

Preferred Educational Requirements

BLS provides preferred educational requirements for each SOC occupation. Occupations are classified into one of eleven categories listed below based on analysis of the occupation's most significant source of education or training according to these principles:

- An occupation is placed into the category that best describes the education or training needed by most workers to become fully qualified.
- Postsecondary awards, if generally needed for entry into the occupation, take precedence over work-related training even though additional skills or experience may be needed for a worker to become fully qualified.
- The length of time an average worker generally needs to become fully qualified through a combination of on-the-job training and experience is used to categorize occupations in which a postsecondary award generally is not needed for entry.

Postsecondary awards

First Professional Degree. Completion of the degree usually requires at least 3 years of full-time academic study beyond a bachelor's degree.

29-1061	Anesthesiologists
29-1011	Chiropractors
29-1020	Dentists
29-1062	Family & General Practitioners
29-1199	Health Diagnosing & Treating Practitioners, NEC
29-1063	Internists, General
23-1011	Lawyers
29-1064	Obstetricians & Gynecologists
29-1041	Optometrists
29-1065	Pediatricians, General
29-1051	Pharmacists
29-1069	Physicians & Surgeons, NEC
29-1081	Podiatrists
29-1066	Psychiatrists
29-1067	Surgeons
29-1131	Veterinarians

Doctoral Degree. Completion of a Ph.D. or other doctoral degree usually requires at least 3 years of full-time academic study beyond a bachelor's degree.

25-1041	Agricultural Sciences Teachers, Postsecondary
25-1061	Anthropology & Archeology Teachers, Postsecondary
25-1031	Architecture Teachers, Postsecondary
25-1062	Area, Ethnic, & Cultural Studies Teachers, Postsecondary
25-1121	Art, Drama, & Music Teachers, Postsecondary
19-2011	Astronomers
25-1051	Atmospheric, Earth, Marine, & Space Sciences Teachers, Postsecondary
19-1021	Biochemists & Biophysicists
25-1042	Biological Science Teachers, Postsecondary
19-1029	Biological Scientists, NEC
25-1011	Business Teachers, Postsecondary
25-1052	Chemistry Teachers, Postsecondary
25-1122	Communications Teachers, Postsecondary
15-1011	Computer & Information Scientists, Research
25-1021	Computer Science Teachers, Postsecondary
25-1111	Criminal Justice & Law Enforcement Teachers, Postsecondary
25-1063	Economics Teachers, Postsecondary
25-1081	Education Teachers, Postsecondary
25-1032	Engineering Teachers, Postsecondary
25-1123	English Language & Literature Teachers, Postsecondary
25-1053	Environmental Science Teachers, Postsecondary
19-1041	Epidemiologists
25-1124	Foreign Language & Literature Teachers, Postsecondary
25-1043	Forestry & Conservation Science Teachers, Postsecondary
25-1064	Geography Teachers, Postsecondary
25-1071	Health Specialties Teachers, Postsecondary
25-1125	History Teachers, Postsecondary
25-1192	Home Economics Teachers, Postsecondary
25-1112	Law Teachers, Postsecondary
25-1082	Library Science Teachers, Postsecondary
25-1022	Mathematical Science Teachers, Postsecondary
19-1042	Medical Scientists, Ex Epidemiologists
19-1022	Microbiologists
25-1126	Philosophy & Religion Teachers, Postsecondary
19-2012	Physicists
25-1054	Physics Teachers, Postsecondary
25-1065	Political Science Teachers, Postsecondary
25-1199	Postsecondary Teachers, NEC
25-1066	Psychology Teachers, Postsecondary
25-1113	Social Work Teachers, Postsecondary
25-1067	Sociology Teachers, Postsecondary
19-1023	Zoologists & Wildlife Biologists

Master's Degree. Completion of the degree usually requires 1 or 2 years of full-time academic study beyond a bachelor's degree.

19-3091	Anthropologists & Archeologists
25-4011	Archivists
29-1121	Audiologists
21-2011	Clergy
19-3031	Clinical, Counseling, & School Psychologists
25-4012	Curators
21-1012	Educational, Vocational, & School Counselors
19-3092	Geographers
21-1091	Health Educators
19-3093	Historians
19-3032	Industrial-Organizational Psychologists
25-9031	Instructional Coordinators
25-4021	Librarians
21-1013	Marriage & Family Therapists
15-2099	Mathematical Science Occupations, NEC
15-2021	Mathematicians
21-1023	Mental Health & Substance Abuse Social Workers
21-1014	Mental Health Counselors
25-4013	Museum Technicians & Conservators
25-1072	Nursing Instructors & Teachers, Postsecondary
15-2031	Operations Research Analysts
29-1123	Physical Therapists
19-3094	Political Scientists
25-1193	Recreation & Fitness Studies Teachers, Postsecondary
21-1015	Rehabilitation Counselors
19-3099	Social Scientists and Related Workers, NEC
19-3041	Sociologists
29-1127	Speech-Language Pathologists
15-2041	Statisticians
21-1011	Substance Abuse & Behavioral Disorder Counselors
19-3051	Urban & Regional Planners

Bachelor's or higher degree, plus Work Experience. Most occupations in this category are management occupations. All require experience in a related non-management position for which a bachelor's or higher degree is usually required.

15-2011	Actuaries
23-1021	Administrative Law Judges, Adjudicators, & Hearing Officers
11-3011	Administrative Services Managers
11-2011	Advertising & Promotions Managers
13-1011	Agents & Business Managers of Artists, Performers, & Athletes
23-1022	Arbitrators, Mediators, & Conciliators
27-1011	Art Directors
11-1011	Chief Executives
11-3041	Compensation & Benefits Managers
11-3021	Computer & Information Systems Managers
11-9032	Education Administrators, Elementary & Secondary School
11-9039	Education Administrators, NEC
11-9033	Education Administrators, Postsecondary
11-9031	Education Administrators, Preschool & Child Care Center/Program
11-9041	Engineering Managers
11-9011	Farm, Ranch, & Other Agricultural Managers
11-3031	Financial Managers
11-9071	Gaming Managers
11-1021	General & Operations Managers
23-1023	Judges, Magistrate Judges, & Magistrates
11-1031	Legislators
13-1111	Management Analysts
11-2021	Marketing Managers
11-9111	Medical & Health Services Managers
27-2041	Music Directors & Composers
11-9121	Natural Sciences Managers
27-2012	Producers & Directors
11-2031	Public Relations Managers
11-3061	Purchasing Managers
11-2022	Sales Managers
11-3042	Training & Development Managers

Bachelor's Degree. Completion of the degree usually requires at least 4 but not more than 5 years of full-time academic work after high school.

13-2011	Accountants & Auditors
25-3011	Adult Literacy, Remedial Education, & GED Teachers & Instructors
17-2011	Aerospace Engineers
17-2021	Agricultural Engineers
53-2011	Airline Pilots, Copilots, & Flight Engineers
19-1011	Animal Scientists
17-1011	Architects, Ex Landscape & Naval
17-1099	Architects, Surveyors, & Cartographers, NEC
27-1099	Art & Design Workers, NEC
27-1019	Artists and Related Workers, NEC
29-9091	Athletic Trainers
19-2021	Atmospheric & Space Scientists
17-2031	Biomedical Engineers
13-2031	Budget Analysts
13-1199	Business Operations Specialists, NEC
17-1021	Cartographers & Photogrammetrists
17-2041	Chemical Engineers
19-2031	Chemists
21-1021	Child, Family, & School Social Workers
17-2051	Civil Engineers
27-1021	Commercial & Industrial Designers
13-1072	Compensation, Benefits, & Job Analysis Specialists
17-2061	Computer Hardware Engineers
15-1021	Computer Programmers
15-1031	Computer Software Engineers, Applications
15-1032	Computer Software Engineers, Systems Software
15-1051	Computer Systems Analysts
19-1031	Conservation Scientists
11-9021	Construction Managers
13-1051	Cost Estimators
21-1019	Counselors, NEC
21-9099	Counselors, Social, & Religious Workers, NEC
13-2041	Credit Analysts
15-1061	Database Administrators
29-1031	Dietitians & Nutritionists
21-2021	Directors, Religious Activities & Education
19-3011	Economists
27-3041	Editors
25-9099	Education, Training, and Library Workers, NEC
17-2071	Electrical Engineers
17-2072	Electronics Engineers, Ex Computer

25-2021	Elementary School Teachers, Ex Special Education
13-1071	Employment, Recruitment, & Placement Specialists
17-2199	Engineers, NEC
17-2081	Environmental Engineers
19-2041	Environmental Scientists & Specialists, Including Health
25-9021	Farm & Home Management Advisors
27-1022	Fashion Designers
27-4032	Film & Video Editors
13-2051	Financial Analysts
13-2061	Financial Examiners
13-2099	Financial Specialists, NEC
19-1012	Food Scientists & Technologists
19-1032	Foresters
19-2042	Geoscientists, Ex Hydrologists & Geographers
25-1191	Graduate Teaching Assistants
27-1024	Graphic Designers
17-2111	Health & Safety Engineers, Ex Mining Safety Engineers & Inspectors
13-1079	Human Resources, Training, & Labor Relations Specialists, NEC
19-2043	Hydrologists
17-2112	Industrial Engineers
11-3051	Industrial Production Managers
41-3021	Insurance Sales Agents
13-2053	Insurance Underwriters
27-1025	Interior Designers
25-2012	Kindergarten Teachers, Ex Special Education
17-1012	Landscape Architects
23-2092	Law Clerks
23-9099	Legal & Related Workers, NEC
23-2099	Legal Support Workers, NEC
25-9199	Library, Museum, Training, & Other Education Workers, NEC
19-1099	Life Scientists, NEC
13-2071	Loan Counselors
13-2072	Loan Officers
17-2121	Marine Engineers & Naval Architects
19-3021	Market Research Analysts
17-2131	Materials Engineers
19-2032	Materials Scientists
17-2141	Mechanical Engineers
29-2011	Medical & Clinical Laboratory Technologists
21-1022	Medical & Public Health Social Workers
13-1121	Meeting & Convention Planners
25-2022	Middle School Teachers, Ex Special & Vocational Education
17-2151	Mining & Geological Engineers, Including Mining Safety Engineers
27-1014	Multi-Media Artists & Animators
15-1071	Network & Computer Systems Administrators
15-1081	Network Systems & Data Communications Analysts
17-2161	Nuclear Engineers

29-9011	Occupational Health & Safety Specialists
29-9012	Occupational Health & Safety Technicians
29-1122	Occupational Therapists
29-2091	Orthotists & Prosthetists
13-2052	Personal Financial Advisors
17-2171	Petroleum Engineers
19-2099	Physical Scientists, NEC
29-1071	Physician Assistants
25-2011	Preschool Teachers, Ex Special Education
21-1092	Probation Officers & Correctional Treatment Specialists
11-9141	Property, Real Estate, & Community Association Managers
27-3031	Public Relations Specialists
13-1023	Purchasing Agents, Ex Wholesale, Retail, & Farm Products
39-9032	Recreation Workers
29-1125	Recreational Therapists
41-9031	Sales Engineers
25-2031	Secondary School Teachers, Ex Special & Vocational Education
41-3031	Securities, Commodities, & Financial Services Sales Agents
27-1027	Set & Exhibit Designers
11-9151	Social & Community Service Managers
19-1013	Soil & Plant Scientists
25-2042	Special Education Teachers, Middle School
25-2041	Special Education Teachers, Preschool, Kindergarten, & Elementary School
25-2043	Special Education Teachers, Secondary School
19-3022	Survey Researchers
17-1022	Surveyors
13-2081	Tax Examiners, Collectors, and Revenue Agents
25-3999	Teachers, Primary, Secondary, & Adult, NEC
27-3042	Technical Writers
13-1073	Training & Development Specialists
25-2023	Vocational Education Teachers, Middle School
25-2032	Vocational Education Teachers, Secondary School
13-1022	Wholesale & Retail Buyers, Ex Farm Products
27-3043	Writers & Authors

Associate Degree. Completion of the degree usually requires at least 2 years of full-time academic study.

17-3021	Aerospace Engineering & Operations Technicians
19-4011	Agricultural & Food Science Technicians
19-4021	Biological Technicians
29-2031	Cardiovascular Technologists & Technicians
19-4031	Chemical Technicians
17-3022	Civil Engineering Technicians
15-1041	Computer Support Specialists
29-2021	Dental Hygienists
29-2032	Diagnostic Medical Sonographers
17-3099	Drafters, Engineering, & Mapping Technicians, NEC
17-3023	Electrical & Electronic Engineering Technicians
17-3024	Electro-Mechanical Technicians
17-3029	Engineering Technicians, Except Drafters, NEC
17-3025	Environmental Engineering Technicians
19-4091	Environmental Science & Protection Technicians, Including Health
19-4092	Forensic Science Technicians
19-4093	Forest & Conservation Technicians
11-9061	Funeral Directors
19-4041	Geological & Petroleum Technicians
17-3026	Industrial Engineering Technicians
19-4099	Life, Physical, & Social Science Technicians, NEC
15-2091	Mathematical Technicians
17-3027	Mechanical Engineering Technicians
29-2012	Medical & Clinical Laboratory Technicians
29-2071	Medical Records & Health Information Technicians
29-2033	Nuclear Medicine Technologists
19-4051	Nuclear Technicians
31-2011	Occupational Therapist Assistants
23-2011	Paralegals & Legal Assistants
31-2021	Physical Therapist Assistants
29-1124	Radiation Therapists
29-2034	Radiologic Technologists & Technicians
29-1111	Registered Nurses
29-1126	Respiratory Therapists
51-9141	Semiconductor Processors
29-2056	Veterinary Technologists & Technicians

Postsecondary Vocational Training. Some programs last only a few weeks while others may last more than a year. Programs lead to a certificate or other award but not a degree.

49-3011	Aircraft Mechanics & Service Technicians
49-3012	Aircraft Mechanics & Service Technicians, FAA Certified
13-2021	Appraisers & Assessors of Real Estate
17-3011	Architectural & Civil Drafters
49-3023	Automotive Service Technicians & Mechanics
49-2091	Avionics Technicians
39-5011	Barbers
27-4012	Broadcast Technicians
49-3031	Bus & Truck Mechanics & Diesel Engine Specialists
35-1011	Chefs & Head Cooks
49-9092	Commercial Divers
53-2012	Commercial Pilots
15-1099	Computer Specialists, NEC
49-2011	Computer, Automated Teller, & Office Machine Repairers
23-2091	Court Reporters
43-9031	Desktop Publishers
49-2092	Electric Motor, Power Tool, & Related Repairers
49-2099	Electrical & Electronic Equipment Mechanics, Installers, & Repairers, NEC
17-3012	Electrical & Electronics Drafters
49-2093	Electrical & Electronics Installers & Repairers, Transportation Equipment
49-2094	Electrical & Electronics Repairers, Commercial & Industrial Equipment
49-2095	Electrical & Electronics Repairers, Powerhouse, Substation, & Relay
49-2096	Electronic Equipment Installers & Repairers, Motor Vehicles
49-2097	Electronic Home Entertainment Equipment Installers & Repairers
39-4011	Embalmers
29-2041	Emergency Medical Technicians & Paramedics
49-3041	Farm Equipment Mechanics
39-9031	Fitness Trainers & Aerobics Instructors
39-3012	Gaming & Sports Book Writers & Runners
39-3011	Gaming Dealers
39-1011	Gaming Supervisors
39-5012	Hairdressers, Hairstylists, & Cosmetologists
51-9071	Jewelers & Precious Stone & Metal Workers
43-6012	Legal Secretaries
29-2061	Licensed Practical & Licensed Vocational Nurses
39-5092	Manicurists & Pedicurists
31-9011	Massage Therapists
17-3013	Mechanical Drafters
43-6013	Medical Secretaries
31-9094	Medical Transcriptionists
49-3042	Mobile Heavy Equipment Mechanics, Ex Engines

29-2053	Psychiatric Technicians
49-2021	Radio Mechanics
41-9022	Real Estate Sales Agents
29-2054	Respiratory Therapy Technicians
49-2098	Security & Fire Alarm Systems Installers
53-5031	Ship Engineers
39-5094	Skin Care Specialists
39-1012	Slot Key Persons
27-4014	Sound Engineering Technicians
29-2055	Surgical Technologists
49-2022	Telecommunications Equipment Installers & Repairers, Ex Line Installers
41-3041	Travel Agents
51-4121	Welders, Cutters, Solderers, & Brazers

Work-related training

Work Experience in a related occupation. Many occupations requiring work experience are first-line supervisors/managers of service, sales and related, production, or other occupations, or are management occupations.

45-2011	Agricultural Inspectors
53-1011	Aircraft Cargo Handling Supervisors
53-5021	Captains, Mates, & Pilots of Water Vessels
27-2032	Choreographers
39-6012	Concierges
47-4011	Construction & Building Inspectors
47-4999	Construction Trades and Related Workers, NEC
39-3092	Costume Attendants
33-3021	Detectives & Criminal Investigators
13-1061	Emergency Management Specialists
33-2021	Fire Inspectors & Investigators
47-1011	First-Line Supervisors/Managers of Construction Trades & Extraction Workers
33-1011	First-Line Supervisors/Managers of Correctional Officers
33-1021	First-Line Supervisors/Managers of Fire Fighting & Prevention Workers
35-1012	First-Line Supervisors/Managers of Food Preparation & Serving Workers
53-1021	First-Line Supervisors/Managers of Helpers, Laborers, & Material Movers, Hand
37-1011	First-Line Supervisors/Managers of Housekeeping & Janitorial Workers
37-1012	First-Line Supervisors/Managers of Landscaping, Lawn Service, & Groundskeeping Workers

49-1011	First-Line Supervisors/Managers of Mechanics, Installers, & Repairers
41-1012	First-Line Supervisors/Managers of Non-Retail Sales Workers
43-1011	First-Line Supervisors/Managers of Office & Administrative Support Workers
39-1021	First-Line Supervisors/Managers of Personal Service Workers
33-1012	First-Line Supervisors/Managers of Police & Detectives
51-1011	First-Line Supervisors/Managers of Production & Operating Workers
41-1011	First-Line Supervisors/Managers of Retail Sales Workers
53-1031	First-Line Supervisors/Managers of Transportation & Material-Moving Machine & Vehicle Operators
33-1099	First-Line Supervisors/Managers, Protective Service Workers, NEC
11-9051	Food Service Managers
33-2022	Forest Fire Inspectors & Prevention Specialists
45-2041	Graders & Sorters, Agricultural Products
39-3093	Locker Room, Coatroom, & Dressing Room Attendants
11-9081	Lodging Managers
11-9199	Managers, NEC
47-5042	Mine Cutting & Channeling Machine Operators
43-4141	New Accounts Clerks
11-9131	Postmasters & Mail Superintendents
33-9021	Private Detectives & Investigators
13-1021	Purchasing Agents & Buyers, Farm Products
53-4013	Rail Yard Engineers, Dinkey Operators, & Hostlers
53-4021	Railroad Brake, Signal, & Switch Operators
53-4031	Railroad Conductors & Yardmasters
41-9021	Real Estate Brokers
25-3021	Self-Enrichment Education Teachers
51-6052	Tailors, Dressmakers, & Custom Sewers
53-6051	Transportation Inspectors
11-3071	Transportation, Storage, & Distribution Managers
25-1194	Vocational Education Teachers, Postsecondary

Long-Term on-the-job training. More than 12 months of on-the-job training or combined work experience and formal classroom instruction are needed for workers to develop the skills necessary to be fully qualified. This category includes formal and informal apprenticeships that may last up to 5 years. Long-term on-the-job training also includes intensive occupation-specific, employer-sponsored programs that workers must successfully complete. These include fire and police academies and schools for air traffic controllers and flight attendants. In other occupations—insurance sales and securities sales, for example—trainees take formal courses, often provided on the job site, to prepare for the required licensing exams. Individuals undergoing training generally are considered to be employed in the occupation. Also included in this category is the development of a natural ability—such as that possessed by musicians, athletes, actors, and other entertainers—that must be cultivated over several years, frequently in a nonwork setting.

27-2011	Actors
53-2021	Air Traffic Controllers
51-2011	Aircraft Structure, Surfaces, Rigging, & Systems Assemblers
27-2021	Athletes & Sports Competitors
27-4011	Audio & Video Equipment Technicians
49-3021	Automotive Body & Related Repairers
49-3022	Automotive Glass Installers & Repairers
51-3011	Bakers
47-2011	Boilermakers
47-2021	Brickmasons & Blockmasons
27-3021	Broadcast News Analysts
51-3021	Butchers & Meat Cutters
51-7011	Cabinetmakers & Bench Carpenters
47-2031	Carpenters
47-2051	Cement Masons & Concrete Finishers
51-8091	Chemical Plant & System Operators
13-1031	Claims Adjusters, Examiners, & Investigators
27-2022	Coaches & Scouts
13-1041	Compliance Officers, Ex Agriculture, Construction, Health & Safety, & Transportation
51-4011	Computer-Controlled Machine Tool Operators, Metal & Plastic
35-2012	Cooks, Institution & Cafeteria
35-2013	Cooks, Private Household
35-2014	Cooks, Restaurant
27-2031	Dancers
51-9081	Dental Laboratory Technicians
49-9051	Electrical Power-Line Installers & Repairers
47-2111	Electricians
47-4021	Elevator Installers & Repairers
27-2099	Entertainers and Performers, Sports & Related Workers, NEC
51-9194	Etchers & Engravers
51-6092	Fabric & Apparel Patternmakers
11-9012	Farmers & Ranchers

27-1013	Fine Artists, Including Painters, Sculptors, & Illustrators
33-2011	Fire Fighters
33-3031	Fish & Game Wardens
39-6031	Flight Attendants
51-7021	Furniture Finishers
51-8092	Gas Plant Operators
47-2121	Glaziers
49-9021	Heating, Air Conditioning, & Refrigeration Mechanics & Installers
49-9031	Home Appliance Repairers
49-9041	Industrial Machinery Mechanics
49-9099	Installation, Maintenance, and Repair Workers, NEC
13-1032	Insurance Appraisers, Auto Damage
27-3091	Interpreters & Translators
51-5021	Job Printers
51-4041	Machinists
49-9042	Maintenance & Repair Workers, General
49-9043	Maintenance Workers, Machinery
27-3099	Media & Communication Workers, NEC
51-9082	Medical Appliance Technicians
49-9044	Millwrights
51-7031	Model Makers, Wood
49-3051	Motorboat Mechanics
49-3052	Motorcycle Mechanics
49-9063	Musical Instrument Repairers & Tuners
27-2042	Musicians & Singers
51-8011	Nuclear Power Reactor Operators
51-4012	Numerical Tool & Process Control Programmers
29-2081	Opticians, Dispensing
51-7032	Patternmakers, Wood
51-8093	Petroleum Pump System Operators, Refinery Operators, & Gaugers
27-4021	Photographers
51-8099	Plant and System Operators, NEC
47-2161	Plasterers & Stucco Masons
47-2152	Plumbers, Pipefitters, & Steamfitters
33-3051	Police & Sheriff's Patrol Officers
51-8012	Power Distributors & Dispatchers
51-8013	Power Plant Operators
49-9069	Precision Instrument & Equipment Repairers, NEC
51-5022	Prepress Technicians & Workers
27-3012	Public Address System & Other Announcers
27-3011	Radio & Television Announcers
27-4013	Radio Operators
49-3043	Rail Car Repairers
49-3092	Recreational Vehicle Service Technicians
49-9045	Refractory Materials Repairers, Ex Brickmasons
47-2171	Reinforcing Iron & Rebar Workers

27-3022	Reporters & Correspondents
51-6041	Shoe & Leather Workers & Repairers
49-9097	Singal & Track Switch Repairers
51-8021	Stationary Engineers & Boiler Operators
47-2022	Stonemasons
47-2221	Structural Iron & Steel Workers
49-9052	Telecommunications Line Installers & Repairers
47-2053	Terrazzo Workers & Finishers
51-6063	Textile Knitting & Weaving Machine Setters, Operators, & Tenders
47-2044	Tile & Marble Setters
51-4111	Tool & Die Makers
33-3052	Transit & Railroad Police
39-6022	Travel Guides
27-2023	Umpires, Referees, & Other Sports Officials
51-6093	Upholsterers
49-9064	Watch Repairers
51-8031	Water & Liquid Waste Treatment Plant & System Operators

Moderate-Term on-the-job training. Skills needed to be fully qualified can be acquired during 1 to 12 months of combined on-the-job experience and informal training.

41-3011	Advertising Sales Agents
45-2091	Agricultural Equipment Operators
45-2099	Agricultural Workers, NEC
53-2099	Air Transportation Workers, NEC
53-3011	Ambulance Drivers & Attendants, Ex Emergency Medical Technicians
45-2021	Animal Breeders
33-9011	Animal Control Workers
39-2011	Animal Trainers
51-2099	Assemblers and Fabricators, NEC
25-9011	Audio-Visual Collections Specialists
33-3011	Bailiffs
49-3091	Bicycle Repairers
51-5011	Bindery Workers
51-5012	Bookbinders
43-3031	Bookkeeping, Accounting, & Auditing Clerks
43-4011	Brokerage Clerks
53-3021	Bus Drivers, Transit & Intercity
49-9061	Camera & Photographic Equipment Repairers
27-4031	Camera Operators, Television, Video, & Motion Picture
43-5011	Cargo & Freight Agents
47-2041	Carpet Installers
51-9191	Cementing & Gluing Machine Operators & Tenders
51-9011	Chemical Equipment Operators & Tenders

51-9192	Cleaning, Washing, & Metal Pickling Equipment Operators & Tenders
51-9121	Coating, Painting, & Spraying Machine Setters, Operators, & Tenders
49-9091	Coin, Vending, & Amusement Machine Servicers & Repairers
43-9011	Computer Operators
47-2061	Construction Laborers
47-5041	Continuous Mining Machine Operators
49-9012	Control & Valve Installers & Repairers, Ex Mechanical Door
51-9193	Cooling & Freezing Equipment Operators & Tenders
33-3012	Correctional Officers & Jailers
53-7021	Crane & Tower Operators
51-9021	Crushing, Grinding, & Polishing Machine Setters, Operators, & Tenders
43-4051	Customer Service Representatives
51-9032	Cutting & Slicing Machine Setters, Operators, & Tenders
51-4031	Cutting, Punching, & Press Machine Setters, Operators, & Tenders, Metal & Plastic
43-9021	Data Entry Keyers
41-9011	Demonstrators & Product Promoters
31-9091	Dental Assistants
47-5011	Derrick Operators, Oil & Gas
29-2051	Dietetic Technicians
43-5032	Dispatchers, Ex Police, Fire, & Ambulance
51-4032	Drilling & Boring Machine Tool Setters, Operators, & Tenders, Metal & Plastic
47-2081	Drywall & Ceiling Tile Installers
47-5021	Earth Drillers, Ex Oil & Gas
43-4061	Eligibility Interviewers, Government Programs
39-3099	Entertainment Attendants and Related Workers, NEC
53-7032	Excavating & Loading Machine & Dragline Operators
43-6011	Executive Secretaries & Administrative Assistants
47-5031	Explosives Workers, Ordnance Handling Experts, & Blasters
47-5099	Extraction Workers, NEC
51-4021	Extruding & Drawing Machine Setters, Operators, & Tenders, Metal & Plastic
51-6091	Extruding & Forming Machine Setters, Operators, & Tenders, Synthetic & Glass Fibers
51-9041	Extruding, Forming, Pressing, & Compacting Machine Setters, Operators, & Tenders
49-9093	Fabric Menders, Ex Garment
45-4021	Fallers
45-1012	Farm Labor Contractors
47-4031	Fence Erectors
51-2091	Fiberglass Laminators & Fabricators
45-1011	First-Line Supervisors/Managers of Farming, Fishing, & Forestry Workers
45-3011	Fishers & Related Fishing Workers
47-2042	Floor Layers, Ex Carpet, Wood, & Hard Tiles
47-2043	Floor Sanders & Finishers
27-1023	Floral Designers
45-4011	Forest & Conservation Workers
51-4022	Forging Machine Setters, Operators, & Tenders, Metal & Plastic
51-4071	Foundry Mold & Coremakers

51-9051	Furnace, Kiln, Oven, Drier, & Kettle Operators & Tenders
53-7071	Gas Compressor & Gas Pumping Station Operators
51-9022	Grinding & Polishing Workers, Hand
51-4033	Grinding, Lapping, Polishing, & Buffing Machine Tool Setters, Operators, & Tenders, Metal & Plastic
47-4041	Hazardous Materials Removal Workers
51-4191	Heat Treating Equipment Setters, Operators, & Tenders, Metal & Plastic
47-4051	Highway Maintenance Workers
53-7041	Hoist & Winch Operators
45-3021	Hunters & Trappers
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers
47-2131	Insulation Workers, Floor, Ceiling, & Wall
47-2132	Insulation Workers, Mechanical
43-9041	Insurance Claims & Policy Processing Clerks
51-4034	Lathe & Turning Machine Tool Setters, Operators, & Tenders, Metal & Plastic
51-6011	Laundry & Dry-Cleaning Workers
51-4192	Lay-Out Workers, Metal & Plastic
49-9094	Locksmiths & Safe Repairers
53-4012	Locomotive Firers
45-4023	Log Graders & Scalers
45-4022	Logging Equipment Operators
45-4029	Logging Workers, NEC
49-9095	Manufactured Building & Mobile Home Installers
49-9011	Mechanical Door Repairers
27-4099	Media and Communication Equipment Workers, NEC
31-9092	Medical Assistants
49-9062	Medical Equipment Repairers
27-1026	Merchandise Displayers & Window Trimmers
51-4199	Metal Workers & Plastic Workers, NEC
51-4051	Metal-Refining Furnace Operators & Tenders
51-4035	Milling & Planing Machine Setters, Operators, & Tenders, Metal & Plastic
47-5049	Mining Machine Operators, NEC
51-9023	Mixing & Blending Machine Setters, Operators, & Tenders
51-4061	Model Makers, Metal & Plastic
41-9012	Models
51-9195	Molders, Shapers, & Casters, Ex Metal & Plastic
51-4072	Molding, Coremaking, & Casting Machine Setters, Operators, & Tenders, Metal & Plastic
51-4081	Multiple Machine Tool Setters, Operators, & Tenders, Metal & Plastic
47-2073	Operating Engineers & Other Construction Equipment Operators
51-9083	Ophthalmic Laboratory Technicians
49-3053	Outdoor Power Equipment & Other Small Engine Mechanics
47-2141	Painters, Construction & Maintenance
51-9122	Painters, Transportation Equipment
51-9196	Paper Goods Machine Setters, Operators, & Tenders
47-2142	Paperhangers
41-2022	Parts Salespersons

51-4062	Patternmakers, Metal & Plastic
47-2071	Paving, Surfacing, & Tamping Equipment Operators
39-9099	Personal Care and Service Workers, NEC
37-2021	Pest Control Workers
37-3012	Pesticide Handlers, Sprayers, & Applicators, Vegetation
29-2052	Pharmacy Technicians
51-9131	Photographic Process Workers
47-2072	Pile-Driver Operators
47-2151	Pipelayers
51-4193	Plating & Coating Machine Setters, Operators, & Tenders, Metal & Plastic
43-5031	Police, Fire, & Ambulance Dispatchers
51-4052	Pourers & Casters, Metal
51-5023	Printing Machine Operators
51-5099	Printing Workers, NEC
51-9199	Production Workers, NEC
53-7072	Pump Operators, Ex Wellhead Pumps
47-4061	Rail-Track Laying & Maintenance Equipment Operators
39-9041	Residential Advisors
47-5051	Rock Splitters, Quarry
51-4023	Rolling Machine Setters, Operators, & Tenders, Metal & Plastic
47-5061	Roof Bolters, Mining
47-2181	Roofers
47-5012	Rotary Drill Operators, Oil & Gas
47-5071	Roustabouts, Oil & Gas
41-9099	Sales & Related Workers, NEC
41-3099	Sales Representatives, Services, NEC
41-4012	Sales Representatives, Wholesale & Manufacturing, Ex Technical & Scientific Products
41-4011	Sales Representatives, Wholesale & Manufacturing, Technical & Scientific Products
51-7041	Sawing Machine Setters, Operators, & Tenders, Wood
43-6014	Secretaries, Ex Legal, Medical, & Executive
51-9012	Separating, Filtering, Clarifying, Precipitating, & Still Machine Setters, Operators, & Tenders
47-4071	Septic Tank Servicers & Sewer Pipe Cleaners
47-5013	Service Unit Operators, Oil, Gas, & Mining
51-6031	Sewing Machine Operators
47-2211	Sheet Metal Workers
51-6042	Shoe Machine Operators & Tenders
51-3023	Slaughterers & Meat Packers
21-1093	Social & Human Service Assistants
43-9111	Statistical Assistants
51-2041	Structural Metal Fabricators & Fitters
17-3031	Surveying & Mapping Technicians
53-7121	Tank Car, Truck, & Ship Loaders
47-2082	Tapers
13-2082	Tax Preparers
51-2092	Team Assemblers

51-6061	Textile Bleaching & Dyeing Machine Operators & Tenders
51-6062	Textile Cutting Machine Setters, Operators, & Tenders
51-6064	Textile Winding, Twisting, & Drawing Out Machine Setters, Operators, & Tenders
51-6099	Textile, Apparel, & Furnishings Workers, NEC
51-2093	Timing Device Assemblers, Adjusters, & Calibrators
51-9197	Tire Builders
23-2093	Title Examiners, Abstractors, & Searchers
51-4194	Tool Grinders, Filers, & Sharpeners
39-6021	Tour Guides & Escorts
53-3032	Truck Drivers, Heavy & Tractor-Trailer
49-3099	Vehicle & Mobile Equipment Mechanics, Installers, & Repairers, NEC
51-4122	Welding, Soldering, & Brazing Machine Setters, Operators, & Tenders
53-7073	Wellhead Pumpers
51-7099	Woodworkers, NEC
51-7042	Woodworking Machine Setters, Operators, & Tenders, Ex Sawing
43-9022	Word Processors & Typists

Short-Term on-the-job training. Skills needed to be fully qualified can be acquired during a short demonstration of job duties or during 1 month or less of on-the-job experience or instruction.

53-2022	Airfield Operations Specialists
39-3091	Amusement & Recreation Attendants
39-6011	Baggage Porters & Bellhops
35-3011	Bartenders
43-3011	Bill & Account Collectors
43-3021	Billing & Posting Clerks & Machine Operators
53-6011	Bridge & Lock Tenders
37-9099	Building & Grounds Cleaning & Maintenance Workers, NEC
53-3022	Bus Drivers, School
41-2011	Cashiers
39-9011	Child Care Workers
53-7061	Cleaners of Vehicles & Equipment
51-2021	Coil Winders, Tapers, & Finishers
35-3021	Combined Food Preparation & Serving Workers, Including Fast Food
43-2099	Communications Equipment Operators, NEC
53-7011	Conveyor Operators & Tenders
35-2011	Cooks, Fast Food
35-2015	Cooks, Short Order
43-4021	Correspondence Clerks
41-2021	Counter & Rental Clerks
35-3022	Counter Attendants, Cafeteria, Food Concession, & Coffee Shop
43-5021	Couriers & Messengers
43-4031	Court, Municipal, & License Clerks

43-4041	Credit Authorizers, Checkers, & Clerks
33-9091	Crossing Guards
51-9031	Cutters & Trimmers, Hand
35-9011	Dining Room & Cafeteria Attendants & Bartender Helpers
35-9021	Dishwashers
41-9091	Door-To-Door Sales Workers, News & Street Vendors, & Related Workers
53-7031	Dredge Operators
53-3031	Driver/Sales Workers
51-2022	Electrical & Electronic Equipment Assemblers
51-2023	Electromechanical Equipment Assemblers
51-2031	Engine & Other Machine Assemblers
45-9099	Farming, Fishing, & Forestry Workers, NEC
45-2080	Farmworkers
43-4071	File Clerks
43-4999	Financial, Information, & Record Clerks, NEC
51-3091	Food & Tobacco Roasting, Baking, & Drying Machine Operators & Tenders
51-3092	Food Batchmakers
51-3093	Food Cooking Machine Operators & Tenders
35-9099	Food Preparation and Serving Related Workers, NEC
35-2021	Food Preparation Workers
51-3099	Food Processing Workers, NEC
35-3041	Food Servers, Nonrestaurant
39-4021	Funeral Attendants
43-3041	Gaming Cage Workers
41-2012	Gaming Change Persons & Booth Cashiers
31-9099	Healthcare Support Workers, NEC
47-3019	Helpers, Construction Trades, NEC
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, & Tile & Marble Setters
47-3012	Helpers--Carpenters
47-3013	Helpers--Electricians
47-5081	Helpers--Extraction Workers
49-9098	Helpers--Installation, Maintenance, & Repair Workers
47-3014	Helpers--Painters, Paperhangers, Plasterers, & Stucco Masons
47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, & Steamfitters
51-9198	Helpers--Production Workers
47-3016	Helpers--Roofers
31-1011	Home Health Aides
35-9031	Hosts & Hostesses, Restaurant, Lounge, & Coffee Shop
43-4081	Hotel, Motel, & Resort Desk Clerks
43-4161	Human Resources Assistants, Ex Payroll & Timekeeping
53-7051	Industrial Truck & Tractor Operators
43-4111	Interviewers, Ex Eligibility & Loan
37-2011	Janitors & Cleaners, Ex Maids & Housekeeping Cleaners
53-7062	Laborers & Freight, Stock, & Material Movers, Hand
37-3011	Landscaping & Groundskeeping Workers

43-4121	Library Assistants, Clerical
25-4031	Library Technicians
53-7033	Loading Machine Operators, Underground Mining
43-4131	Loan Interviewers & Clerks
53-4011	Locomotive Engineers
53-7063	Machine Feeders & Offbearers
37-2012	Maids & Housekeeping Cleaners
43-9051	Mail Clerks & Mail Machine Operators, Ex Postal Service
39-5091	Makeup Artists, Theatrical & Performance
53-7199	Material Moving Workers, NEC
43-5199	Material Recording, Scheduling, Dispatching, & Distributing Workers, NEC
51-3022	Meat, Poultry, & Fish Cutters & Trimmers
31-9093	Medical Equipment Preparers
43-5041	Meter Readers, Utilities
39-3021	Motion Picture Projectionists
53-3099	Motor Vehicle Operators, NEC
53-5022	Motorboat Operators
39-2021	Nonfarm Animal Caretakers
31-1012	Nursing Aides, Orderlies, & Attendants
31-2012	Occupational Therapist Aides
43-9061	Office Clerks, General
43-9071	Office Machine Operators, Ex Computer
43-4151	Order Clerks
51-9111	Packaging & Filling Machine Operators & Tenders
53-7064	Packers & Packagers, Hand
51-9123	Painting, Coating, & Decorating Workers
33-3041	Parking Enforcement Workers
53-6021	Parking Lot Attendants
43-3051	Payroll & Timekeeping Clerks
39-9021	Personal & Home Care Aides
31-9095	Pharmacy Aides
51-9132	Photographic Processing Machine Operators
31-2022	Physical Therapist Aides
43-5051	Postal Service Clerks
43-5052	Postal Service Mail Carriers
43-5053	Postal Service Mail Sorters, Processors, & Processing Machine Operators
51-6021	Pressers, Textile, Garment, & Related Materials
43-3061	Procurement Clerks
43-5061	Production, Planning, & Expediting Clerks
43-9081	Proofreaders & Copy Markers
33-9099	Protective Service Workers, NEC
31-1013	Psychiatric Aides
53-4099	Rail Transportation Workers, NEC
43-4171	Receptionists & Information Clerks
53-7081	Refuse & Recyclable Material Collectors

43-4181	Reservation & Transportation Ticket Agents & Travel Clerks
41-2031	Retail Salespersons
49-9096	Riggers
53-5011	Sailors & Marine Oilers
43-9999	Secretaries, Administrative Assistants, & Other Office Support Workers, NEC
33-9032	Security Guards
47-4091	Segmental Pavers
53-6031	Service Station Attendants
51-6051	Sewers, Hand
39-5093	Shampooers
43-5071	Shipping, Receiving, & Traffic Clerks
53-7111	Shuttle Car Operators
43-5081	Stock Clerks & Order Fillers
53-4041	Subway & Streetcar Operators
43-2011	Switchboard Operators, Including Answering Service
53-3041	Taxi Drivers & Chauffeurs
25-9041	Teacher Assistants
41-9041	Telemarketers
43-2021	Telephone Operators
43-3071	Tellers
49-3093	Tire Repairers & Changers
53-6041	Traffic Technicians
39-6032	Transportation Attendants, Ex Flight Attendants & Baggage Porters
53-6099	Transportation Workers, NEC
37-3013	Tree Trimmers & Pruners
53-3033	Truck Drivers, Light or Delivery Services
39-3031	Ushers, Lobby Attendants, & Ticket Takers
31-9096	Veterinary Assistants & Laboratory Animal Caretakers
35-3031	Waiters & Waitresses
53-5099	Water Transportation Workers, NEC
43-5111	Weighers, Measurers, Checkers, & Samplers, Recordkeeping