responsive, maximize their economic impact, and generate a return on investment for public funds should generally focus program resources to support high-growth, high-wage occupations.

Detailed Information by Occupation

				т —			
	2009-14 A	2009-14 Avg. Annual Openings			gs Median Hourly Earnings		
Occupation Title	Region	State[s]	U.S.	Region	State[s]	U.S.	
Carpenters	65	312	47,095	\$25.06	\$27.02	\$16.68	
Laborers and freight, stock, and material movers, hand	50	352	90,808	\$11.73	\$12.35	\$10.90	
Construction laborers	42	181	38,871	\$18.23	\$20.17	\$13.71	
Farmers and ranchers	35	61	-8,005	\$7.25	\$7.25	\$6.64	
General and operations managers	34	259	55,266	\$30.10	\$37.96	\$40.90	
Automotive service technicians and mechanics	33	143	27,795	\$12.70	\$14.60	\$15.46	
Truck drivers, heavy and tractor-trailer	29	138	60,351	\$18.37	\$18.53	\$17.37	
Customer service representatives	29	375	124,349	\$13.75	\$14.48	\$14.32	
Construction managers	28	116	22,976	\$21.90	\$25.43	\$20.19	
Electricians	26	120	26,445	\$26.05	\$26.68	\$20.74	
Operating engineers and other construction equipment operators	20	77	14,783	\$30.31	\$33.54	\$18.41	
Maintenance and repair workers, general	16	93	23,136	\$17.07	\$17.25	\$15.56	
Plumbers, pipefitters, and steamfitters	11	76	18,381	\$15.54	\$22.94	\$20.74	
First-line supervisors/managers of mechanics, installers, and repairers	10	72	15,055	\$24.13	\$29.75	\$26.80	
Shipping, receiving, and traffic clerks	10	82	24,298	\$11.53	\$12.96	\$13.32	
Cement masons and concrete finishers	9	56	9,782	\$28.58	\$27.67	\$16.62	
Personal financial advisors	7	122	35,263	\$9.58	\$10.14	\$17.14	
First-line supervisors/managers of production and operating workers	7	43	13,989	\$19.69	\$22.48	\$24.03	
Industrial truck and tractor operators	7	38	18,240	\$15.99	\$16.76	\$13.94	
Heating, air conditioning, and refrigeration mechanics and installers	7	36	10,802	\$18.02	\$19.44	\$17.56	
Bus drivers, transit and intercity	7	52	5,268	\$13.57	\$16.57	\$14.82	
Team assemblers	6	28	28,744	\$12.90	\$14.13	\$12.37	
HelpersInstallation, maintenance, and repair workers	6	29	5,731	\$15.54	\$14.79	\$11.44	

Occupation Title	Region	State[s]	U.S.	Region	State[s]	U.S.
Sales representatives, wholesale and manufacturing, technical and scientific products	5	36	16,601	\$16.55	\$18.82	\$31.32
Civil engineers	5	73	12,249	\$27.08	\$33.23	\$32.99
Roofers	5	43	6,762	\$14.34	\$20.56	\$15.14
Inspectors, testers, sorters, samplers, and weighers	4	19	9,018	\$10.62	\$14.11	\$15.11
Wholesale and retail buyers, except farm products	4	32	3,881	\$14.82	\$17.83	\$21.77
Dispatchers, except police, fire, and ambulance	4	30	6,022	\$14.46	\$14.38	\$16.15
Construction and building inspectors	3	28	4,754	\$22.97	\$24.77	\$22.23
Public relations specialists	3	33	7,464	\$18.12	\$22.22	\$22.88
Refuse and recyclable material collectors	3	25	5,258	\$16.72	\$18.41	\$16.64
Helpers, carpenters	3	22	3,465	\$18.33	\$17.97	\$12.54
Welders, cutters, solderers, and brazers	3	34	14,123	\$16.25	\$22.63	\$15.93
Marketing managers	3	26	7,276	\$23.04	\$26.44	\$42.79
Production, planning, and expediting clerks	3	33	9,821	\$15.05	\$19.40	\$19.41
Industrial machinery mechanics	2	21	9,146	\$17.32	\$22.09	\$20.66
Structural iron and steel workers	2	17	3,176	\$24.63	\$27.88	\$20.23
Power plant operators	2	15	1,461	\$31.72	\$31.70	\$27.95
Architects, except landscape and naval	2	24		\$18.37	\$28.60	\$30.01
Machinists	2		4,641			\$17.50
		18	9,504	\$23.38	\$24.27	•
Financial analysts	2	42	16,274	\$11.58	\$19.94	\$26.29
Transportation, storage, and distribution managers	2	16	4,627	\$35.48	\$35.91	\$35.18
Forest and conservation workers	2	6	673	\$11.95	\$15.47	\$11.41
Purchasing agents and buyers, farm products	2	4	362	\$18.21	\$21.72	\$24.22
Training and development specialists	2	23	9,184	\$17.44	\$20.85	\$23.61
Urban and regional planners	2	13	1,803	\$27.90	\$29.82	\$28.61
Environmental scientists and specialists, including health	2	28	4,341	\$25.51	\$28.53	\$28.80
Landscape architects	2	4	1,251	\$15.49	\$17.25	\$22.81
Electrical engineers	2	27	4,880	\$35.57	\$36.99	\$38.60
Reporters and correspondents	1	6	1,938	\$13.24	\$13.91	\$14.73
Engineering managers	1	17	5,442	\$44.08	\$48.69	\$54.17
Architectural and civil drafters	1	26	3,927	\$23.30	\$22.21	\$21.37
Commercial and industrial designers	1	12	2,241	\$11.94	\$14.80	\$20.56
Computer software engineers, systems software	1	20	17,616	\$26.83	\$33.81	\$41.67
Structural metal fabricators and fitters	1	9	2,949	\$14.26	\$14.09	\$15.76
Forest and conservation technicians	1	5	1,536	\$17.34	\$16.57	\$15.15
Natural sciences managers	1	6	1,722	\$46.62	\$46.93	\$53.22
Environmental science and protection technicians, including health	1	10	2,239	\$19.70	\$20.66	\$18.88
Sheet metal workers	1	21	6,303	\$19.00	\$26.76	\$18.78
Agricultural inspectors	1	2	491	\$19.51	\$24.76	\$19.56
Electronics engineers, except computer	1	17	4,130	\$32.47	\$37.87	\$40.03
Agricultural and food science technicians	1	7	568	\$14.19	\$17.70	\$15.16
Electrical and electronic engineering technicians	1	12	4,127	\$26.75	\$28.17	\$25.35
Industrial production managers	1	9	5,841	\$29.58	\$31.58	\$39.67
Electrical and electronics repairers, commercial and industrial equipment	1	17	3,283	\$27.23	\$30.59	\$23.18
Conservation scientists	1	3	721	\$23.50	\$26.05	\$23.50
Nuclear engineers	1	3	740	\$18.07	\$21.43	\$32.63
Supervisors, farming, fishing, and forestry workers	1	1	692	\$16.07	\$21.43	\$17.79
Insulation workers, floor, ceiling, and wall	1	7	1,149	\$17.09	\$21.54	\$15.06
	1					
Industrial engineering technicians Chamical equipment experters and tenders		9	2,164	\$18.83	\$22.46	\$22.60
Chemical equipment operators and tenders	1	3	1,259	\$23.08	\$20.07	\$21.76
Mechanical engineers	1	18	6,611	\$27.78	\$35.51	\$35.49



Occupation Title	Region	State[s]	U.S.	Region	State[s]	U.S.
Zoologists and wildlife biologists		5	669		\$28.15	\$24.76
Electro-mechanical technicians		3	379		\$21.85	\$21.95
Chemists		6	2,960		\$27.08	\$31.42
Mixing and blending machine setters, operators, and tenders		2	2,675		\$14.51	\$15.03
Atmospheric and space scientists		2	426		\$27.95	\$32.23
Occupational health and safety specialists		7	1,710		\$32.37	\$29.50
Transportation inspectors		6	1,277		\$28.06	\$26.19
Railroad conductors and yardmasters			1,504			\$25.37
Locomotive engineers and operators		6	2,060		\$23.53	\$22.43
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic		2	6,527		\$10.71	\$13.54
Nuclear power reactor operators		1	334		\$22.52	\$33.95
Chemical plant and system operators		2	1,474		\$22.97	\$25.23
Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders		2	1,289		\$12.27	\$17.64
Engine and other machine assemblers		4	1,177		\$15.37	\$15.70
Drilling and boring machine tool setters, operators, and tenders, metal and plastic			881			\$14.83
Computer-controlled machine tool operators, metal and plastic		1	2,873		\$15.20	\$16.02
Chemical engineers		1	1,125		\$37.05	\$40.30
Arbitrators, mediators, and conciliators		1	297		\$18.79	\$23.39
Farm and home management advisors		2	443		\$15.73	\$16.70
Occupational health and safety technicians		1	474		\$22.03	\$21.24
Fish and game wardens		1	388		\$22.80	\$23.52
Nuclear technicians		2	352		\$23.51	\$27.63
Geological and petroleum technicians		2	1,087		\$23.27	\$25.50
Materials scientists		1	398		\$30.13	\$36.56
Geoscientists, except hydrologists and geographers		9	2,096		\$31.44	\$36.11
Hydrologists		3	742		\$26.43	\$33.60
Chemical technicians		4	2,656		\$24.71	\$20.20
Boilermakers		5	1,106		\$26.27	\$24.68
Industrial engineers		4	9,823		\$34.95	\$35.32
Continuous mining machine operators		2	580		\$28.52	\$24.64
Aerospace engineers			2,169			\$43.79
Millwrights		2	1,169		\$24.37	\$22.55
Aircraft structure, surfaces, rigging, and systems assemblers		3	1,518		\$19.20	\$21.30
Service unit operators, oil, gas, and mining		2	1,856		\$25.98	\$19.95
Rail-track laying and maintenance equipment operators		2	582		\$28.22	\$21.27
Health and safety engineers, except mining safety engineers and inspectors		6	962		\$32.82	\$34.04
Environmental engineers		8	2,911		\$38.95	\$34.87
Environmental engineering technicians		2	976		\$19.61	\$19.70
Hazardous materials removal workers		5	1,445		\$16.79	\$18.16
Electrical and electronic equipment assemblers		1	3,933		\$13.47	\$13.23
TOTAL	597	3,915	1,032,43 3	\$18.31	\$22.05	\$19.66

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

 $Average\ annual\ openings: total\ new\ plus\ replacement\ jobs\ over\ the\ entire\ time frame\ divided\ by\ number\ of\ years\ in\ the\ time frame.$

^{1.} Projected new and replacement jobs can indicate demand, but are not necessarily equivalent to demand. The number is based on past regional performance of the industries that employ workers in the given occupations, combined with official, biannual state and federal ten-year estimates. Projections may underestimate demand if employers need these kinds of workers but are unable to hire qualified individuals to meet their needs, or if unforeseen business recruitment and growth outpace past trends. Similarly, projections may overestimate demand if there are unforeseen contractions in key employers, entire industries, or the national economy as a whole.



Regional Job Outlook

The table summarizes the regional job outlook for the focus occupations using employment projections and current wage data, indicating the demand for these kinds of workers and their pay scale. Colleges which strive to be labor market responsive, maximize their economic impact, and generate a return on investment for public funds should generally focus program resources to support high-growth, high-wage occupations. Occupations are sorted by total 2009 jobs.

Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Farmers and ranchers	2,436	2,397	-39	174	\$7.25
Carpenters	1,741	1,947	206	324	\$25.06
Construction laborers	1,479	1,634	155	211	\$18.23
Laborers and freight, stock, and material movers, hand	1,046	1,129	83	250	\$11.73
General and operations managers	1,038	1,082	44	169	\$30.10
Maintenance and repair workers, general	886	956	70	81	\$17.07
Truck drivers, heavy and tractor-trailer	781	857	76	145	\$18.37
Construction managers	639	728	89	139	\$21.90
Operating engineers and other construction equipment operators	574	616	42	98	\$30.31
Automotive service technicians and mechanics	573	682	109	166	\$12.70
Customer service representatives	505	579	74	144	\$13.75
Electricians	491	556	65	128	\$26.05
Industrial truck and tractor operators	244	245	1	34	\$15.99
First-line supervisors/managers of mechanics, installers, and repairers	243	265	22	50	\$24.13
Shipping, receiving, and traffic clerks	240	259	19	48	\$11.53
Plumbers, pipefitters, and steamfitters	231	260	29	53	\$15.54
First-line supervisors/managers of production and operating workers	214	227	13	36	\$19.69
Bus drivers, transit and intercity	179	200	21	33	\$13.57
Cement masons and concrete finishers	179	196	17	43	\$28.58
Personal financial advisors	176	205	29	37	\$9.58
Heating, air conditioning, and refrigeration mechanics and installers	145	166	21	34	\$18.02
Civil engineers	143	150	7	26	\$27.08
Sales representatives, wholesale and manufacturing, technical and scientific products	136	147	11	26	\$16.55
HelpersInstallation, maintenance, and repair workers	123	139	16	30	\$15.54
Team assemblers	120	139	19	31	\$12.90
Inspectors, testers, sorters, samplers, and weighers	118	125	7	20	\$10.62
Roofers	112	124	12	25	\$14.34
Wholesale and retail buyers, except farm products	110	117	7	19	\$14.82
Dispatchers, except police, fire, and ambulance	108	112	4	18	\$14.46



Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Public relations specialists	105	118	13	17	\$18.12
Construction and building inspectors	102	110	8	17	\$22.97
Supervisors, farming, fishing, and forestry workers	82	78	-4	4	\$16.27
Agricultural and food science technicians	75	74	-1	5	\$14.19
Helpers, carpenters	69	75	6	15	\$18.33
Architects, except landscape and naval	68	73	5	11	\$18.37
Industrial machinery mechanics	64	71	7	12	\$17.32
Marketing managers	64	70	6	13	\$23.04
Structural iron and steel workers	62	64	2	12	\$24.63
Refuse and recyclable material collectors	59	67	8	16	\$16.72
Production, planning, and expediting clerks	57	62	5	13	\$15.05
Welders, cutters, solderers, and brazers	57	65	8	14	\$16.25
Power plant operators	55	57	2	11	\$31.72
Engineering managers	52	54	2	7	\$44.08
Financial analysts	52	61	9	10	\$11.58
Architectural and civil drafters	49	49	0	7	\$23.30
Electrical engineers	48	50	2	8	\$35.57
Urban and regional planners	46	48	2	9	\$27.90
Training and development specialists	45	49	4	9	\$17.44
Machinists	45	52	7	11	\$23.38
Transportation, storage, and distribution managers	44	47	3	10	\$35.48
Environmental scientists and specialists, including health	43	46	3	9	\$25.51
Forest and conservation workers	39	41	2	9	\$11.95
Landscape architects	38	42	4	8	\$15.49
Purchasing agents and buyers, farm products	36	41	5	9	\$18.21
Electronics engineers, except computer	36	37	1	5	\$32.47
Natural sciences managers	34	36	2	6	\$46.62
Computer software engineers, systems software	34	38	4	6	\$26.83
Agricultural inspectors	32	33	1	5	\$19.51
Conservation scientists	31	31	0	5	\$23.50
Forest and conservation technicians	31	31	0	6	\$17.34
Commercial and industrial designers	29	32	3	7	\$11.94
Electrical and electronic engineering technicians	28	30	2	5	\$26.75
Structural metal fabricators and fitters	28	32	4	6	\$14.26
Environmental science and protection technicians, including health	25	26	1	6	\$19.70
Industrial production managers	23	23	0	5	\$29.58
Sheet metal workers	22	25	3	6	\$19.00
Zoologists and wildlife biologists	21	21	0	2	\$27.18
Reporters and correspondents	21	25	4	7	\$13.24
Nuclear engineers	18	20	2	4	\$18.07
Electrical and electronics repairers, commercial and industrial equipment	15	17	2	5	\$27.23
Mechanical engineers	15	16	1	3	\$27.78
Industrial engineering technicians	14	16	2	3	\$18.83
Insulation workers, floor, ceiling, and wall	13	15	2	4	\$17.09



Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Chemical equipment operators and tenders	13	14	1	3	\$23.08
Occupational health and safety specialists	13	13	0	1	\$26.25
Mixing and blending machine setters, operators, and tenders	12	12	0	1	\$12.03
Chemists	11	11	0	1	\$22.39
Atmospheric and space scientists	11	11	0	1	\$24.97
Electro-mechanical technicians	10	11	1	2	\$19.11
Millwrights	<10	10			
Geoscientists, except hydrologists and geographers	<10	10			
Hydrologists	<10	10			
Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	<10	<10		-	
Industrial engineers	<10	<10			
Engine and other machine assemblers	<10	<10			
Health and safety engineers, except mining safety engineers and inspectors	<10	<10			
Aircraft structure, surfaces, rigging, and systems assemblers	<10	<10	-		
Farm and home management advisors	<10	<10			
Hazardous materials removal workers	<10	<10			
Fish and game wardens	<10	<10			
Locomotive engineers and operators	<10	<10			
Boilermakers	<10	<10			
Nuclear technicians	<10	<10			
Continuous mining machine operators	<10	<10			
Geological and petroleum technicians	<10	<10			
Materials scientists	<10	<10			
Environmental engineering technicians	<10	<10			
Environmental engineers	<10	<10			
Occupational health and safety technicians	<10	<10			
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	<10	<10			
Rail-track laying and maintenance equipment operators	<10	<10			
Service unit operators, oil, gas, and mining	<10	<10			
Aerospace engineers	<10	<10			
Chemical plant and system operators	<10	<10			
Computer-controlled machine tool operators, metal and plastic	<10	<10			
Nuclear power reactor operators	<10	<10			
Chemical engineers	<10	<10			
Electrical and electronic equipment assemblers	<10	<10			
Transportation inspectors	<10	<10			
Chemical technicians	<10	<10			
Arbitrators, mediators, and conciliators	<10	<10			
Drilling and boring machine tool setters, operators, and tenders, metal and plastic	<10	<10			<u></u>
Railroad conductors and yardmasters					
•	17,136	18,516	1,377	2,984	\$18.31

Regional Program Growth Report | Hawaii Community College Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

State & National Job Outlook

These two tables summarize the state and national job outlook for the focus occupations using employment projections and current wage data, indicating the demand for these kinds of workers and their pay scale. Occupations are in the same order as they are in the regional job outlook table on the previous page.

State Job Outlook

Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Carpenters	9,724	10,628	904	1,562	\$27.02
General and operations managers	9,580	9,720	140	1,295	\$37.96
Laborers and freight, stock, and material movers, hand	9,103	9,406	303	1,760	\$12.35
Customer service representatives	7,717	8,520	803	1,877	\$14.48
Construction laborers	7,598	8,215	617	903	\$20.17
Maintenance and repair workers, general	6,887	7,266	379	464	\$17.25
Truck drivers, heavy and tractor-trailer	4,297	4,606	309	690	\$18.53
Farmers and ranchers	4,046	4,000	-46	307	\$7.25
Automotive service technicians and mechanics	3,388	3,763	375	715	\$14.60
Electricians	3,239	3,423	184	601	\$26.68
Construction managers	3,170	3,506	336	582	\$25.43
Operating engineers and other construction equipment operators	2,688	2,811	123	383	\$33.54
Shipping, receiving, and traffic clerks	2,605	2,702	97	409	\$12.96
Bus drivers, transit and intercity	2,431	2,531	100	259	\$16.57
Plumbers, pipefitters, and steamfitters	2,392	2,525	133	380	\$22.94
Personal financial advisors	2,231	2,743	512	612	\$10.14
First-line supervisors/managers of mechanics, installers, and repairers	2,213	2,311	98	358	\$29.75
Civil engineers	2,043	2,138	95	364	\$33.23
Public relations specialists	1,732	1,830	98	163	\$22.22
First-line supervisors/managers of production and operating workers	1,527	1,579	52	217	\$22.48
Industrial truck and tractor operators	1,403	1,400	-3	188	\$16.76
Sales representatives, wholesale and manufacturing, technical and scientific products	1,374	1,404	30	182	\$18.82
Cement masons and concrete finishers	1,339	1,423	84	278	\$27.67
Wholesale and retail buyers, except farm products	1,304	1,317	13	160	\$17.83
Heating, air conditioning, and refrigeration mechanics and installers	1,133	1,214	81	180	\$19.44
Roofers	1,067	1,161	94	216	\$20.56
Dispatchers, except police, fire, and ambulance	1,057	1,073	16	150	\$14.38
Financial analysts	950	1,133	183	210	\$19.94
Production, planning, and expediting clerks	918	957	39	164	\$19.40
Construction and building inspectors	863	924	61	141	\$24.77

Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Architectural and civil drafters	846	853	7	128	\$22.21
Architects, except landscape and naval	820	861	41	118	\$28.60
Welders, cutters, solderers, and brazers	808	892	84	170	\$22.63
HelpersInstallation, maintenance, and repair workers	798	850	52	146	\$14.79
Environmental scientists and specialists, including health	778	817	39	140	\$28.53
Electrical engineers	733	782	49	134	\$36.99
Marketing managers	722	770	48	128	\$26.44
Sheet metal workers	702	724	22	107	\$26.76
Refuse and recyclable material collectors	656	694	38	127	\$18.41
Inspectors, testers, sorters, samplers, and weighers	650	676	26	97	\$14.11
Training and development specialists	640	686	46	115	\$20.85
Team assemblers	618	694	76	140	\$14.13
Electronics engineers, except computer	607	620	13	83	\$37.87
Industrial machinery mechanics	600	654	54	104	\$22.09
Computer software engineers, systems software	578	634	56	98	\$33.81
Engineering managers	576	605	29	87	\$48.69
Mechanical engineers	554	583	29	89	\$35.51
Helpers, carpenters	528	573	45	112	\$17.97
Electrical and electronic engineering technicians	481	494	13	60	\$28.17
Transportation, storage, and distribution managers	477	488	11	82	\$35.91
Machinists	463	509	46	89	\$24.27
Electrical and electronics repairers, commercial and industrial equipment	439	452	13	87	\$30.59
Structural iron and steel workers	400	422	22	87	\$27.88
Urban and regional planners	369	381	12	66	\$29.82
Agricultural and food science technicians	337	345	8	34	\$17.70
Power plant operators	318	338	20	75	\$31.70
Occupational health and safety specialists	312	319	7	37	\$32.37
Commercial and industrial designers	268	290	22	58	\$14.80
Geoscientists, except hydrologists and geographers	244	257	13	45	\$31.44
Structural metal fabricators and fitters	228	252	24	44	\$14.09
Industrial engineering technicians	219	244	25	46	\$22.46
Natural sciences managers	210	219	9	32	\$46.93
Supervisors, farming, fishing, and forestry workers	208	194	-14	6	\$21.01
Landscape architects	207	208	1	21	\$17.25
Zoologists and wildlife biologists	201	205	4	24	\$28.15
Industrial production managers	201	206	5	45	\$31.58
Chemists	194	199	5	31	\$27.08
Environmental engineers	193	205	12	40	\$38.95
Environmental science and protection technicians, including health	185	198	13	48	\$20.66
Insulation workers, floor, ceiling, and wall	179	196	17	37	\$21.54
Health and safety engineers, except mining safety engineers and inspectors	174	184	10	31	\$32.82
Locomotive engineers and operators	142	147	5	30	\$23.53
• •				30	



Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Forest and conservation workers	128	134	6	30	\$15.47
Nuclear engineers	126	129	3	17	\$21.43
Reporters and correspondents	124	134	10	29	\$13.91
Purchasing agents and buyers, farm products	117	124	7	20	\$21.72
Hazardous materials removal workers	112	124	12	24	\$16.79
Forest and conservation technicians	111	112	1	23	\$16.57
Conservation scientists	110	111	1	17	\$26.05
Electro-mechanical technicians	100	106	6	16	\$21.85
Mixing and blending machine setters, operators, and tenders	98	99	1	11	\$14.51
Chemical equipment operators and tenders	96	97	1	14	\$20.07
Boilermakers	94	102	8	25	\$26.27
Farm and home management advisors	91	97	6	12	\$15.73
Atmospheric and space scientists	90	91	1	12	\$27.95
Chemical technicians	85	91	6	20	\$24.71
Industrial engineers	77	90	13	22	\$34.95
Agricultural inspectors	76	78	2	12	\$24.76
Hydrologists	75	80	5	15	\$26.43
Rail-track laying and maintenance equipment operators	68	71	3	11	\$28.22
Aircraft structure, surfaces, rigging, and systems assemblers	67	75	8	15	\$19.20
Millwrights	65	70	5	9	\$24.37
Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	64	65	1	9	\$12.27
Chemical plant and system operators	61	58	-3	10	\$22.97
Engine and other machine assemblers	60	70	10	20	\$15.37
Environmental engineering technicians	59	65	6	12	\$19.61
Service unit operators, oil, gas, and mining	50	55	5	9	\$25.98
Continuous mining machine operators	42	44	2	10	\$28.52
Chemical engineers	34	37	3	7	\$37.05
Nuclear technicians	33	35	2	8	\$23.51
Geological and petroleum technicians	31	34	3	9	\$23.27
Occupational health and safety technicians	30	32	2	5	\$22.03
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	30	33	3	9	\$10.71
Arbitrators, mediators, and conciliators	28	29	1	4	\$18.79
Fish and game wardens	26	27	1	4	\$22.80
Electrical and electronic equipment assemblers	26	27	1	7	\$13.47
Materials scientists	24	27	3	6	\$30.13
Computer-controlled machine tool operators, metal and plastic	15	17	2	3	\$15.20
Nuclear power reactor operators	15	19	4	7	\$22.52
Aerospace engineers	15	15	0	1	\$29.88
Railroad conductors and yardmasters	<10	<10			
Drilling and boring machine tool setters, operators, and tenders, metal and plastic	<10	<10			
•	121,578	129,005	7,428	19,577	\$22.05

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

National Job Outlook

Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Customer service representatives	2,285,782	2,604,431	318,649	621,745	\$14.32
Laborers and freight, stock, and material movers, hand	2,265,932	2,373,767	107,835	454,038	\$10.90
Truck drivers, heavy and tractor-trailer	1,823,770	1,984,692	160,922	301,755	\$17.37
General and operations managers	1,771,917	1,856,338	84,421	276,330	\$40.90
Farmers and ranchers	1,694,372	1,653,000	-41,372	-40,026	\$6.64
Carpenters	1,496,689	1,676,828	180,139	235,473	\$16.68
Maintenance and repair workers, general	1,366,526	1,466,633	100,107	115,678	\$15.56
Construction laborers	1,352,306	1,511,490	159,184	194,356	\$13.71
Team assemblers	1,026,331	1,064,382	38,051	143,721	\$12.37
Automotive service technicians and mechanics	813,715	890,976	77,261	138,975	\$15.46
Shipping, receiving, and traffic clerks	729,431	764,175	34,744	121,488	\$13.32
Personal financial advisors	716,379	886,187	169,808	176,317	\$17.14
Construction managers	709,038	808,157	99,119	114,882	\$20.19
Electricians	697,633	756,036	58,403	132,224	\$20.74
First-line supervisors/managers of production and operating workers	652,394	655,361	2,967	69,944	\$24.03
Industrial truck and tractor operators	591,073	602,855	11,782	91,202	\$13.94
Sales representatives, wholesale and manufacturing, technical and scientific products	521,319	560,932	39,613	83,003	\$31.32
Plumbers, pipefitters, and steamfitters	462,389	513,192	50,803	91,905	\$20.74
Inspectors, testers, sorters, samplers, and weighers	446,482	444,544	-1,938	45,091	\$15.11
First-line supervisors/managers of mechanics, installers, and repairers	442,205	467,929	25,724	75,277	\$26.80
Computer software engineers, systems software	420,462	481,427	60,965	88,080	\$41.67
Operating engineers and other construction equipment operators	414,596	451,769	37,173	73,917	\$18.41
Welders, cutters, solderers, and brazers	390,438	422,452	32,014	70,616	\$15.93
Financial analysts	389,943	464,713	74,770	81,369	\$26.29
Machinists	387,643	400,009	12,366	47,518	\$17.50
Heating, air conditioning, and refrigeration mechanics and installers	315,588	348,168	32,580	54,012	\$17.56
Civil engineers	301,549	329,627	28,078	61,247	\$32.99
Public relations specialists	293,171	321,537	28,366	37,318	\$22.88
Industrial machinery mechanics	276,935	300,323	23,388	45,730	\$20.66
Production, planning, and expediting clerks	276,327	289,028	12,701	49,103	\$19.41
Training and development specialists	225,294	249,333	24,039	45,920	\$23.61
Mechanical engineers	225,259	234,672	9,413	33,055	\$35.49
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	214,052	205,147	-8,905	32,634	\$13.54
Marketing managers	209,798	228,273	18,475	36,380	\$42.79
Industrial engineers	203,510	228,397	24,887	49,114	\$35.32
Bus drivers, transit and intercity	199,705	214,973	15,268	26,339	\$14.82
Cement masons and concrete finishers	197,468	219,684	22,216	48,912	\$16.62
Electrical and electronic equipment assemblers	195,471	172,496	-22,975	19,667	\$13.23



Wholesale and retail buyers, except farm products 162,857 167,928 5,071 19,405 \$21,77	Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Noofess		188,559	195,711	7,152	30,108	\$16.15
Wholesale and retail buyers, except farm products 162,857 167,928 5,071 19,405 \$21,77 products 5heet metal workers 160,612 174,432 13,820 31,516 \$18,78	Engineering managers	179,927	189,535	9,608	27,212	\$54.17
Treducts Sheet metal workers 160,612 174,432 31,516 518.78	Roofers	167,217	188,114	20,897	33,812	\$15.14
Electrical and electronic engineering	, ,	162,857	167,928	5,071	19,405	\$21.77
technicians International Content International C	Sheet metal workers	160,612	174,432	13,820	31,516	\$18.78
Refuse and recyclable material collectors 150,531 159,565 9,034 26,291 \$16,64 industrial production managers 146,631 146,867 36 29,203 \$39,67 Architects, except Landscape and naval 145,724 158,814 13,090 232,005 \$30,01 Helper-Installation, maintenance, and repair workers 145,724 158,814 13,090 223,005 \$10,01 Helper-Installation, maintenance, and repair workers 143,525 157,350 11,999 26,655 \$11,44 repair workers 143,526 148,925 4,999 20,650 \$40,03 Mixing and blending machine setters, operators, and tenders Computer-controlled machine setters, operators, and tenders Computer-controlled machine tool operators, and land plastic Construction and building inspectors 124,860 139,942 15,082 23,772 \$22,23 Architectural and child irathers 115,282 119,462 4,180 13,655 \$21,37 Structural markal afforizators and fitters 105,277 110,985 5,708 147,45 151,767 Transportation, storage, and distribution managers 105,277 110,985 5,708 147,45 151,767 Transportation, storage, and distribution managers 103,703 113,131 9,428 23,137 \$35,18 managers 115,184 8,647 8,030 17,325 \$18,081 8,648 8,649 4,261 14,798 \$31,42 Helpers, carpenters 76,617 84,647 8,030 17,325 \$12,54 Electrical and electronics repairers, 76,617 84,647 8,030 17,325 \$12,54 Electrical and electronics repairers, 74,268 78,288 4,020 16,413 \$23,18 commercial and industrial equipment 6,3706 6,482 2,776 13,778 \$20,20 \$23,18 commercial and industrial eleginers 73,186 80,74 85,505 15,880 \$20,23 \$18,000 \$1,000	Electrical and electronic engineering technicians	158,438	163,999	5,561	20,634	\$25.35
Industrial production managers	Electrical engineers	153,556	160,935	7,379	24,400	\$38.60
Architects, except landscape and naval 145,724 158,814 13,090 23,205 \$30.01 Helipers-Installation, maintenance, and repair workers 11,999 28,655 \$11.44 repair workers 11,996 148,925 11,999 20,650 \$40.03 \$11,491 \$15,000 \$13,373 \$15.03 \$15,031 \$15,03	Refuse and recyclable material collectors	150,531	159,565	9,034	26,291	\$16.64
Helpers-Installation, maintenance, and repair workers 145,351 157,350 11,999 28,655 \$11.44 repair workers 143,926 148,925 4.999 20,650 \$40.03 Mixing and blending machine setters, portators, and tenders 133,316 132,416 -900 13,373 \$15.03 operators, and tenders 130,582 135,212 4.630 14,365 \$16.02 operators, metal and plastic 14,860 139,942 15,082 23,772 \$22.23 Architectural and building inspectors 124,860 139,942 15,082 23,772 \$22.23 Architectural and civil drafters 115,282 119,462 4,180 19,635 \$21.37 Structural metal fabricators and fitters 105,277 110,985 5,708 14,745 \$15,76 Environmental scientists and specialists, including health 14,798 131,313 9,428 23,137 \$351.88 Environmental scientists and specialists, including health 14,998 31,42 Electrical and electronics repairers 76,617 84,647 8,030 17,325 \$12,54 Electrical and electronics repairers 74,268 78,288 4,020 16,413 \$23.18 Electrical and electronics repairers 68,660 74,465 5,805 15,880 \$20.23 Electrical and electronics repairers 68,5660 74,465 5,805 15,880 \$20.23 Electrical repairers 68,566 74,465 5,805 15,880 \$20.23 Electrical repairers 75,017 78,000 79,000 79,000 Electrical repairers 75,017 79,000 79,000 79,000 Electrical repairers 75,017 79,000 79,000 79,000 Electrical repairers 75,021 79,000 79,000 79,000 Electrical repairers 75,021 59,204 2,183 9,690 514,73 Electrocial repairers 75,021 59,204 2,249 7,322 52,24 Electrical rep	Industrial production managers	146,831	146,867	36	29,203	\$39.67
repair workers	Architects, except landscape and naval	145,724	158,814	13,090	23,205	\$30.01
Mixing and blending machine setters, operators, and tenders personal operators, and tenders computer-controlled machine tool operators, and tenders computer-controlled machine tool operators, metal and plastic construction and building inspectors 124,860 139,942 15,082 23,772 522.23 Architectural and civil drafters 115,282 119,462 4,180 19,635 521.37 Structural metal fabricators and fitters 105,277 110,985 5,708 14,745 15,767 Transportation, storage, and distribution 103,703 113,131 9,428 23,137 351.8 managers 103,703 113,131 9,428 23,137 351.8 managers 100,2757 111,620 21,705 \$88.80 including health with controlled machine tool including health with controlled machine to the controlle		145,351	157,350	11,999	28,655	\$11.44
Computer-controlled machine tool operators, metal and plastic 130,582 135,212 4,630 14,365 16,02	Electronics engineers, except computer	143,926	148,925	4,999	20,650	\$40.03
Operators, metal and plastic Construction and building inspectors 124,860 139,942 15,082 23,772 \$22.23 Architectural and civil drafters 115,282 119,462 4,180 19,635 \$21.37 Structural metal fabricators and fitters 105,277 110,985 5,708 14,745 \$15,76 Transportation, storage, and distribution 103,703 113,131 9,428 23,137 \$35.18 managers Environmental scientists and specialists, 191,137 102,757 11,620 21,705 \$28.80 including health Chemists 81,888 86,149 4,261 14,798 \$31.42 Helpers, carpenters 76,617 84,647 8,030 17,325 \$12.54 Ellectrical and electronics repairers, 74,268 78,288 4,020 16,413 \$31.82 Ellectrical and electronics repairers, 74,268 78,288 4,020 16,413 \$31.82 Commercial and industrial equipment Com		133,316	132,416	-900	13,373	\$15.03
Architectural and civil drafters 115,282 119,462 4,180 19,635 \$21.37 Structural metal fabricators and fitters 105,277 110,985 5,708 14,745 \$15.76 Transportation, storage, and distribution 103,703 113,131 9,428 23,137 \$35.18 managers Environmental scientists and specialists, 191,137 102,757 11,620 21,705 \$28.80 including health Chemists 81,888 86,149 4,261 14,798 \$31.42 Helpers, carpenters 76,617 84,647 8,030 17,325 \$12.54 Ellectrical and electronics repairers, 74,268 78,288 4,020 16,413 \$23.18 Commercial and industrial designers 73,186 80,297 7,111 11,205 \$20.56 Structural iron and steel workers 68,660 74,465 5,805 15,880 \$20.23 Aerospace engineers 68,548 72,265 4,317 10,846 \$43.79 Industrial engineering technicians 63,706 66,482 2,776 13,278 \$20.20 Landscape architects 59,123 63,319 4,196 6,254 \$22.81 Supervisors, farming, fishing, and forestry workers 54,735 61,629 6,894 14,553 34.87 Reporters and correspondents 57,021 59,204 2,183 9,690 \$14,73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 45,545 49,285 3,740 8,612 \$53.22 Chemical equipment operators and 52,260 51,567 -693 6,293 \$21.76 Environmental engineers 45,545 49,285 3,740 8,612 \$53.22 Chemical equipment operators 44,756 42,507 -2,249 7,372 \$25.33 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,163 46,406 3,258 5,847 \$22.55 Esparating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders Millwrights 43,148 46,406 3,258 5,847 \$22.55 Esparating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	Computer-controlled machine tool operators, metal and plastic	130,582	135,212	4,630	14,365	\$16.02
Structural metal fabricators and fitters 105,277 110,985 5,708 14,745 515.76 Transportation, storage, and distribution managers 103,703 113,131 9,428 23,137 \$35.18 Environmental scientists and specialists, including health 91,137 102,757 11,620 21,705 \$28.80 Chemists 81,888 86,149 4,261 14,798 \$31.42 Electrical and electronics repairers, commercial and industrial designers 76,617 84,647 8,030 17,325 \$12.54 Electrical and electronics repairers, commercial and industrial designers 73,186 80,297 7,111 11,205 \$20.55 Commercial and industrial designers 73,186 80,297 7,111 11,205 \$20.55 Structural iron and steel workers 68,660 74,465 5,805 15,880 \$20.23 Aerospace engineers 68,548 72,865 4,317 10,846 \$43.79 Industrial engineering technicians 63,706 66,482 2,776 13,278 \$20.20 Chemical engineering technicians </td <td>Construction and building inspectors</td> <td>124,860</td> <td>139,942</td> <td>15,082</td> <td>23,772</td> <td>\$22.23</td>	Construction and building inspectors	124,860	139,942	15,082	23,772	\$22.23
Transportation, storage, and distribution managers Environmental scientists and specialists, including health Chemists 81,888 86,149 4,261 14,798 \$31.42 Helpers, carpenters 76,617 84,647 8,030 17,325 512.54 Electrical and electronics repairers, 74,268 78,288 4,020 16,413 \$23.18 Commercial and industrial equipment Commercial and industrial designers 73,186 80,297 7,111 11,205 \$20.56 Structural iron and steel workers 68,660 74,465 5,805 15,880 \$20.23 Aerospace engineers 68,548 72,865 4,317 10,846 \$43.79 Industrial engineering technicians 67,453 71,816 4,363 10,818 \$22.60 Chemical technicians 63,706 66,482 2,776 13,278 \$20.20 Landscape architects 59,123 63,319 4,196 6,254 \$22.81 Supervisors, farming, fishing, and forestry workers Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Chemical equipment operators and 52,260 51,567 693 6,293 \$21.76 Environmental engineers 46,535 48,787 2,252 10,299 \$22.43 Housturial engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Housturial engineers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers Millwrights 43,148 46,406 3,258 5,847 \$2.255 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders Millwrights 42,206 43,163 957 6,443 \$17.64	Architectural and civil drafters	115,282	119,462	4,180	19,635	\$21.37
### Ranagers	Structural metal fabricators and fitters	105,277	110,985	5,708	14,745	\$15.76
Including health Chemists 81,888 86,149 4,261 14,798 531.42 Helpers, carpenters 76,617 84,647 8,030 17,325 512.54 Electrical and electronics repairers, 74,268 78,288 4,020 16,413 523.18 commercial and industrial equipment Commercial and industrial designers 73,186 80,297 7,111 11,205 520.56 Structural iron and steel workers 68,660 74,465 5,805 15,880 520.23 Aerospace engineers 68,548 72,865 4,317 10,846 543.79 Industrial engineering technicians 67,453 71,816 4,363 10,818 522.60 Chemical technicians 63,706 66,482 2,776 13,278 520.20 Landscape architects 59,123 63,319 4,196 6,254 522.81 Supervisors, farming, fishing, and forestry workers Reporters and correspondents 57,021 59,204 2,183 9,690 514.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 529.50 Environmental engineers 54,735 61,629 6,894 14,553 534.87 Chemical equipment operators and tenders Locomotive engineers and operators 46,535 48,787 2,252 10,299 522.43 Natural sciences managers 45,545 49,285 3,740 8,612 553.22 Chemical plant and system operators 44,756 42,507 2,249 7,372 525.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 518.16 Geoscientists, except hydrologists and esteers, operators, and tenders Millwrights 43,148 46,406 3,258 5,847 522.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	•	103,703	113,131	9,428	23,137	\$35.18
Helpers, carpenters 76,617 84,647 8,030 17,325 512.54 Electrical and electronics repairers, 74,268 78,288 4,020 16,413 \$23.18 commercial and industrial equipment 73,186 80,297 7,111 11,205 \$20.56 Structural iron and steel workers 68,660 74,465 5,805 15,880 \$20.23 Aerospace engineers 68,548 72,865 4,317 10,846 \$43.79 Industrial engineering technicians 67,453 71,816 4,363 10,818 \$22.60 Chemical technicians 63,706 66,482 2,776 13,278 \$20.20 Landscape architects 59,123 63,319 4,196 6,254 \$22.81 Supervisors, farming, fishing, and forestry workers 8,596 \$8,400 -196 3,461 \$17.79 workers 8,596 \$8,400 -196 3,461 \$17.79 workers 8,596 \$1,592.04 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 334.87 Chemical equipment operators and correspondents 52,260 \$1,567 -693 6,293 \$21.76 Chemical plant and system operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and 43,253 49,607 6,354 10,479 \$36.11 Geoscientists, except hydrologists and 43,253 49,607 6,354 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	Environmental scientists and specialists, including health	91,137	102,757	11,620	21,705	\$28.80
Electrical and electronics repairers, commercial and industrial equipment Commercial and industrial equipment 73,186 80,297 7,111 11,205 \$20.56 Structural iron and steel workers 68,660 74,465 5,805 15,880 \$20.23 Aerospace engineers 68,548 72,865 4,317 10,846 \$43.79 Industrial engineering technicians 67,453 71,816 4,363 10,818 \$22.60 Chemical technicians 63,706 66,482 2,776 13,278 \$20.20 Landscape architects 59,123 63,319 4,196 6,254 \$22.81 Supervisors, farming, fishing, and forestry 88,596 58,400 -196 3,461 \$17.79 workers Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 334.87 Chemical equipment operators and 52,260 51,567 693 6,293 \$21.76 tenders Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers Millwrights 43,148 46,406 3,258 5,847 \$2.255 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	Chemists	81,888	86,149	4,261	14,798	\$31.42
Commercial and industrial equipment 73,186 80,297 7,111 11,205 \$20,565 Structural iron and steel workers 68,660 74,465 5,805 15,880 \$20,23 Aerospace engineers 68,660 74,465 5,805 15,880 \$20,23 Aerospace engineers 68,548 72,865 4,317 10,846 \$43,79 Industrial engineering technicians 67,453 71,816 4,363 10,818 \$22,260 Chemical technicians 63,706 66,482 2,776 13,278 \$20,20 Landscape architects 59,123 63,319 4,196 6,254 \$22,81 Supervisors, farming, fishing, and forestry 58,596 58,400 -196 3,461 \$17.79 workers \$7,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 34.81 Locandia equipme	Helpers, carpenters	76,617	84,647	8,030	17,325	\$12.54
Structural iron and steel workers 68,660 74,465 5,805 15,880 \$20,23 Aerospace engineers 68,548 72,865 4,317 10,846 \$43,79 Industrial engineering technicians 67,453 71,816 4,363 10,818 \$22,60 Chemical technicians 63,706 66,482 2,776 13,278 \$20,20 Landscape architects 59,123 63,319 4,196 6,254 \$22,81 Supervisors, farming, fishing, and forestry workers 58,596 58,400 -196 3,461 \$17.79 Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22	Electrical and electronics repairers, commercial and industrial equipment	74,268	78,288	4,020	16,413	\$23.18
Aerospace engineers 68,548 72,865 4,317 10,846 \$43.79 Industrial engineering technicians 67,453 71,816 4,363 10,818 \$22.60 Chemical technicians 63,706 66,482 2,776 13,278 \$20.20 Landscape architects 59,123 63,319 4,196 6,254 \$22.81 Supervisors, farming, fishing, and forestry workers 58,596 58,400 -196 3,461 \$17.79 Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22	Commercial and industrial designers	73,186	80,297	7,111	11,205	\$20.56
Industrial engineering technicians 67,453 71,816 4,363 10,818 \$22.60 Chemical technicians 63,706 66,482 2,776 13,278 \$20.20 Landscape architects 59,123 63,319 4,196 6,254 \$22.81 Supervisors, farming, fishing, and forestry workers 58,596 58,400 -196 3,461 \$17.79 Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$22.53	Structural iron and steel workers	68,660	74,465	5,805	15,880	\$20.23
Chemical technicians 63,706 66,482 2,776 13,278 \$20.20 Landscape architects 59,123 63,319 4,196 6,254 \$22.81 Supervisors, farming, fishing, and forestry workers 58,596 58,400 -196 3,461 \$17.79 Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16	Aerospace engineers	68,548	72,865	4,317	10,846	\$43.79
Landscape architects 59,123 63,319 4,196 6,254 \$22.81 Supervisors, farming, fishing, and forestry workers 58,596 58,400 -196 3,461 \$17.79 Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and stil	Industrial engineering technicians	67,453	71,816	4,363	10,818	\$22.60
Supervisors, farming, fishing, and forestry workers 58,596 58,400 -196 3,461 \$17.79 workers Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders </td <td>Chemical technicians</td> <td>63,706</td> <td>66,482</td> <td>2,776</td> <td>13,278</td> <td>\$20.20</td>	Chemical technicians	63,706	66,482	2,776	13,278	\$20.20
workers Reporters and correspondents 57,021 59,204 2,183 9,690 \$14.73 Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders 42,206 43,163 957 6,443 \$17.64	Landscape architects	59,123	63,319	4,196	6,254	\$22.81
Occupational health and safety specialists 54,931 58,413 3,482 8,548 \$29.50 Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,253 49,607 6,354 10,479 \$36.11 Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders 42,206 43,163 957 6,443 \$17.64	Supervisors, farming, fishing, and forestry workers	58,596	58,400	-196	3,461	\$17.79
Environmental engineers 54,735 61,629 6,894 14,553 \$34.87 Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 tenders Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	Reporters and correspondents	57,021	59,204	2,183	9,690	\$14.73
Chemical equipment operators and tenders 52,260 51,567 -693 6,293 \$21.76 Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,253 49,607 6,354 10,479 \$36.11 Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders 42,206 43,163 957 6,443 \$17.64	Occupational health and safety specialists	54,931	58,413	3,482	8,548	\$29.50
tenders Locomotive engineers and operators 46,535 48,787 2,252 10,299 \$22.43 Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	Environmental engineers	54,735	61,629	6,894	14,553	\$34.87
Natural sciences managers 45,545 49,285 3,740 8,612 \$53.22 Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,253 49,607 6,354 10,479 \$36.11 Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders 42,206 43,163 957 6,443 \$17.64	Chemical equipment operators and tenders	52,260	51,567	-693	6,293	\$21.76
Chemical plant and system operators 44,756 42,507 -2,249 7,372 \$25.23 Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,253 49,607 6,354 10,479 \$36.11 Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders 42,206 43,163 957 6,443 \$17.64	Locomotive engineers and operators	46,535	48,787	2,252	10,299	\$22.43
Hazardous materials removal workers 43,457 46,130 2,673 7,227 \$18.16 Geoscientists, except hydrologists and geographers 43,253 49,607 6,354 10,479 \$36.11 Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders 42,206 43,163 957 6,443 \$17.64	Natural sciences managers	45,545	49,285	3,740	8,612	\$53.22
Geoscientists, except hydrologists and geographers 43,253 49,607 6,354 10,479 \$36.11 Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders 42,206 43,163 957 6,443 \$17.64	Chemical plant and system operators	44,756	42,507	-2,249	7,372	\$25.23
geographers Millwrights 43,148 46,406 3,258 5,847 \$22.55 Separating, filtering, clarifying, 42,206 43,163 957 6,443 \$17.64 precipitating, and still machine setters, operators, and tenders	Hazardous materials removal workers	43,457	46,130	2,673	7,227	\$18.16
Separating, filtering, clarifying, 42,206 43,163 957 6,443 \$17.64 precipitating, and still machine setters, operators, and tenders	· · · · · · · · · · · · · · · · · · ·	43,253	49,607	6,354	10,479	\$36.11
precipitating, and still machine setters, operators, and tenders	Millwrights	43,148	46,406	3,258	5,847	\$22.55
·	Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	42,206	43,163	957	6,443	\$17.64
	Service unit operators, oil, gas, and mining	40,953	47,095	6,142	9,281	\$19.95



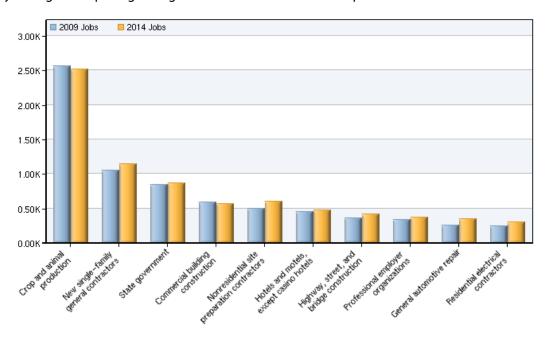
Occupation Title	2009 Jobs	2014 Jobs	New Jobs	New & Rep. Jobs	Median Hourly Earnings
Power plant operators	37,925	38,917	992	7,304	\$27.95
Nuclear engineers	37,677	39,300	1,623	3,698	\$32.63
Urban and regional planners	37,467	41,025	3,558	9,014	\$28.61
Aircraft structure, surfaces, rigging, and systems assemblers	37,336	41,057	3,721	7,591	\$21.30
Environmental science and protection technicians, including health	36,235	41,193	4,958	11,196	\$18.88
Engine and other machine assemblers	35,862	35,918	56	5,885	\$15.70
Forest and conservation technicians	33,968	35,367	1,399	7,681	\$15.15
Chemical engineers	32,020	33,725	1,705	5,627	\$40.30
Drilling and boring machine tool setters, operators, and tenders, metal and plastic	31,093	28,918	-2,175	4,403	\$14.83
Railroad conductors and yardmasters	30,105	31,775	1,670	7,522	\$25.37
Insulation workers, floor, ceiling, and wall	28,992	31,724	2,732	5,746	\$15.06
Health and safety engineers, except mining safety engineers and inspectors	26,600	28,383	1,783	4,811	\$34.04
Transportation inspectors	23,609	26,229	2,620	6,385	\$26.19
Agricultural and food science technicians	23,417	24,726	1,309	2,839	\$15.16
Conservation scientists	23,148	24,283	1,135	3,607	\$23.50
Environmental engineering technicians	22,739	25,557	2,818	4,880	\$19.70
Zoologists and wildlife biologists	21,023	22,496	1,473	3,344	\$24.76
Boilermakers	20,074	22,141	2,067	5,528	\$24.68
Farm and home management advisors	19,632	20,913	1,281	2,215	\$16.70
Hydrologists	19,304	21,909	2,605	3,708	\$33.60
Purchasing agents and buyers, farm products	18,803	18,895	92	1,812	\$24.22
Electro-mechanical technicians	18,159	18,411	252	1,894	\$21.95
Geological and petroleum technicians	15,786	18,282	2,496	5,436	\$25.50
Agricultural inspectors	15,714	16,171	457	2,457	\$19.56
Rail-track laying and maintenance equipment operators	15,276	16,332	1,056	2,908	\$21.27
Atmospheric and space scientists	14,941	15,862	921	2,130	\$32.23
Forest and conservation workers	14,403	15,312	909	3,364	\$11.41
Continuous mining machine operators	13,344	14,013	669	2,902	\$24.64
Fish and game wardens	13,317	13,585	268	1,941	\$23.52
Occupational health and safety technicians	13,191	14,426	1,235	2,370	\$21.24
Arbitrators, mediators, and conciliators	11,337	11,805	468	1,486	\$23.39
Materials scientists	11,002	11,684	682	1,990	\$36.56
Nuclear technicians	9,577	10,097	520	1,762	\$27.63
Nuclear power reactor operators	8,267	8,696	429	1,671	\$33.95
	31,742,766	34,129,664	2,386,895	5,162,163	\$19.66

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

Inverse Staffing Patterns

Industrial Makeup

These are your region's top ten growing industries in the selected occupations.



NAICS Code	Description	2009 Jobs	2014 Jobs	Change	% Change
11A000	Crop and animal production	2,565	2,510	-55	-2%
236115	New single-family general contractors	1,054	1,145	91	9%
920000	State government	844	870	26	3%
236220	Commercial building construction	590	567	-23	-4%
238912	Nonresidential site preparation contractors	499	595	96	19%
721110	Hotels and motels, except casino hotels	447	473	26	6%
237310	Highway, street, and bridge construction	354	416	62	17%
561330	Professional employer organizations	335	368	33	10%
811111	General automotive repair	258	351	93	36%
238211	Residential electrical contractors	247	295	48	19%

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2.

EMSI

Regional Graduation Summary

Regional graduations ("completions" or number of awards/degrees granted) in the programs tied to the focus occupations are one indicator of workforce supply. (Other sources include in-migration of new workers to the region, promotion from within firms, and currently unemployed workers in the same or similar occupations.) The following table breaks down these graduations by program and award level at AnyRegion college and at all institutions in the region. A zero entry for completers indicates the program is offered but had no completions, while a "-" indicates the program is not offered.

CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions, Entire Region
11.0102	Artificial Intelligence and Robotics	[all]	-	-
11.0103	Information Technology	Award of at least 1 but less than 2 academic years	-	-
		Associate's degree	8	8
11.0401	Information Science/Studies	[all]	-	-
11.0701	Computer Science	Bachelor's degree	-	2
14.0101	Engineering, General	[all]	-	-
14.0201	Aerospace, Aeronautical and Astronautical Engineering	[all]	-	-
14.0301	Agricultural/Biological Engineering and Bioengineering	[all]	-	-
14.0401	Architectural Engineering	[all]	-	-
14.0501	Biomedical/Medical Engineering	[all]	-	-
14.0601	Ceramic Sciences and Engineering	[all]	-	-
14.0701	Chemical Engineering	[all]	-	-
14.0801	Civil Engineering, General	[all]	-	-
14.0802	Geotechnical Engineering	[all]	-	-
14.0803	Structural Engineering	[all]	-	-
14.0804	Transportation and Highway Engineering	[all]	-	-
14.0805	Water Resources Engineering	[all]	-	-
14.0899	Civil Engineering, Other	[all]	-	-
14.0901	Computer Engineering, General	[all]	-	-
14.0902	Computer Hardware Engineering	[all]	-	-
14.0903	Computer Software Engineering	[all]	-	-
14.0999	Computer Engineering, Other	[all]	-	-
14.1001	Electrical, Electronics and Communications Engineering	[all]	-	-
14.1101	Engineering Mechanics	[all]	-	-
14.1201	Engineering Physics	[all]	-	-
14.1301	Engineering Science	[all]	-	-
14.1401	Environmental/Environmental Health Engineering	[all]	-	-
14.1801	Materials Engineering	[all]	-	-
14.1901	Mechanical Engineering	[all]	-	-
14.2001	Metallurgical Engineering	[all]	-	-
14.2101	Mining and Mineral Engineering	[all]	-	-
14.2201	Naval Architecture and Marine Engineering	[all]	-	-

CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions, Entire Region
14.2301	Nuclear Engineering	[all]	-	-
14.2401	Ocean Engineering	[all]	-	-
14.2501	Petroleum Engineering	[all]	-	-
14.2701	Systems Engineering	[all]	-	-
14.2801	Textile Sciences and Engineering	[all]	-	-
14.3101	Materials Science	[all]	-	-
14.3201	Polymer/Plastics Engineering	[all]	-	-
14.3301	Construction Engineering	[all]	-	-
14.3401	Forest Engineering	[all]	-	-
14.3501	Industrial Engineering	[all]	-	-
14.3601	Manufacturing Engineering	[all]	-	-
14.3701	Operations Research	[all]	-	-
14.3801	Surveying Engineering	[all]	-	-
14.3901	Geological/Geophysical Engineering	[all]	-	-
14.9999	Engineering, Other	[all]	-	-
15.0303	Electrical/Electronic/Communications Engr Technology/Technician	Associate's degree	6	6
15.0305	Telecommunications Technology/Technician	[all]	-	-
15.0399	Electrical/Electronic Engineering Technologies/Technicians, Other	[all]	-	-
15.0501	Heating/AC/Refrigeration Technology/Technician	[all]	-	-
15.0505	Solar Energy Technology/Technician	[all]	-	-
15.0507	Environmental Engineering Technology/Environmental Technology	[all]	-	-
15.0508	Hazardous Materials Management and Waste Technology/Technician	[all]	-	-
15.0612	Industrial Technology/Technician	[all]	-	-
15.0613	Manufacturing Technology/Technician	[all]	-	-
15.0699	Industrial Production Technologies/Technicians, Other	[all]	-	-
15.0701	Occupational Safety and Health Technology/Technician	[all]	-	-
15.0702	Quality Control Technology/Technician	[all]	-	-
15.0703	Industrial Safety Technology/Technician	[all]	-	-
15.0704	Hazardous Materials Information Systems Technology/Technician	[all]	-	-
15.0799	Quality Control and Safety Technologies/Technicians, Other	[all]	-	-
15.0803	Automotive Engineering Technology/Technician	[all]	-	-
15.0901	Mining Technology/Technician	[all]	-	-
15.0903	Petroleum Technology/Technician	[all]	-	-
15.1001	Construction Engineering Technology/Technician	[all]	-	-
15.1201	Computer Engineering Technology/Technician	[all]	-	-
15.1202	Computer Technology/Computer Systems Technology	[all]	-	-
15.1299	Computer Engineering Technologies/Technicians, Other	[all]	-	-
15.1301	Drafting and Design Technology/Technician, General	[all]	-	-
15.1302	CAD/CADD Drafting and/or Design Technology/Technician	[all]	-	-



CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions, Entire Region
15.1303	Architectural Drafting and Architectural CAD/CADD	Associate's degree	10	10
15.1304	Civil Drafting and Civil Engineering CAD/CADD	[all]	-	-
15.1401	Nuclear Engineering Technology/Technician	[all]	-	-
15.1501	Engineering/Industrial Management	[all]	-	-
15.9999	Engineering Technologies/Technicians, Other	[all]	-	-
19.0101	Family and Consumer Sciences/Human Sciences, General	[all]	-	-
19.0201	Business Family and Consumer Sciences/Human Sciences	[all]	-	-
19.0202	Family and Consumer Sciences/Human Sciences Communication	[all]	-	-
19.0203	Consumer Merchandising/Retailing Management	[all]	-	-
19.0299	Family/Consumer Sciences/Human Sciences Business Services, Other	[all]	-	-
19.0401	Family Resource Management Studies, General	[all]	-	-
19.0402	Consumer Economics	[all]	-	-
19.0403	Consumer Services and Advocacy	[all]	-	-
19.0499	Family and Consumer Economics and Related Services, Other	[all]	-	-
19.0601	Housing and Human Environments, General	[all]	-	-
19.0605	Home Furnishings and Equipment Installers	[all]	-	-
19.0699	Housing and Human Environments, Other	[all]	-	-
19.0701	Human Development and Family Studies, General	[all]	-	-
19.0702	Adult Development and Aging	[all]	-	-
19.0704	Family Systems	[all]	-	-
19.0706	Child Development	[all]	-	-
19.0707	Family and Community Services	[all]	-	-
19.0799	Human Development, Family Studies, and Related Services, Other	[all]	-	-
19.0901	Apparel and Textiles, General	[all]	<u>-</u>	-
19.0905	Apparel and Textile Marketing Management	[all]	-	-
19.9999	Family and Consumer Sciences/Human Sciences, Other	[all]	-	-
22.0001	Pre-Law Studies	[all]	-	-
22.0101	Law (LLB, JD)	[all]	<u>-</u>	-
22.9999	Legal Professions and Studies, Other	[all]	<u>-</u>	-
26.0101	Biology/Biological Sciences, General	Bachelor's degree	-	36
26.0202	Biochemistry	[all]	-	-
26.0203	Biophysics	[all]	-	-
26.0204	Molecular Biology	[all]	-	-
26.0209	Radiation Biology/Radiobiology	[all]	-	-
26.0301	Botany/Plant Biology	[all]	-	-
26.0305	Plant Pathology/Phytopathology	[all]	-	-
26.0307	Plant Physiology	[all]	-	-
26.0399	Botany/Plant Biology, Other	[all]	-	-
26.0401	Cell/Cellular Biology and Histology	[all]	-	



CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions Entire Region
26.0403	Anatomy	[all]	-	
26.0499	Cell/Cellular Biology and Anatomical Sciences, Other	[all]	-	
26.0502	Microbiology, General	[all]	-	
26.0503	Medical Microbiology and Bacteriology	[all]	-	
26.0504	Virology	[all]	-	
26.0505	Parasitology	[all]	-	
26.0507	Immunology	[all]	-	
26.0701	Zoology/Animal Biology	[all]	-	
26.0702	Entomology	[all]	-	
26.0707	Animal Physiology	[all]	-	
26.0708	Animal Behavior and Ethology	[all]	-	
26.0709	Wildlife Biology	[all]	-	
26.0799	Zoology/Animal Biology, Other	[all]	-	
26.0804	Animal Genetics	[all]	-	
26.0805	Plant Genetics	[all]	-	
26.0910	Pathology/Experimental Pathology	[all]	-	
26.1001	Pharmacology	[all]	-	
26.1004	Toxicology	[all]	-	
26.1101	Biometry/Biometrics	[all]	-	
26.1102	Biostatistics	[all]	_	
26.1201	Biotechnology	[all]		
26.1301	Ecology	[all]		
26.1302	Marine Biology and Biological Oceanography	Bachelor's degree	-	1
26.1303	Evolutionary Biology	[all]		
26.1399	Ecology, Evolution, Systematics and Population Biology, Other	[all]	-	
26.9999	Biological and Biomedical Sciences, Other	[all]	-	
27.0101	Mathematics, General	Bachelor's degree	-	
27.0301	Applied Mathematics	[all]	-	
27.0303	Computational Mathematics	[all]	-	
27.0399	Applied Mathematics, Other	[all]	-	
27.0501	Statistics, General	[all]		
27.9999	Mathematics and Statistics, Other	[all]	-	
30.0101	Biological and Physical Sciences	[all]		
30.0501	Peace Studies and Conflict Resolution	[all]		
30.0501	Systems Science and Theory	[all]	-	
30.0801	Mathematics and Computer Science	[all]	<u> </u>	
30.1001	·		<u> </u>	
30.1501	Biopsychology Science, Technology and Society	[all]	<u> </u>	
30.1301	Natural Sciences			
		Bachelor's degree	-	
30.1901	Nutrition Sciences	[all]	-	
30.2401	Neuroscience	[all]		
30.2501	Cognitive Science	[all]	-	
38.0102	Logic	[all]	-	
40.0101	Physical Sciences	[all]	-	
40.0201	Astronomy	Bachelor's degree	-	
40.0202	Astrophysics	[all]	-	
40 0202	Planetary Astronomy and Science	[all]	-	
40.0203 40.0401	Atmospheric Sciences and Meteorology,	[all]		



CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions, Entire Region
40.0403	Atmospheric Physics and Dynamics	[all]	-	-
40.0404	Meteorology	[all]	-	-
40.0499	Atmospheric Sciences and Meteorology, Other	[all]	-	-
40.0501	Chemistry, General	Bachelor's degree	-	1
40.0502	Analytical Chemistry	[all]	-	-
40.0503	Inorganic Chemistry	[all]	-	-
40.0504	Organic Chemistry	[all]	-	-
40.0506	Physical and Theoretical Chemistry	[all]	-	-
40.0507	Polymer Chemistry	[all]	-	-
40.0508	Chemical Physics	[all]	-	-
40.0599	Chemistry, Other	[all]	-	-
40.0601	Geology/Earth Science, General	Bachelor's degree	-	10
40.0602	Geochemistry	[all]	-	-
40.0603	Geophysics and Seismology	[all]	-	-
40.0604	Paleontology	[all]	-	-
40.0605	Hydrology and Water Resources Science	[all]	-	-
40.0607	Oceanography, Chemical and Physical	[all]	-	-
40.0699	Geological and Earth Sciences/Geosciences, Other	[all]	-	-
40.0801	Physics, General	Bachelor's degree	-	5
40.0802	Atomic/Molecular Physics	[all]	-	-
40.0806	Nuclear Physics	[all]	-	-
40.0807	Optics/Optical Sciences	[all]	-	-
40.0808	Solid State and Low-Temperature Physics	[all]	-	-
40.0809	Acoustics	[all]	-	-
40.0810	Theoretical and Mathematical Physics	[all]	-	-
40.0899	Physics, Other	[all]	-	-
40.9999	Physical Sciences, Other	[all]	-	-
41.0204	Industrial Radiologic Technology/Technician	[all]	-	-
41.0205	Nuclear/Nuclear Power Technology/Technician	[all]	-	-
41.0299	Nuclear and Industrial Radiologic Technologies/Technicians, Other	[all]	-	-
41.0301	Chemical Technology/Technician	[all]	-	-
41.0399	Physical Science Technologies/Technicians, Other	[all]	-	-
41.9999	Science Technologies/Technicians, Other	[all]	-	-
44.0401	Public Administration	[all]	-	-
46.0201	Carpentry/Carpenter	Award of at least 1 but less than 2 academic years	1	1
		Associate's degree	13	13
46.0302	Electrician	[all]	-	-
46.0402	Concrete Finishing/Concrete Finisher	[all]	-	-
46.0403	Building/Home/Construction Inspection/Inspector	[all]	-	-
46.0410	Roofer	[all]	-	-
46.0411	Metal Building Assembly/Assembler	[all]	-	-
46.0412	Building/Construction Site Management/Manager	[all]	-	-
46.0502	Pipefitting/Pipefitter and Sprinkler Fitter	[all]	-	-
46.0503	Plumbing Technology/Plumber	[all]	-	-



CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions Entire Region
46.0599	Plumbing and Related Water Supply Services, Other	[all]	-	
46.9999	Construction Trades, Other	[all]	-	
47.0103	Communications Systems Installation and Repair Technology	[all]	-	
47.0104	Computer Installation and Repair Technology/Technician	[all]	-	
47.0105	Industrial Electronics Technology/Technician	[all]	-	
47.0201	Heating/AC/Ventilation/Refrig Maint Technology/Technician	[all]	-	
47.0302	Heavy Equipment Maintenance Technology/Technician	[all]	-	
47.0303	Industrial Mechanics and Maintenance Technology	[all]	-	
47.0399	Heavy/Industrial Equipment Maintenance Technologies, Other	[all]	-	
47.0604	Automobile/Automotive Mechanics Technology/Technician	Award of at least 1 but less than 2 academic years	16	10
		Associate's degree	15	15
47.0607	Airframe Mechanics and Aircraft Maintenance Technology/Technician	[all]	-	
47.0608	Aircraft Powerplant Technology/Technician	[all]	-	
47.0609	Avionics Maintenance Technology/Technician	[all]	-	
47.0612	Vehicle Emissions Inspection/Maintenance Technology/Technician	[all]	-	
47.0613	Medium/Heavy Vehicle and Truck Technology/Technician	[all]	-	
47.0614	Alternative Fuel Vehicle Technology/Technician	[all]	-	
47.0615	Engine Machinist	[all]	-	
47.9999	Mechanic and Repair Technologies/Technicians, Other	[all]	-	
48.0501	Machine Tool Technology/Machinist	[all]	-	
48.0503	Machine Shop Technology/Assistant	[all]	-	
48.0506	Sheet Metal Technology/Sheetworking	[all]	-	
48.0508	Welding Technology/Welder	Award of at least 1 but less than 2 academic years	2	
		Associate's degree	4	
48.0801	Boilermaking/Boilermaker	[all]	-	
49.0101	Aeronautics/Aviation/Aerospace Science and Technology, General	[all]	-	
49.0104	Aviation/Airway Management and Operations	[all]	-	
49.0202	Construction/Heavy Equipment/Earthmoving Equipment Operation	[all]	-	
49.0205	Truck and Bus Driver/Commercial Vehicle Operation	[all]	-	
49.0299	Ground Transportation, Other	[all]	-	
49.9999	Transportation and Materials Moving, Other	[all]	-	
50.0401	Design and Visual Communications, General	[all]	-	
50.0402	Commercial and Advertising Art	[all]	-	
50.0404	Industrial Design	[all]	-	



CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions, Entire Region
50.0499	Design and Applied Arts, Other	[all]	-	-
51.0916	Radiation Protection/Health Physics Technician	[all]	-	-
51.2202	Environmental Health	[all]	-	-
51.2206	Occupational Health and Industrial Hygiene	[all]	-	-
52.0101	Business/Commerce, General	[all]	-	-
52.0201	Business Administration and Management, General	Bachelor's degree	-	46
52.0203	Logistics and Materials Management	[all]	-	-
52.0205	Operations Management and Supervision	[all]	-	-
52.0209	Transportation/Transportation Management	[all]	-	-
52.0304	Accounting and Finance	[all]	-	-
52.0305	Accounting and Business/Management	[all]	-	-
52.0406	Receptionist	[all]	-	-
52.0408	General Office Occupations and Clerical Services	[all]	-	-
52.0409	Parts, Warehousing, and Inventory Management Operations	[all]	-	-
52.0411	Customer Service Support/Call Center/Teleservice Operation	[all]	-	-
52.0701	Entrepreneurship/Entrepreneurial Studies	[all]	-	-
52.0801	Finance, General	[all]	-	-
52.0804	Financial Planning and Services	[all]	-	-
52.1003	Organizational Behavior Studies	[all]	-	-
52.1101	International Business/Trade/Commerce	[all]	-	-
52.1401	Marketing/Marketing Management, General	Award of at least 1 but less than 2 academic years	2	2
		Associate's degree	7	7
52.1402	Marketing Research	[all]	-	-
52.1403	International Marketing	[all]	-	-
52.1499	Marketing, Other	[all]	-	-
52.1801	Sales, Distribution, and Marketing Operations, General	[all]	-	-
52.1802	Merchandising and Buying Operations	[all]	-	-
52.1804	Selling Skills and Sales Operations	[all]	-	-
52.1902	Fashion Merchandising	[all]	-	-
52.1904	Apparel and Accessories Marketing Operations	[all]	-	-
52.9999	Business, Management, Marketing & Related Support Services, Other	[all]	-	-
1.0301	Agricultural Production Operations, General	Award of at least 1 but less than 2 academic years	-	-
		Associate's degree	1	1
3.0599	Forestry, Other	Award of at least 1 but less than 2 academic years	3	3
		Associate's degree	4	4
1.0000	Agriculture, General	Bachelor's degree	-	25
3.0103	Environmental Studies	Bachelor's degree	-	1
3.0104	Environmental Science	Bachelor's degree	-	3
		Master's degree	-	5
9.0101	Communication Studies/Speech Communication and Rhetoric	Bachelor's degree	-	41



CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions, Entire Region
1.0101	Agricultural Business and Management, General	[all]	-	-
1.0102	Agribusiness/Agricultural Business Operations	[all]	-	-
1.0104	Farm/Farm and Ranch Management	[all]	-	
1.0105	Agricultural/Farm Supplies Retailing and Wholesaling	[all]	-	-
1.0199	Agricultural Business and Management, Other	[all]	-	-
1.0302	Animal/Livestock Husbandry and Production	[all]	-	-
1.0303	Aquaculture	[all]	-	
1.0304	Crop Production	[all]	-	
1.0306	Dairy Husbandry and Production	[all]	_	-
1.0307	Horse Husbandry/Equine Science and Management	[all]	-	-
1.0399	Agricultural Production Operations, Other	[all]	-	-
1.0401	Agricultural and Food Products Processing	[all]	-	-
1.0599	Agricultural and Domestic Animal Services, Other	[all]	-	-
1.0603	Ornamental Horticulture	[all]	-	-
1.0604	Greenhouse Operations and Management	[all]	-	-
1.0606	Plant Nursery Operations and Management	[all]	-	-
1.0801	Agricultural and Extension Education Services	[all]	-	-
1.0802	Agricultural Communication/Journalism	[all]	-	-
1.0899	Agricultural Public Services, Other	[all]	-	-
1.0901	Animal Sciences, General	[all]	-	-
1.0902	Agricultural Animal Breeding	[all]	-	-
1.0904	Animal Nutrition	[all]	-	-
1.0905	Dairy Science	[all]	-	-
1.0906	Livestock Management	[all]	-	-
1.0907	Poultry Science	[all]	-	-
1.1001	Food Science	[all]	-	-
1.1101	Plant Sciences, General	[all]	-	-
1.1102	Agronomy and Crop Science	[all]	-	-
1.1103	Horticultural Science	[all]	<u>-</u>	-
1.1105	Plant Protection and Integrated Pest Management	[all]	-	-
1.1106	Range Science and Management	[all]	-	-
1.9999	Agriculture, Agriculture Operations, and Related Sciences, Other	[all]	-	-
3.0101	Natural Resources/Conservation, General	[all]	-	-
3.0199	Natural Resources Conservation and Research, Other	[all]	-	-
3.0201	Natural Resources Management and Policy	[all]	-	-
3.0204	Natural Resource Economics	[all]	-	-
3.0205	Water, Wetlands, and Marine Resources Management	[all]	-	-
3.0206	Land Use Planning and Management/Development	[all]	-	-
3.0299	Natural Resources Management and Policy, Other	[all]	-	-



CIP Code	Program Title	Award Level	2008 Completions, Your College	2008 Completions, Entire Region
3.0301	Fishing and Fisheries Sciences and Management	[all]	-	-
3.0501	Forestry, General	[all]	-	-
3.0502	Forest Sciences and Biology	[all]	-	-
3.0506	Forest Management/Forest Resources Management	[all]	-	-
3.0508	Urban Forestry	[all]	-	-
3.0509	Wood Science and Wood Products/Pulp and Paper Technology	[all]	-	-
3.0510	Forest Resources Production and Management	[all]	-	-
3.0511	Forest Technology/Technician	[all]	-	-
3.0601	Wildlife and Wildlands Science and Management	[all]	-	-
3.9999	Natural Resources and Conservation, Other	[all]	-	-
4.0201	Architecture (BArch, BA/BS, MArch, MA/MS, PhD)	[all]	-	-
4.0301	City/Urban, Community and Regional Planning	[all]	-	-
4.0401	Environmental Design/Architecture	[all]	-	-
4.0501	Interior Architecture	[all]	-	-
4.0601	Landscape Architecture (BS, BSLA, BLA, MSLA, MLA, PhD)	[all]	-	-
4.0801	Architectural History and Criticism, General	[all]	-	-
4.0901	Architectural Technology/Technician	[all]	-	-
4.9999	Architecture and Related Services, Other	[all]	-	-
9.0102	Mass Communication/Media Studies	[all]	-	-
9.0199	Communication and Media Studies, Other	[all]	-	-
9.0401	Journalism	[all]	-	-
9.0402	Broadcast Journalism	[all]	-	-
9.0404	Photojournalism	[all]	-	-
9.0499	Journalism, Other	[all]	-	-
9.0799	Radio, Television, and Digital Communication, Other	[all]	-	-
9.0901	Organizational Communication, General	[all]	-	-
9.0902	Public Relations/Image Management	[all]	-	-
9.0904	Political Communication	[all]	-	-
9.0905	Health Communication	[all]	-	-
9.0999	Public Relations, Advertising, and Applied Communication, Other	[all]	-	-
	TOTAL		92	305

Source: U.S. Department of Education, National Center for Education Statistics: Integrated Postsecondary Education Data System (IPEDS).

Occupational Programs & Completers

The following section provides detailed information for each focus occupation, including the job outlook information provided above. Each occupation is also associated with one or more postsecondary programs (defined by standard CIP 2000 codes) using information published by the U.S. Department of Education with customizations by EMSI.

A zero entry for completers indicates the program is offered but had no completions, while a "-" indicates the program is not offered.

Summary Table

Occupation	2009-2014 Avg. Annual Openings	2008 Completions, All Related Programs (College)	2008 Completions, All Related Programs (Region)	Total Related Programs	Total Occs. Sharing Same Programs
Carpenters	65	-	-	1	3
Laborers and freight, stock, and material movers, hand	50	-	-	-	-
Construction laborers	42	-	-	1	14
Farmers and ranchers	35	-	-	24	14
General and operations managers	34	-	-	5	17
Automotive service technicians and mechanics	33	-	-	5	4
Truck drivers, heavy and tractor-trailer	29	-	-	1	10
Customer service representatives	29	-	-	2	5
Construction managers	28	-	-	4	28
Electricians	26	-	-	1	6
Operating engineers and other construction equipment operators	20	-	-	2	16
Maintenance and repair workers, general	16	-	-	1	3
Plumbers, pipefitters, and steamfitters	11	-	-	3	5
First-line supervisors/managers of mechanics, installers, and repairers	10	-	-	1	17
Shipping, receiving, and traffic clerks	10	-	-	2	23
Cement masons and concrete finishers	9	-	-	1	4
Personal financial advisors	7	-	-	2	8
First-line supervisors/managers of production and operating workers	7	-	-	1	17
Industrial truck and tractor operators	7	-	-	1	4
Heating, air conditioning, and refrigeration mechanics and installers	7	-	-	3	2
Bus drivers, transit and intercity	7	-	-	1	10
Team assemblers	6	-	-	-	-
HelpersInstallation, maintenance, and repair workers	6	-	-	1	12
Sales representatives, wholesale and manufacturing, technical and scientific products	5	-	-	2	22
Civil engineers	5	-	-	4	2
Roofers	5	-	-	1	3



Occupation	2009-2014 Avg. Annual Openings	2008 Completions, All Related Programs (College)	2008 Completions, All Related Programs (Region)	Total Related Programs	Total Occs. Sharing Same Programs
	4	(College)	(Negion)		1
Inspectors, testers, sorters, samplers, and weighers	4	-	-	1	'
Wholesale and retail buyers, except farm products	4	-	-	5	6
Dispatchers, except police, fire, and ambulance	4	-	-	-	-
Construction and building inspectors	3	-	-	1	2
Public relations specialists	3	-	-	7	9
Refuse and recyclable material collectors	3	-	-	-	-
Helpers, carpenters	3	-	-	1	3
Welders, cutters, solderers, and brazers	3	-	-	1	2
Marketing managers	3	-	-	6	8
Production, planning, and expediting clerks	3	-	-	1	1
Industrial machinery mechanics	2	-	-	2	14
Structural iron and steel workers	2	-	-	2	14
Power plant operators	2	-	-	1	17
Architects, except landscape and naval	2	-	-	4	4
Machinists	2	-	-	2	17
Financial analysts	2	-	-	3	8
Transportation, storage, and distribution managers	2	-	-	6	18
Forest and conservation workers	2	-	-	11	8
Purchasing agents and buyers, farm products	2	-	-	1	4
Training and development specialists	2	-	-	1	2
Urban and regional planners	2	-	-	1	2
Environmental scientists and specialists, including health	2	-	-	2	2
Landscape architects	2	-	-	2	3
Electrical engineers	2	-	-	1	3
Reporters and correspondents	1	-	-	9	11
Engineering managers	1	-	-	46	28
Architectural and civil drafters	1	-	-	5	2
Commercial and industrial designers	1	-	-	5	6
Computer software engineers, systems software	1	-	-	6	11
Structural metal fabricators and fitters	1	-	-	1	10
Forest and conservation technicians	1	-	-	13	8
Natural sciences managers	1	-	-	91	22
Environmental science and protection technicians, including health	1	-	-	4	3
Sheet metal workers	1	-	-	1	5
Agricultural inspectors	1	-	-	1	5
Electronics engineers, except computer	1	-	-	1	3
Agricultural and food science technicians	1	-	-	8	12
Electrical and electronic engineering technicians	1	-	-	6	9
Industrial production managers	1	-	-	3	27
Electrical and electronics repairers, commercial and industrial equipment	1	-	-	2	6
Conservation scientists	1	-	-	12	6
Nuclear engineers	1	-	-	1	2



Occupation	2009-2014 Avg. Annual Openings	2008 Completions, All Related Programs (College)	2008 Completions, All Related Programs (Region)	Total Related Programs	Total Occs Sharing Same Program
Supervisors, farming, fishing, and forestry workers	1	-	-	21	1:
Insulation workers, floor, ceiling, and wall	1	_	_	1	14
Industrial engineering technicians	<u>.</u> 1		_	5	
Chemical equipment operators and	1			1	
tenders					
Mechanical engineers	1	-	-	1	
Zoologists and wildlife biologists	0	-	-	9	
Electro-mechanical technicians	0	-	-	2	
Chemists	0	-	-	8	
Mixing and blending machine setters, operators, and tenders	0	-	-	1	
Atmospheric and space scientists	0	-	-	5	
Occupational health and safety specialists	0	-	-	5	
Transportation inspectors		-	-	2	
Railroad conductors and yardmasters		-	-	1	1
Locomotive engineers and operators		-	-	2	1
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic		-	-	2	1
Nuclear power reactor operators		-	-	1	
Chemical plant and system operators		-	-	1	
Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders		-	-	-	
Engine and other machine assemblers		-	-	3	1
Drilling and boring machine tool setters, operators, and tenders, metal and plastic		-	-	1	1
Computer-controlled machine tool operators, metal and plastic		-	-	1	1
Chemical engineers		-	-	1	
Arbitrators, mediators, and conciliators		-	-	4	
Farm and home management advisors		-	-	25	2
Occupational health and safety technicians		-	-	3	
Fish and game wardens		-	-	3	
Nuclear technicians		-	-	5	
Geological and petroleum technicians		-	-	1	
Materials scientists		-	-	1	
Geoscientists, except hydrologists and geographers	-	-	-	7	
Hydrologists		-	-	3	
Chemical technicians		-	-	2	
Boilermakers		-	-	1	
Industrial engineers		-	-	2	
Continuous mining machine operators		-	-	1	1
Aerospace engineers		-	-	1	
Millwrights		-	-	2	1
Aircraft structure, surfaces, rigging, and systems assemblers		-	-	3	
Service unit operators, oil, gas, and mining		-	-	1	
Rail-track laying and maintenance equipment operators		-	-	1	1
Health and safety engineers, except mining safety engineers and inspectors		-	-	1	



Occupation	2009-2014 Avg. Annual Openings	2008 Completions, All Related Programs (College)	2008 Completions, All Related Programs (Region)	Total Related Programs	Total Occs. Sharing Same Programs
Environmental engineers		-	-	1	3
Environmental engineering technicians		-	-	3	9
Hazardous materials removal workers		-	-	3	16
Electrical and electronic equipment assemblers	-	-	-	2	12

Source: EMSI Complete Employment - 2nd Quarter 2009 v. 2; U.S. Department of Education, IPEDS & Occupational Code Crosswalk - CIP 2000.

An occupation may be related to multiple programs and vice versa. Completions may be double-counted if related to multiple occupations; **do not total**. See columns "Total Related Programs" and "Total Occs. Sharing Same Programs" to refine interpretation of openings versus completions.

Detail Tables

The following tables provide detailed information for focus occupations and related programs, comparing estimated average annual openings in each occupation with recent completions (awards/degrees) in related programs at both AnyRegion College and at all institutions in the region. Many postsecondary programs are linked to multiple occupations; this is shown in the final column of each table and is one indication that fewer program completers will likely enter the given occupation than the overall total would suggest.

Sources for this section: EMSI Complete Employment - 2nd Quarter 2009 v. 2; U.S. Department of Education, IPEDS.

General and operations managers

2009-2014 Avg. Annual Openings: **34** Median Hourly Earnings: **\$30.10**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	46	17
Public Administration	-	-	9
Business/Commerce, General	-	-	5
Business Administration and Management, General	-	46	3
Entrepreneurship/Entrepreneurial Studies	-	-	-
International Business/Trade/Commerce	-	-	-

Marketing managers

2009-2014 Avg. Annual Openings: **3** Median Hourly Earnings: **\$23.04**

2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
9	9	8
-	-	4
-	-	1
9	9	1
-	-	2
-	-	-
-	-	-
	College 9 - -	College Entire Region 9 9

Industrial production managers

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$29.58**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	46	27
Business/Commerce, General	-	-	11
Business Administration and Management, General	-	46	3
Operations Management and Supervision	-	-	13



Transportation, storage, and distribution managers

2009-2014 Avg. Annual Openings: **2** Median Hourly Earnings: **\$35.48**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	46	18
Public Administration	-	-	9
Aeronautics/Aviation/Aerospace Science and Technology, General	-	-	-
Aviation/Airway Management and Operations	-	-	-
Business/Commerce, General	-	-	5
Business Administration and Management, General	-	46	3
Logistics and Materials Management	-	-	1

Farmers and ranchers

2009-2014 Avg. Annual Openings: **35** Median Hourly Earnings: **\$7.25**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	1	26	14
Agricultural Business and Management, General	-	-	2
Agriculture, General	-	25	5
Agribusiness/Agricultural Business Operations	-	-	-
Farm/Farm and Ranch Management	-	-	2
Agricultural Production Operations, General	1	1	-
Animal/Livestock Husbandry and Production	-	-	3
Aquaculture	-	-	-
Crop Production	-	-	-
Dairy Husbandry and Production	-	-	-
Agricultural Production Operations, Other	-	-	-
Ornamental Horticulture	-	-	1
Greenhouse Operations and Management	-	-	-
Plant Nursery Operations and Management	-	-	1
Animal Sciences, General	-	-	-
Agricultural Animal Breeding	-	-	-
Animal Nutrition	-	-	-
Dairy Science	-	-	-
Livestock Management	-	-	-
Poultry Science	-	-	-
Plant Sciences, General	-	-	-
Agronomy and Crop Science	-	-	-
Horticultural Science	-	-	-
Plant Protection and Integrated Pest Management	-	-	-
Range Science and Management	-	-	-



Construction managers

2009-2014 Avg. Annual Openings: **28** Median Hourly Earnings: **\$21.90**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	46	28
Construction Engineering Technology/Technician	-	-	3
Business/Commerce, General	-	-	9
Business Administration and Management, General	-	46	3
Operations Management and Supervision	-	-	13

Engineering managers

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$44.08**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	28
Architecture (BArch, BA/BS, MArch, MA/MS, PhD)	-	-	2
City/Urban, Community and Regional Planning	-	-	1
Environmental Design/Architecture	-	-	1
Interior Architecture	-	-	1
Landscape Architecture (BS, BSLA, BLA, MSLA, MLA, PhD)	-	-	-
Engineering, General	-	-	1
Aerospace, Aeronautical and Astronautical Engineering	-	-	1
Agricultural/Biological Engineering and Bioengineering	-	-	1
Architectural Engineering	-	-	-
Biomedical/Medical Engineering	-	-	1
Ceramic Sciences and Engineering	-	-	1
Chemical Engineering	-	-	1
Civil Engineering, General	-	-	1
Geotechnical Engineering	-	-	-
Structural Engineering	-	-	-
Transportation and Highway Engineering	-	-	-
Water Resources Engineering	-	-	-
Civil Engineering, Other	-	-	-
Computer Engineering, General	-	-	3
Computer Hardware Engineering	-	-	-
Computer Software Engineering	-	-	-
Computer Engineering, Other	-	-	-
Electrical, Electronics and Communications Engineering	-	-	2
Engineering Mechanics	-	-	-
Engineering Physics	-	-	-
Engineering Science	-	-	-



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Environmental/Environmental Health Engineering	-	-	2
Materials Engineering	-	-	1
Mechanical Engineering	-	-	2
Metallurgical Engineering	-	-	-
Mining and Mineral Engineering	-	-	1
Naval Architecture and Marine Engineering	-	-	1
Nuclear Engineering	-	-	1
Ocean Engineering	-	-	-
Petroleum Engineering	-	-	1
Systems Engineering	-	-	-
Textile Sciences and Engineering	-	-	-
Materials Science	-	-	1
Polymer/Plastics Engineering	-	-	-
Construction Engineering	-	-	-
Forest Engineering	-	-	-
Industrial Engineering	-	-	1
Manufacturing Engineering	-	-	-
Surveying Engineering	-	-	-
Geological/Geophysical Engineering	-	-	-
Engineering, Other	-	-	-

Natural sciences managers

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$46.62**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	90	22
Operations Research	-	-	2
Biology/Biological Sciences, General	-	36	2
Biochemistry	-	-	2
Biophysics	-	-	-
Molecular Biology	-	-	-
Radiation Biology/Radiobiology	-	-	-
Botany/Plant Biology	-	-	-
Plant Pathology/Phytopathology	-	-	-
Plant Physiology	-	-	-
Botany/Plant Biology, Other	-	-	-
Cell/Cellular Biology and Histology	-	-	1
Anatomy	-	-	-
Cell/Cellular Biology and Anatomical Sciences, Other	-	-	2
Microbiology, General	-	-	-
Medical Microbiology and Bacteriology	-	-	-
Virology	-	-	-
Parasitology	-	-	-
Immunology	-	-	-
Zoology/Animal Biology	-	-	-
Entomology	-	-	-
Animal Physiology	-	-	-



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Zoology/Animal Biology, Other	-	-	-
Animal Genetics	-	-	-
Plant Genetics	-	-	-
Pathology/Experimental Pathology	-	-	-
Pharmacology	-	-	-
Toxicology	-	-	-
Biometry/Biometrics	-	-	-
Biostatistics	-	-	1
Biotechnology	<u>-</u>	-	-
Ecology	-	-	-
Marine Biology and Biological Oceanography	-	17	-
Evolutionary Biology	-	-	-
Ecology, Evolution, Systematics and Population Biology, Other	-	-	-
Biological and Biomedical Sciences, Other	-	-	-
Mathematics, General	-	9	2
Algebra and Number Theory	-	-	-
Analysis and Functional Analysis	-	-	-
Geometry/Geometric Analysis	-	-	-
Topology and Foundations	-	-	-
Applied Mathematics	-	-	1
Computational Mathematics	-	-	-
Applied Mathematics, Other	-	-	-
Statistics, General	-	-	-
Mathematics and Statistics, Other	-	-	-
Biological and Physical Sciences	-	<u>-</u>	-
Systems Science and Theory	-	-	-
Mathematics and Computer Science	-	<u>-</u>	-
Biopsychology	-	-	-
Science, Technology and Society			
Natural Sciences	<u>-</u>	4	1
Nutrition Sciences	<u>-</u>	-	2
Neuroscience	<u>-</u>	<u>-</u>	
Cognitive Science	<u>-</u>		_
Logic	<u>-</u>	<u>-</u>	_
Physical Sciences	<u>-</u>		_
Astronomy	<u>-</u>	8	1
Astrophysics	<u>-</u>	-	1
Planetary Astronomy and Science	<u>-</u>	-	-
Atmospheric Sciences and Meteorology, General	-	-	1
Atmospheric Chemistry and Climatology	-	-	-
Atmospheric Physics and Dynamics	-	-	-
Meteorology	<u>-</u>	-	-
Atmospheric Sciences and Meteorology, Other	-	-	-
Chemistry, General	-	1	1
Analytical Chemistry	-	-	-
Inorganic Chemistry	-	-	-
Organic Chemistry	-	-	-
Physical and Theoretical Chemistry	-	-	-
·			



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Polymer Chemistry	-	-	-
Chemical Physics	-	-	-
Chemistry, Other	-	-	-
Geology/Earth Science, General	-	10	2
Geochemistry	-	-	-
Geophysics and Seismology	-	-	-
Paleontology	-	-	-
Hydrology and Water Resources Science	-	-	-
Geochemistry and Petrology	-	-	-
Oceanography, Chemical and Physical	-	-	-
Geological and Earth Sciences/Geosciences, Other	-	-	-
Physics, General	-	5	-
Atomic/Molecular Physics	-	-	-
Elementary Particle Physics	-	-	-
Plasma and High-Temperature Physics	-	-	-
Nuclear Physics	-	-	-
Optics/Optical Sciences	-	-	-
Solid State and Low-Temperature Physics	-	-	-
Acoustics	-	-	-
Theoretical and Mathematical Physics	-	-	-
Physics, Other	-	-	-
Physical Sciences, Other	-	-	-

Purchasing agents and buyers, farm products

2009-2014 Avg. Annual Openings: 2 Median Hourly Earnings: \$18.21

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	4
Agricultural/Farm Supplies Retailing and Wholesaling	-	-	4

Wholesale and retail buyers, except farm products

2009-2014 Avg. Annual Openings: **4** Median Hourly Earnings: **\$14.82**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	6
Apparel and Textile Marketing Management	-	-	2
Sales, Distribution, and Marketing Operations, General	-	-	4
Merchandising and Buying Operations	-	-	-
Fashion Merchandising	-	-	-
Apparel and Accessories Marketing Operations	-	-	-



Training and development specialists

2009-2014 Avg. Annual Openings: **2** Median Hourly Earnings: **\$17.44**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Organizational Behavior Studies	-	-	2

Financial analysts

2009-2014 Avg. Annual Openings: 2 Median Hourly Earnings: \$11.58

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	8
Accounting and Finance	-	-	3
Accounting and Business/Management	-	-	-
Finance, General	-	-	5

Personal financial advisors

2009-2014 Avg. Annual Openings: **7** Median Hourly Earnings: **\$9.58**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	8
Finance, General	-	-	7
Financial Planning and Services	-	-	1

Computer software engineers, systems software

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$26.83**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	8	10	11
Artificial Intelligence and Robotics	-	-	4
Information Technology	8	8	2
Information Science/Studies	-	-	3
Computer Science	-	2	-
Computer Engineering, General	-	-	2
Computer Engineering Technologies/Technicians, Other	-	-	-

Architects, except landscape and naval

2009-2014 Avg. Annual Openings: **2** Median Hourly Earnings: **\$18.37**



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	4
Architecture (BArch, BA/BS, MArch, MA/MS, PhD)	-	-	2
Environmental Design/Architecture	-	-	1
Architectural History and Criticism, General	-	-	1
Architecture and Related Services, Other	-	-	-

Landscape architects

2009-2014 Avg. Annual Openings: **2** Median Hourly Earnings: **\$15.49**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Environmental Design/Architecture	-	-	3
Landscape Architecture (BS, BSLA, BLA, MSLA, MLA, PhD)	-	-	-

Aerospace engineers

2009-2014 Avg. Annual Openings: - Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Aerospace, Aeronautical and Astronautical Engineering	-	-	2

Chemical engineers

2009-2014 Avg. Annual Openings: - Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Chemical Engineering	-	-	2

Civil engineers

2009-2014 Avg. Annual Openings: **5** Median Hourly Earnings: **\$27.08**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Civil Engineering, General	-	-	2
Transportation and Highway Engineering	-	-	-
Water Resources Engineering	-	-	-
Civil Engineering, Other	-	-	-



Electrical engineers

2009-2014 Avg. Annual Openings: 2 Median Hourly Earnings: \$35.57

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Electrical, Electronics and Communications Engineering	-	-	3

Electronics engineers, except computer

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$32.47**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Electrical, Electronics and Communications Engineering	-	-	3

Environmental engineers

2009-2014 Avg. Annual Openings: - Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Environmental/Environmental Health Engineering	-	-	3

Health and safety engineers, except mining safety engineers and inspectors

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Environmental/Environmental Health Engineering	-	-	3

Industrial engineers

2009-2014 Avg. Annual Openings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Industrial Engineering	-	-	2
Technology Education/Industrial Arts	-	-	1



Mechanical engineers

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$27.78**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	4
Mechanical Engineering	-	-	4

Nuclear engineers

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$18.07**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Nuclear Engineering	-	-	2

Architectural and civil drafters

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$23.30**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	10	10	2
Architectural Technology/Technician	-	-	1
Drafting and Design Technology/Technician, General	-	-	1
CAD/CADD Drafting and/or Design Technology/Technician	-	-	-
Architectural Drafting and Architectural CAD/CADD	10	10	-
Civil Drafting and Civil Engineering CAD/CADD	-	-	-

Electrical and electronic engineering technicians

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$26.75**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	6	6	9
Electrical, Electronic and Communications Engineering Technology/Technician	6	6	1
Telecommunications Technology/Technician	-	-	-
Electrical and Electronic Engineering Technologies/Technicians, Other	-	-	-
Engineering Technology, General	-	-	8
Computer Engineering Technology/Technician	-	-	-
Computer Technology/Computer Systems Technology	-	-	-



Electro-mechanical technicians

2009-2014 Avg. Annual Openings: **0** Median Hourly Earnings: **\$19.11**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	9
Engineering Technology, General	-	-	9
Engineering Technologies/Technicians, Other	-	-	-

Environmental engineering technicians

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	9
Environmental Engineering Technology/Environmental Technology	-	-	1
Hazardous Materials Information Systems Technology/Technician	-	-	-
Engineering Technology, General	-	-	8

Industrial engineering technicians

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$18.83**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	9
Industrial Technology/Technician	-	-	1
Manufacturing Technology/Technician	-	-	-
Industrial Production Technologies/Technicians, Other	-	-	-
Engineering Technology, General	-	-	8
Engineering/Industrial Management	-	-	-

Zoologists and wildlife biologists

2009-2014 Avg. Annual Openings: **0** Median Hourly Earnings: **\$27.18**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	8
Wildlife and Wildlands Science and Management	-	-	3
Cell/Cellular Biology and Anatomical Sciences, Other	-	-	4
Zoology/Animal Biology	-	-	-
Entomology	-	-	-
Animal Physiology	-	-	-
Animal Behavior and Ethology	-	-	-



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Wildlife Biology	-	-	-
Zoology/Animal Biology, Other	-	-	-
Ecology	-	-	1

Conservation scientists

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$23.50**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	7	7	6
Natural Resources/Conservation, General	-	-	4
Natural Resources Conservation and Research, Other	-	-	-
Natural Resources Management and Policy	-	-	-
Water, Wetlands, and Marine Resources Management	-	-	-
Land Use Planning and Management/Development	-	-	-
Natural Resources Management and Policy, Other	-	-	-
Forestry, General	-	-	-
Forest Sciences and Biology	-	-	-
Forest Management/Forest Resources Management	-	-	-
Forestry, Other	7	7	-
Wildlife and Wildlands Science and Management	-	-	2
Natural Resources and Conservation, Other	-	-	-

Atmospheric and space scientists

2009-2014 Avg. Annual Openings: **0** Median Hourly Earnings: **\$24.97**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Atmospheric Sciences and Meteorology, General	-	-	2
Atmospheric Chemistry and Climatology	-	-	-
Atmospheric Physics and Dynamics	-	-	-
Meteorology	-	-	-
Atmospheric Sciences and Meteorology, Other	-	-	-

Chemists

2009-2014 Avg. Annual Openings: **0** Median Hourly Earnings: **\$22.39**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	1	2
Chemistry, General	-	1	2



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Analytical Chemistry	-	-	-
Inorganic Chemistry	-	-	-
Organic Chemistry	-	-	-
Physical and Theoretical Chemistry	-	-	-
Polymer Chemistry	-	-	-
Chemical Physics	-	-	-
Chemistry, Other	-	-	-

Materials scientists

2009-2014 Avg. Annual Openings: -Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Materials Science	-	-	2

Environmental scientists and specialists, including health

2009-2014 Avg. Annual Openings: 2 Median Hourly Earnings: \$25.51

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	9	2
Environmental Studies	-	1	2
Environmental Science	-	8	-

Geoscientists, except hydrologists and geographers

2009-2014 Avg. Annual Openings: -Median Hourly Earnings: -

2008 Completions, **Other Occupations** 2008 Completions, **Related Programs** College **Entire Region Linked to Program**

TOTAL, ALL RELATED PROGRAMS	-	10	3
Geology/Earth Science, General	-	10	3
Geochemistry	-	-	-
Geophysics and Seismology	-	-	-
Paleontology	-	-	-
Geochemistry and Petrology	-	-	-
Oceanography, Chemical and Physical	-	-	-
Geological and Earth Sciences/Geosciences, Other	-	-	-

Hydrologists

2009-2014 Avg. Annual Openings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	10	3
Geology/Earth Science, General	-	10	3



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Hydrology and Water Resources Science	-	-	-
Oceanography, Chemical and Physical	-	-	-

Urban and regional planners

2009-2014 Avg. Annual Openings: **2** Median Hourly Earnings: **\$27.90**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
City/Urban, Community and Regional Planning	-	-	2

Agricultural and food science technicians

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$14.19**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	12
Animal/Livestock Husbandry and Production	-	-	7
Crop Production	-	-	1
Animal Sciences, General	-	-	1
Agricultural Animal Breeding	-	-	-
Animal Nutrition	-	-	-
Dairy Science	-	-	-
Food Science	-	-	2
Agronomy and Crop Science	-	-	1

Chemical technicians

2009-2014 Avg. Annual Openings: - Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	6
Food Science	-	-	3
Chemical Technology/Technician	-	-	3

Geological and petroleum technicians

2009-2014 Avg. Annual Openings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Petroleum Technology/Technician	-	-	3



Nuclear technicians

2009-2014 Avg. Annual Openings: - Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	4
Nuclear Engineering Technology/Technician	-	-	1
Industrial Radiologic Technology/Technician	-	-	-
Nuclear/Nuclear Power Technology/Technician	-	-	1
Nuclear and Industrial Radiologic Technologies/Technicians, Other	-	-	-
Radiation Protection/Health Physics Technician	-	-	2

Environmental science and protection technicians, including health

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$19.70**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	9	3
Environmental Studies	-	1	2
Environmental Science	-	8	-
Physical Science Technologies/Technicians, Other	-	-	1
Science Technologies/Technicians, Other	-	-	-

Forest and conservation technicians

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$17.34**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	7	7	8
Natural Resources/Conservation, General	-	-	4
Natural Resources Conservation and Research, Other	-	-	-
Water, Wetlands, and Marine Resources Management	-	-	-
Land Use Planning and Management/Development	-	-	-
Natural Resources Management and Policy, Other	-	-	-
Forestry, General	-	-	-
Forest Sciences and Biology	-	-	-
Forest Management/Forest Resources Management	-	-	-
Urban Forestry	-	-	-
Forest Resources Production and Management	-	-	4
Forest Technology/Technician	-	-	-



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Forestry, Other	7	7	-
Natural Resources and Conservation, Other	-	-	-

Arbitrators, mediators, and conciliators

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	7
Pre-Law Studies	-	-	5
Law (LL.B., J.D.)	-	-	-
Legal Professions and Studies, Other	-	-	1
Peace Studies and Conflict Resolution	-	-	1

Farm and home management advisors

2009-2014 Avg. Annual Openings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	20
Farm/Farm and Ranch Management	-	-	4
Animal/Livestock Husbandry and Production	-	-	3
Crop Production	-	-	1
Agricultural and Extension Education Services	-	-	-
Agricultural Public Services, Other	-	-	-
Animal Nutrition	-	-	1
Family and Consumer Sciences/Human Sciences, General	-	-	-
Business Family and Consumer Sciences/Human Sciences	-	-	-
Consumer Merchandising/Retailing Management	-	-	3
Family and Consumer Sciences/Human Sciences Business Services, Other	-	-	-
Family Resource Management Studies, General	-	-	-
Consumer Economics	-	-	-
Consumer Services and Advocacy	-	-	-
Family and Consumer Economics and Related Services, Other	-	-	-
Housing and Human Environments, General	-	-	-
Home Furnishings and Equipment Installers	-	-	1
Housing and Human Environments, Other	-	-	-
Human Development and Family Studies, General	-	-	-
Adult Development and Aging	-	-	-
Family Systems	-	-	-
Child Development	-	-	-



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Family and Community Services	-	-	-
Human Development, Family Studies, and Related Services, Other	-	-	-
Apparel and Textiles, General	-	-	7
Family and Consumer Sciences/Human Sciences, Other	-	-	-

Commercial and industrial designers

2009-2014 Avg. Annual Openings: 1 Median Hourly Earnings: \$11.94

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	6
Technology Education/Industrial Arts	-	-	2
Design and Visual Communications, General	-	-	3
Commercial and Advertising Art	-	-	1
Industrial Design	-	-	-
Design and Applied Arts, Other	-	-	-

Reporters and correspondents

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$13.24**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	11
Agricultural Communication/Journalism	-	-	3
Mass Communication/Media Studies	-	-	2
Communication and Media Studies, Other	-	-	1
Journalism	-	-	-
Broadcast Journalism	-	-	1
Photojournalism	-	-	2
Journalism, Other	-	-	-
Radio, Television, and Digital Communication, Other	-	-	1
Political Communication	-	-	1

Public relations specialists

2009-2014 Avg. Annual Openings: **3** Median Hourly Earnings: **\$18.12**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	41	9
Communication Studies/Speech Communication and Rhetoric	-	41	3
Organizational Communication, General	-	-	-
Public Relations/Image Management	-	-	2
Political Communication	-	-	2
Health Communication	-	-	1



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Public Relations, Advertising, and Applied Communication, Other	-	-	-
Family and Consumer Sciences/Human Sciences Communication	-	-	1

Occupational health and safety specialists

2009-2014 Avg. Annual Openings: **0** Median Hourly Earnings: **\$26.25**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Occupational Safety and Health Technology/Technician	-	-	1
Industrial Safety Technology/Technician	-	-	-
Quality Control and Safety Technologies/Technicians, Other	-	-	-
Environmental Health	-	-	1
Occupational Health and Industrial Hygiene	-	-	-

Occupational health and safety technicians

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	4
Radiation Protection/Health Physics Technician	-	-	3
Environmental Health	-	-	1
Occupational Health and Industrial Hygiene	-	-	-

Fish and game wardens

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	5
Natural Resource Economics	-	-	1
Fishing and Fisheries Sciences and Management	-	-	2
Wildlife and Wildlands Science and Management	-	-	2

Sales representatives, wholesale and manufacturing, technical and scientific products

2009-2014 Avg. Annual Openings: **5** Median Hourly Earnings: **\$16.55**



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	22
Selling Skills and Sales Operations	-	-	17
Business, Management, Marketing, and Related Support Services, Other	-	-	5

Customer service representatives

2009-2014 Avg. Annual Openings: **29** Median Hourly Earnings: **\$13.75**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	5
Receptionist	-	-	5
Customer Service Support/Call Center/Teleservice Operation	-	-	-

Dispatchers, except police, fire, and ambulance

2009-2014 Avg. Annual Openings: **4** Median Hourly Earnings: **\$14.46**

Related Programs	2008 Completions,	2008 Completions,	Other Occupations
	College	Entire Region	Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	-

Production, planning, and expediting clerks

2009-2014 Avg. Annual Openings: **3** Median Hourly Earnings: **\$15.05**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	1
Parts, Warehousing, and Inventory Management Operations	-	-	1

Shipping, receiving, and traffic clerks

2009-2014 Avg. Annual Openings: **10** Median Hourly Earnings: **\$11.53**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	23
General Office Occupations and Clerical Services	-	-	20
Traffic, Customs, and Transportation Clerk/Technician	-	-	3

Supervisors, farming, fishing, and forestry workers

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$16.27**



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	1	1	12
Farm/Farm and Ranch Management	-	-	4
Agricultural Business and Management, Other	-	-	-
Agricultural Production Operations, General	1	1	1
Animal/Livestock Husbandry and Production	-	-	3
Aquaculture	-	-	-
Crop Production	-	-	-
Dairy Husbandry and Production	-	-	-
Horse Husbandry/Equine Science and Management	-	-	-
Agricultural Production Operations, Other	-	-	-
Agricultural and Domestic Animal Services, Other	-	-	-
Animal Sciences, General	-	-	1
Agricultural Animal Breeding	-	-	-
Animal Nutrition	-	-	-
Dairy Science	-	-	-
Livestock Management	-	-	-
Poultry Science	-	-	-
Plant Sciences, General	-	-	1
Agronomy and Crop Science	-	-	-
Range Science and Management	-	-	-
Agriculture, Agriculture Operations, and Related Sciences, Other	-	-	-
Fishing and Fisheries Sciences and Management	-	-	2

Agricultural inspectors

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$19.51**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	5
Agricultural and Food Products Processing	-	-	5

Forest and conservation workers

2009-2014 Avg. Annual Openings: **2** Median Hourly Earnings: **\$11.95**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	7	7	8
Natural Resources/Conservation, General	-	-	4
Natural Resources Conservation and Research, Other	-	-	-
Natural Resources Management and Policy, Other	-	-	-
Forestry, General	-	-	-
Forest Sciences and Biology	-	-	-



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Forest Management/Forest Resources Management	-	-	-
Urban Forestry	-	-	-
Wood Science and Wood Products/Pulp and Paper Technology	-	-	-
Forest Resources Production and Management	-	-	4
Forestry, Other	7	7	-
Natural Resources and Conservation, Other	-	-	-

Boilermakers

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	1
Boilermaking/Boilermaker	-	-	1

Carpenters

2009-2014 Avg. Annual Openings: **65**

Median Hourly Earnings: \$25.06

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	14	14	3
Carpentry/Carpenter	14	14	3

Cement masons and concrete finishers

2009-2014 Avg. Annual Openings: **9** Median Hourly Earnings: **\$28.58**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	4
Concrete Finishing/Concrete Finisher	-	-	4

Construction laborers

2009-2014 Avg. Annual Openings: **42** Median Hourly Earnings: **\$18.23**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	14
Construction Trades, Other	-	-	14

Operating engineers and other construction equipment operators

2009-2014 Avg. Annual Openings: **20** Median Hourly Earnings: **\$30.31**



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	16
Construction/Heavy Equipment/Earthmoving Equipment Operation	<u>-</u>	<u>-</u>	16
Mobil Crane Operation/Operator	-	-	-

Electricians

2009-2014 Avg. Annual Openings: **26** Median Hourly Earnings: **\$26.05**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	6
Electrician	-	-	6

Insulation workers, floor, ceiling, and wall

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$17.09**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	14
Construction Trades, Other	-	-	14

Plumbers, pipefitters, and steamfitters

2009-2014 Avg. Annual Openings: **11** Median Hourly Earnings: **\$15.54**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	5
Pipefitting/Pipefitter and Sprinkler Fitter	-	-	1
Plumbing Technology/Plumber	-	-	4
Plumbing and Related Water Supply Services, Other	-	-	-

Roofers

2009-2014 Avg. Annual Openings: **5** Median Hourly Earnings: **\$14.34**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Roofer	-	-	3

Sheet metal workers

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$19.00**



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	5
Sheet Metal Technology/Sheetworking	-	-	5

Structural iron and steel workers

2009-2014 Avg. Annual Openings: 2 Median Hourly Earnings: \$24.63

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	14
Metal Building Assembly/Assembler	-	-	1
Construction Trades, Other	-	-	13

Helpers, carpenters

2009-2014 Avg. Annual Openings: 3 Median Hourly Earnings: \$18.33

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	14	14	3
Carpentry/Carpenter	14	14	3

Construction and building inspectors

2009-2014 Avg. Annual Openings: 3 Median Hourly Earnings: \$22.97

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Building/Home/Construction Inspection/Inspector	-	-	2

Hazardous materials removal workers

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	16
Hazardous Materials Management and Waste Technology/Technician	-	-	1
Construction Trades, Other	-	-	13
Mechanic and Repair Technologies/Technicians, Other	-	-	2

Rail-track laying and maintenance equipment operators

2009-2014 Avg. Annual Openings: -



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	16
Construction/Heavy Equipment/Earthmoving Equipment Operation	-	-	16

Service unit operators, oil, gas, and mining

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Mining Technology/Technician	-	-	2

Continuous mining machine operators

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	16
Construction/Heavy Equipment/Earthmoving Equipment Operation	-	-	16

First-line supervisors/managers of mechanics, installers, and repairers

2009-2014 Avg. Annual Openings: **10**

Median Hourly Earnings: \$24.13

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	17
Operations Management and Supervision	-	-	17

Electrical and electronics repairers, commercial and industrial equipment

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$27.23**

Related Programs2008 Completions, College2008 Completions, Entire RegionOther Occupations Linked to ProgramTOTAL, ALL RELATED PROGRAMS--6Computer Installation and Repair Technology/Technician--2Industrial Electronics Technology/Technician--4

Automotive service technicians and mechanics

2009-2014 Avg. Annual Openings: **33** Median Hourly Earnings: **\$12.70**



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	31	31	4
Automotive Engineering Technology/Technician	-	-	1
Automobile/Automotive Mechanics Technology/Technician	31	31	2
Vehicle Emissions Inspection and Maintenance Technology/Technician	-	-	-
Medium/Heavy Vehicle and Truck Technology/Technician	-	-	1
Alternative Fuel Vehicle Technology/Technician	-	-	-

Heating, air conditioning, and refrigeration mechanics and installers

2009-2014 Avg. Annual Openings: **7** Median Hourly Earnings: **\$18.02**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Heating, Air Conditioning and Refrigeration Technology/Technician (ACH/ACR/ACHR/HRAC/HVAC/AC Technology)	-	-	1
Solar Energy Technology/Technician	-	-	1
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR, HVAC, HVACR)	-	-	-

Industrial machinery mechanics

2009-2014 Avg. Annual Openings: 2 Median Hourly Earnings: \$17.32

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	14
Industrial Mechanics and Maintenance Technology	-	-	12
Heavy/Industrial Equipment Maintenance Technologies, Other	-	-	2

Maintenance and repair workers, general

2009-2014 Avg. Annual Openings: **16** Median Hourly Earnings: **\$17.07**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Building/Construction Site Management/Manager	-	-	3



Millwrights

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	14
Industrial Mechanics and Maintenance Technology	-	-	12
Heavy/Industrial Equipment Maintenance Technologies, Other	-	-	2

Helpers--Installation, maintenance, and repair workers

2009-2014 Avg. Annual Openings: **6** Median Hourly Earnings: **\$15.54**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	12
Industrial Mechanics and Maintenance Technology	-	-	12

First-line supervisors/managers of production and operating workers

2009-2014 Avg. Annual Openings: **7** Median Hourly Earnings: **\$19.69**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	17
Operations Management and Supervision	-	-	17

Aircraft structure, surfaces, rigging, and systems assemblers

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	3
Airframe Mechanics and Aircraft Maintenance Technology/Technician	-	-	3
Aircraft Powerplant Technology/Technician	-	-	-
Avionics Maintenance Technology/Technician	-	-	-

Electrical and electronic equipment assemblers

2009-2014 Avg. Annual Openings: -

Related Programs	2008 Completions,	2008 Completions,	Other Occupations
	College	Entire Region	Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	12



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
Communications Systems Installation and Repair Technology	-	-	8
Industrial Electronics Technology/Technician	-	-	4

Engine and other machine assemblers

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	14
Heavy Equipment Maintenance Technology/Technician	-	-	3
Industrial Mechanics and Maintenance Technology	-	-	11
Engine Machinist	-	-	-

Structural metal fabricators and fitters

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$14.26**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	10
Machine Shop Technology/Assistant	-	-	10

Team assemblers

2009-2014 Avg. Annual Openings: **6** Median Hourly Earnings: **\$12.90**

Related Programs	2008 Completions,	2008 Completions,	Other Occupations
	College	Entire Region	Linked to Program
TOTAL, ALL RELATED PROGRAMS	_	=	-

Computer-controlled machine tool operators, metal and plastic

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	10
Machine Shop Technology/Assistant	-	-	10

Cutting, punching, and press machine setters, operators, and tenders, metal and plastic

2009-2014 Avg. Annual Openings: -



Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	17
Machine Tool Technology/Machinist	-	-	14
Sheet Metal Technology/Sheetworking	-	-	3

Drilling and boring machine tool setters, operators, and tenders, metal and plastic

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	14
Machine Tool Technology/Machinist	-	-	14

Machinists

2009-2014 Avg. Annual Openings: 2 Median Hourly Earnings: \$23.38

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	17
Machine Tool Technology/Machinist	-	-	14
Machine Shop Technology/Assistant	-	-	3

Welders, cutters, solderers, and brazers

2009-2014 Avg. Annual Openings: **3** Median Hourly Earnings: **\$16.25**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	6	6	2
Welding Technology/Welder	6	6	2

Nuclear power reactor operators

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	2
Nuclear/Nuclear Power Technology/Technician	-	-	2

Power plant operators

2009-2014 Avg. Annual Openings: **2** Median Hourly Earnings: **\$31.72**

Related Programs	2008 Completions,	2008 Completions,	Other Occupations
	College	Entire Region	Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	17



Related Programs	2008 Completions,	2008 Completions,	Other Occupations
	College	Entire Region	Linked to Program
Operations Management and Supervision	-	=	17

Chemical plant and system operators

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	=	4
Chemical Technology/Technician	-	-	4

Chemical equipment operators and tenders

2009-2014 Avg. Annual Openings: **1** Median Hourly Earnings: **\$23.08**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	4
Chemical Technology/Technician	-	-	4

Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions,	2008 Completions,	Other Occupations
	College	Entire Region	Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	-

Mixing and blending machine setters, operators, and tenders

2009-2014 Avg. Annual Openings: **0** Median Hourly Earnings: **\$12.03**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	5
Agricultural and Food Products Processing	-	-	5

Inspectors, testers, sorters, samplers, and weighers

2009-2014 Avg. Annual Openings: **4** Median Hourly Earnings: **\$10.62**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	1
Quality Control Technology/Technician	-	-	1



Bus drivers, transit and intercity

2009-2014 Avg. Annual Openings: 7 Median Hourly Earnings: \$13.57

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	10
Truck and Bus Driver/Commercial Vehicle Operation	-	-	10

Truck drivers, heavy and tractor-trailer

2009-2014 Avg. Annual Openings: 29 Median Hourly Earnings: \$18.37

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	10
Truck and Bus Driver/Commercial Vehicle Operation	-	-	10

Locomotive engineers and operators

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	10
Truck and Bus Driver/Commercial Vehicle Operation	-	-	10
Transportation and Materials Moving, Other	-	-	-

Railroad conductors and yardmasters

2009-2014 Avg. Annual Openings: -

Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	10
Truck and Bus Driver/Commercial Vehicle Operation	-	-	10

Transportation inspectors

2009-2014 Avg. Annual Openings: -Median Hourly Earnings: -

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	6
Transportation/Transportation Management	-	-	4
Traffic, Customs, and Transportation Clerk/Technician	-	-	2



Industrial truck and tractor operators

2009-2014 Avg. Annual Openings: **7** Median Hourly Earnings: **\$15.99**

Related Programs	2008 Completions, College	2008 Completions, Entire Region	Other Occupations Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	4
Ground Transportation, Other	-	-	4

Laborers and freight, stock, and material movers, hand

2009-2014 Avg. Annual Openings: **50** Median Hourly Earnings: **\$11.73**

Related Programs	2008 Completions,	2008 Completions,	Other Occupations
	College	Entire Region	Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	-

Refuse and recyclable material collectors

2009-2014 Avg. Annual Openings: **3** Median Hourly Earnings: **\$16.72**

Related Programs	2008 Completions,	2008 Completions,	Other Occupations
	College	Entire Region	Linked to Program
TOTAL, ALL RELATED PROGRAMS	-	-	-



About the Data

Introduction

EMSI data is a compilation and harmonization of more than 80 government and private-sector sources. Updated every six months and based on the most recent data available, the dataset covers the entire US population and economy, down to each individual ZIP code. It includes data for industries, occupations, demographics, postsecondary institutions, and selected economic indicators.

Occupation Data

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional "staffing patterns" (showing the average mix of job types in various industries) taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is augmented by data from the American Community Survey (U.S. Census). Replacement jobs and annual openings estimates are based on national survey data by occupation. As in the official government statistics, occupations are categorized by Standard Occupational Classification (SOC) codes and titles.

Completions Data

Completions are voluntarily reported by postsecondary institutions through the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS). Completions are organized by program using the Classification of Instructional Programs (CIP) codes and titles.

Relating Occupations to Postsecondary Programs

The occupation-to-program (SOC-to-CIP) "crosswalk" is a large table that describes which occupations are generally trained for by each standard postsecondary program (based on Classification of Instructional Programs [CIP] codes and titles, last updated in 2000). EMSI starts with the official crosswalk published by the U.S. Department of Education and customizes it in various ways to make it more accurate and practical for comparing programs to regional labor markets.

About Economic Modeling Specialists

Products and Services

EMSI provides integrated regional economic and labor market data, web-based analysis tools, data-driven reports, and custom consulting services. EMSI specializes in detailed information about regional economies for assessment and planning purposes, bringing together industry, workforce, economic development, and education/training perspectives.

EMSI's expertise is centered on regional economics, data integration and analysis, programming, and design so that it can provide the best available products and services for regional decision makers. EMSI recently merged with its sister company CCbenefits Inc.-well known for conducting socioeconomic impact studies for over 800 community and technical colleges across the nation-to offer an integrated portfolio of solutions for college, workforce, and economic development professionals.

Clients

EMSI's client base includes hundreds of colleges, workforce boards, economic development organizations, governmental agencies, economists, consultants, academics, and private-sector analysts. With over four thousand current clients in the U.S., Canada, and the United Kingdom, EMSI's products and services are critical for informing regional policy.

Contact EMSI

For more information about EMSI, visit us at www.economicmodeling.com, or call us toll-free at 866.999.3674.

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