

Occupational Definitions by Title

Appendix A

13-2011 Accountants & Auditors

Examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial and budgetary data.

Examples: Certified Public Accountant; Tax Accountant; Bursar

15-2011 Actuaries

Analyze statistical data, such as mortality, accident, sickness, disability and retirement rates and construct probability tables and forecast risk and liability for payment of future benefits.

43-3031 Accounting, Bookkeeping, & Auditing Clerks

Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

Examples: Accounts Receivable Clerk; Ledger Clerk; Voucher Examiner

43-6011 Administrative Assistants & Executive Secretaries

Provide high-level administrative support by conducting research, preparing statistical reports, handling information requests, and performing clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings. May also train and supervise lower-level clerical staff.

Example: Administrative Aide

49-3011 Aircraft Mechanics & Service Technicians

Diagnose, adjust, repair, or overhaul aircraft engines and

assemblies, such as hydraulic and pneumatic systems. Include helicopter and aircraft engine specialists.

39-2021 Animal Caretakers, Nonfarm

Feed, water, groom, bathe, exercise, or otherwise care for pets and other nonfarm animals, such as dogs, cats, ornamental fish or birds, zoo animals, and mice. Work in settings such as kennels, animal shelters, zoos, circuses, and aquariums. May keep records of feedings, treatments, and animals received or discharged. May clean, disinfect, and repair cages, pens, or fish tanks.

Examples: Groomer; Dog Groomer; Kennel Worker; Stable Attendant

27-1014 Artists, Multi-Media & Animators

Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials.

Examples: Computer Artist; Computer Graphics Illustrator; Special Effects Specialist

27-4011 Audio & Video Equipment Technicians

Set up or set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations, and news conferences. May also set up and operate associated spotlights and other custom lighting systems.

Examples: Video Control Operator; Audio Visual Production Specialist

49-3021 Automotive Body & Related Repairers

Repair and refinish automotive vehicle bodies and straighten vehicle frames.

Examples: Auto Body Customizer; Collision Mechanic; Frame Straightener

49-3023 Automotive Service Technicians & Mechanics

Diagnose, adjust, repair, or overhaul automotive vehicles.

Examples: Auto Brake Mechanic; Fuel Injection Servicer; Auto Transmission Specialist

51-3011 Bakers

Mix and bake ingredients according to recipes to produce breads, rolls, cookies, cakes, pies, pastries, or other baked goods.

Examples: Cake Maker; Head Baker; Pastry Finisher

35-3011 Bartenders

Mix and serve drinks to patrons, directly or through waitstaff.

Examples: Barkeeper; Taproom Attendant

43-3011 Bill & Account Collectors

Locate and notify customers of delinquent accounts by mail, telephone, or personal visit to solicit payment. Duties include receiving payment and posting amount to customer's account; preparing statements to credit department if customer fails to respond; initiating repossession proceedings or service disconnection; keeping records of collection and status of accounts.

Examples: Payment Collector; Collection Clerk; Installment Agent

43-3021 Billing & Posting Clerks, & Machine Operators

Compile, compute, and record billing, accounting, statistical, and other numerical data for billing purposes. Prepare billing invoices for services rendered or for delivery

or shipment of goods.

Examples: Calculating Machine Operator; Invoice Control Clerk; Rating Clerk

51-5011 Bindery Workers

Set up or operate binding machines that produce books and other printed materials. Include hand bindery workers.

Examples: Hand Bindery Worker; Book Coverer; Stitching Machine Operator; Bookbinding Machine Operator

19-4021 Biological Technicians

Assist biological and medical scientists in laboratories. Set up, operate, and maintain laboratory instruments and equipment, monitor experiments, make observations, and calculate and record results. May analyze organic substances, such as blood, food, and drugs.

Examples: Biotechnologist; Wildlife Technician; Specimen Technician

47-2021 Brickmasons & Blockmasons

Lay and bind building materials, such as brick, structural tile, concrete block, cinder block, glass block, and terra-cotta block, with mortar and other substances to construct or repair walls, partitions, arches, sewers, and other structures.

Examples: Adobe Layer; Chimney Builder; Furnace Liner

43-4011 Brokerage Clerks

Perform clerical duties involving the purchase or sale of securities. Duties include writing orders for stock purchases and sales, computing transfer taxes, verifying stock transactions, accepting and delivering securities, tracking stock price fluctuations, computing equity, distributing dividends, and keeping records of daily transactions and holdings.

Examples: Portfolio Assistant; Dividend Clerk; Telephone Quotation Clerk

13-2031 Budget Analysts

Examine budget estimates for completeness, accuracy, and conformance with procedures and regulations. Analyze budgeting and

accounting reports for the purpose of maintaining expenditure controls.

Examples: Budget Examiner; Fiscal Agent; Fiscal Officer

53-3022 Bus Drivers, School

Transport students or special clients, such as the elderly or persons with disabilities. Ensure adherence to safety rules. May assist passengers in boarding or exiting.

51-3021 Butchers & Meat Cutters

Cut, trim, or prepare consumer-sized portions of meat for use or sale in retail establishments.

Examples: Carver; Meat Department Manager; Cleaver

13-1022 Buyers, Wholesale & Retail, Except Farm Products

Buy merchandise or commodities, other than farm products, for resale to consumers at the wholesale or retail level, including both durable and nondurable goods. Analyze past buying trends, sales records, price, and quality of merchandise to determine value and yield. Select, order, and authorize payment for merchandise according to contractual agreements. May conduct meetings with sales personnel and introduce new products.

Examples: Importer; Merchandiser; Wholesale Jobber

51-7011 Cabinetmakers & Bench Carpenters

Cut, shape, and assemble wooden articles or set up and operate a variety of woodworking machines, such as power saws, jointers, and mortisers to surface, cut, or shape lumber or to fabricate parts for wood products.

Examples: Marquetry Worker; Antique Furniture Repairer; Wood Machinist

43-5011 Cargo & Freight Agents

Expedite and route movement of incoming and outgoing cargo and freight shipments in airline, train, and trucking terminals, and shipping docks. Take orders from customers and arrange pickup of freight and cargo for delivery to loading platform. Prepare and

examine bills of lading to determine shipping charges and tariffs.

Examples: Routing Agent; Shipping Agent

47-2031 Carpenters

Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; wood stairways, window and door frames, and hardwood floors. May also install cabinets, siding, drywall and batt or roll insulation. Include brattice builders who build doors or brattices (ventilation walls or partitions) in underground passageways to control the proper circulation of air through the passageways and to the working places.

Examples: Shipwright; Cabinetmaker; Wood Floor Layer

41-2011 Cashiers

Receive and disburse money in establishments other than financial institutions. Usually involves use of electronic scanners, cash registers, or related equipment. Often involved in processing credit or debit card transactions and validating checks.

Examples: Toll Collector; Auction Clerk; Disbursement Clerk

47-2051 Cement Masons and Concrete Finishers

Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, roads, or curbs using a variety of hand and power tools. Align forms for sidewalks, curbs, or gutters; patch voids; use saws to cut expansion joints.

Examples: Curb Builder; Concrete Floor Installer

35-1011 Chefs & Head Cooks

Direct the preparation, seasoning, and cooking of salads, soups, fish, meats, vegetables, desserts, or other foods. May plan and price menu items, order supplies, and keep records and accounts. May participate in cooking.

Examples: Executive Chef; Pastry Chef; Sous Chef

51-8091 Chemical Plant & System Operators

Control or operate an entire chemical process or system of machines.

Examples: Denitrator; Nitrogen Operator; Wash Operator

19-4031 Chemical Technicians

Conduct chemical and physical laboratory tests to assist scientists in making qualitative and quantitative analyses of solids, liquids, and gaseous materials for purposes, such as research and development of new products or processes, quality control, maintenance of environmental standards, and other work involving experimental, theoretical, or practical application of chemistry and related sciences.

Examples: Assayer; Fiber Analyst; Paint Tester

19-2031 Chemists

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

Examples: Inorganic Chemist; Chemical Analyst

39-9011 Child Care Workers

Attend to children at schools, businesses, private households, and child care institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.

Examples: Bus Monitor; Baby Sitter; Governess; Nanny

17-3022 Civil Engineering Technicians

Apply theory and principles of civil engineering in planning, designing, and overseeing construction and maintenance of structures and facilities under the direction of engineering staff or physical scientists.

Example: Highway Technician

13-1031 Claims Adjusters, Examiners, & Investigators

Review settled claims to determine that payments and settlements

have been made in accordance with company practices and procedures, ensuring that proper methods have been followed. Report overpayments, underpayments, and other irregularities. Confer with legal counsel on claims requiring litigation.

Examples: Insurance Appraiser; Health Insurance Adjuster; Arson Investigator; Claims Agent

53-7061 Cleaners of Vehicles & Equipment

Wash or otherwise clean vehicles, machinery, and other equipment. Use such materials as water, cleaning agents, brushes, cloths, and hoses. Exclude "Janitors and Cleaners, Except Maids and Housekeeping Cleaners" (37-2011).

Examples: Detailer; Barrel Washer; Auto Detailer; Machine Cleaner

51-9121 Coating, Painting, & Spraying Machine Operators

Set up, operate, or tend machines to coat or paint any of a wide variety of products including food, glassware, cloth, ceramics, metal, plastic, paper, or wood, with lacquer, silver, copper, rubber, varnish, glaze, enamel, oil, or rust-proofing materials.

Examples: Electrostatic Paint Operator; Silvering Applicator; Supercalender Operator

27-1021 Commercial & Industrial Designers

Develop and design manufactured products, such as cars, home appliances, and children's toys. Combine artistic talent with research on product use, marketing, and materials to create the most functional and appealing product design.

Examples: Body Stylist; Color Consultant; Jewelry Designer

13-1072 Compensation, Benefits, & Job Analysis Specialists

Conduct programs of compensation and benefits and job analysis for employer. May specialize in specific areas, such as position classification and

pension programs.

Examples: Occupational Analyst; Relocation Director; Wage Conciliator

15-1011 Computer & Information Scientists, Research

Conduct research into fundamental computer and information science as theorists, designers, or inventors. Solve or develop solutions to problems in the field of computer hardware and software.

49-2011 Computer, Automated Teller, & Office Machine Repairers

Repair, maintain, or install computers, word processing systems, automated teller machines, and electronic office machines, such as duplicating and fax machines.

Examples: Cash Register Servicer; ATM Specialist; Computer Installer

15-1071 Computer Network & Computer Systems Administrators

Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system. Maintain network hardware and software. Monitor network to ensure network availability to all system users and perform necessary maintenance to support network availability. May supervise other network support and client server specialists and plan, coordinate, and implement network security measures.

Examples: LAN/WAN Administrator; Network Control Operator; Network Security Administrator

15-1081 Computer Network Systems & Data Communications Analysts

Analyze, design, test, and evaluate network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet, and other data communications systems. Perform network modeling, analysis, and planning. Research and recommend network and data communications hardware and software. Include telecommunications specialists

who deal with the interfacing of computer and communications equipment. May supervise computer programmers.

Examples: Internet Developer; Webmaster; Systems Integrator

43-9011 Computer Operators

Monitor and control electronic computer and peripheral electronic data processing equipment to process business, scientific, engineering, and other data according to operating instructions. May enter commands at a computer terminal and set controls on computer and peripheral devices. Monitor and respond to operating and error messages.

Examples: Peripheral Equipment Operator; Console Operator; Data Processing Clerk

15-1021 Computer Programmers

Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information. May program web sites.

Examples: Computer Programmer Aide; Mainframe Programmer; Systems Programmer

15-1031 Computer Software Engineers, Applications

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

Examples: Applications Developer; Programmer Analyst; Software Designer

15-1041 Computer Support Specialists

Provide technical assistance to

computer system users. Answer questions or resolve computer problems for clients in person, via telephone or from remote location. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.

Examples: Customer Support Analyst; Help Desk Technician; Work Station Support Specialist

15-1051 Computer Systems Analysts

Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems. Analyze user requirements, procedures, and problems to automate or improve existing systems and review computer system capabilities, workflow, and scheduling limitations. May analyze or recommend commercially available software. May supervise computer programmers.

Examples: Health Systems Computer Analyst; Data Processing Systems Project Planner; Information Systems Consultant

47-4011 Construction & Building Inspectors

Inspect structures using engineering skills to determine structural soundness and compliance with specifications, building codes, and other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or plumbing.

Examples: Highway Inspector; Electrical Inspector; Architectural Inspector

47-2061 Construction Laborers

Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring

equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, clean up rubble and debris, and remove asbestos, lead, and other hazardous waste materials. May assist other craft workers.

Examples: Air Hammer Operator; Asphalt Patcher; Construction Craft Laborer

49-9012 Control & Valve Installers & Repairers, Except Mechanical Door

Install, repair, and maintain mechanical regulating and controlling devices, such as electric meters, gas regulators, thermostats, safety and flow valves, and other mechanical governors.

Examples: Electric Meter Installer; Gas Meter Prover; Thermostat Repairer

35-2011 Cooks, Fast Food

Prepare and cook food in a fast food restaurant with a limited menu. Duties of the cooks are limited to preparation of a few basic items and normally involve operating large-volume single-purpose cooking equipment.

Examples: Fry Cook; Pizza Maker

35-2012 Cooks, Institution & Cafeteria

Prepare and cook large quantities of food for institutions, such as schools, hospitals, or cafeterias.

Examples: Camp Cook; Mess Cook; Galley Cook

35-2014 Cooks, Restaurant

Prepare, season, and cook soups, meats, vegetables, desserts, or other foodstuffs in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu.

Examples: Broiler Cook; Specialty Foreign Food Cook; Garde-manger

35-2015 Cooks, Short Order

Prepare and cook to order a variety of foods that require only a short preparation time. May take orders from customers and serve patrons

at counters or tables.

Examples: Barbecue Cook; Griddle Cook

33-3012 Correctional Officers & Jailers

Guard inmates in penal or rehabilitative institution in accordance with established regulations and procedures. May guard prisoners in transit between jail, courtroom, prison, or other point. Include deputy sheriffs and police who spend the majority of their time guarding prisoners in correctional institutions.

Examples: Convict Guard; Custodial Officer; Prison Guard

39-5012 Cosmetologists, Hairdressers, & Hairstylists

Provide beauty services, such as shampooing, cutting, coloring, and styling hair, and massaging and treating scalp. May also apply makeup, dress wigs, perform hair removal, and provide nail and skin care services.

Examples: Beautician; Wig Stylist; Electrologist

13-1051 Cost Estimators

Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured.

Examples: Construction Estimator; Crating & Moving Estimator; Job Estimator

21-1012 Counselors, Educational, Vocational, & School

Counsel individuals and provide group educational and vocational guidance services.

Examples: Guidance Counselor; Curriculum Counselor; Educational Adviser

41-2021 Counter & Rental Clerks

Receive orders for repairs, rentals, and services. May describe available options, compute cost, and accept payment.

Examples: Airplane-Charter Clerk; Car Rental Agent; Skate Shop Attendant

35-3022 Counter Attendants, Cafeteria, Food Concession, & Coffee Shop

Serve food to diners at counter or from a steam table.

Examples: Canteen Operator; Snack Bar Attendant; Hot Dog Attendant

43-5021 Couriers & Messengers

Pick up and carry messages, documents, packages, and other items between offices or departments within an establishment or to other business concerns, traveling by foot, bicycle, motorcycle, automobile, or public conveyance.

Examples: Message Delivery Clerk; Telegraph Messenger

43-4031 Court, Municipal, & License Clerks

Perform clerical duties in courts of law, municipalities, and governmental licensing agencies and bureaus. May prepare docket of cases to be called; secure information for judges and court; prepare draft agendas or bylaws for town or city council; answer official correspondence; keep fiscal records and accounts; issue licenses or permits; record data, administer tests, or collect fees.

Examples: Register of Deeds; Circuit Court Clerk; Warrant Clerk

13-2041 Credit Analysts

Analyze current credit data and financial statements of individuals or firms to determine the degree of risk involved in extending credit or lending money. Prepare reports with this credit information for use in decision-making.

Examples: Credit Negotiator; Escrow Representative; Factorer

43-4041 Credit Authorizers, Checkers, & Clerks

Authorize credit charges against customers' accounts. Investigate history and credit standing of individuals or business establishments applying for credit. May interview applicants to obtain personal and financial data;

determine credit worthiness; process applications; and notify customers of acceptance or rejection of credit.

Examples: Loan Adjuster; Credit Interviewer; Credit Rating Inspector

33-9091 Crossing Guards

Guide or control vehicular or pedestrian traffic at such places as streets, schools, railroad crossings, or construction sites.

Examples: Flagger; Gate Operator; School Patrol

51-9021 Crushing, Grinding, and Polishing Machine Operators

Set up, operate, or tend machines to crush, grind, or polish materials, such as coal, glass, grain, stone, food, or rubber.

Examples: Sand Blast Operator; Beveling and Edging Machine Operator; Pulverizer Operator

43-4051 Customer Service Representatives

Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints. Exclude individuals whose duties are primarily sales or repair.

Examples: Complaint Adjuster; Passenger Relations Representative; Telephone Service Adviser

51-9032 Cutting & Slicing Machine Operators

Set up, operate, or tend machines that cut or slice materials, such as glass, stone, cork, rubber, tobacco, food, paper, or insulating material.

Examples: Shear Operator; Bias Machine Operator; Slate Trimmer

51-4031 Cutting, Punching, & Press Machine Operators

Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material.

Examples: Perforator Operator; Crimping Machine Operator; Four Slide Machine Setter

43-9021 Data Entry Keyers

Operate data entry device, such as keyboard or photo composing perforator. Duties may include verifying data and preparing

materials for printing.

Examples: Key punch Operator; Data Typist

15-1061 Database Administrators

Coordinate changes to computer databases, test and implement the database applying knowledge of database management systems. May plan, coordinate, and implement security measures to safeguard computer databases.

Examples: Automatic Data Processing Planner; Database Design Analyst; Database Security Administrator

41-9011 Demonstrators & Product Promoters

Demonstrate merchandise and answer questions for the purpose of creating public interest in buying the product. May sell demonstrated merchandise.

Examples: Home Demonstrator; Exhibit-Display Representative

31-9091 Dental Assistants

Assist dentist, set up patient and equipment, and keep records.

29-2021 Dental Hygienists

Clean teeth and examine oral areas, head, and neck for signs of oral disease. May educate patients on oral hygiene, take and develop X-rays, or apply fluoride or sealants.

Example: Oral Hygienist

47-5011 Derrick Operators, Oil & Gas

Rig derrick equipment and operate pumps to circulate mud through drill hole.

Examples: Rotary Derrick Operator; Well Service Derrick Worker

33-3021 Detectives and Criminal Investigators

Conduct investigations related to suspected violations of Federal, State, or local laws to prevent or solve crimes.

Examples: Police Inspector; Deputy United States Marshal; Narcotics Agent

49-3031 Diesel Engine Mechanics

Diagnose, adjust, repair, or overhaul trucks, buses, and all

types of diesel engines. Include mechanics working primarily with automobile diesel engines.

Examples: Tractor Trailer Mechanic; Diesel Mechanic; Farm Equipment Engine Mechanic

29-1031 Dietitians & Nutritionists

Plan and conduct food service or nutritional programs to assist in the promotion of health and control of disease. May supervise activities of a department providing quantity food services, counsel individuals, or conduct nutritional research.

Examples: Public Health Dietitian; Nutrition Director; Research Dietitian

35-9011 Dining Room, Cafeteria Attendants & Bartender Helpers

Facilitate food service. Clean tables, carry dirty dishes, replace soiled table linens; set tables; replenish supply of clean linens, silverware, glassware, and dishes; supply service bar with food, and serve water, butter, and coffee to patrons.

Examples: Busser; Lunchroom Attendant; Tray Setter

35-9021 Dishwashers

Clean dishes, kitchen, food preparation equipment, or utensils.

Examples: Kitchen Cleaner; Glass Washer; Pot Washer

43-5032 Dispatchers, Except Police, Fire, and Ambulance

Schedule and dispatch workers, work crews, equipment, or service vehicles for conveyance of materials, freight, or passengers, or for normal installation, service, or emergency repairs rendered outside the place of business. Duties may include using radio, telephone, or computer to transmit assignments and compiling statistics and reports on work progress.

Examples: Security Dispatcher; Repair Service Dispatcher; Taxicab Dispatcher

43-5031 Dispatchers, Police, Fire, & Ambulance

Receive complaints from public concerning crimes and police emergencies. Broadcast orders to police patrol units in vicinity of

complaint to investigate. Operate radio, telephone, or computer equipment to receive reports of fires and medical emergencies and relay information or orders to proper officials.

Examples: Emergency Operator; 911 Operator; Public Safety Dispatcher

17-3012 Drafters, Electrical & Electronics

Prepare wiring diagrams, circuit board assembly diagrams, and layout drawings used for manufacture, installation, and repair of electrical equipment in factories, power plants, and buildings.

17-3013 Drafters, Mechanical

Prepare detailed working diagrams of machinery and mechanical devices, including dimensions, fastening methods, and other engineering information.

Examples: Die Designer; Aeronautical Drafter

53-3031 Driver/Sales Workers

Drive truck or other vehicle over established routes or within an established territory and sell goods, such as food products, including restaurant take-out items, or pick up and deliver items, such as laundry. May also take orders and collect payments. Include newspaper delivery drivers.

Examples: Bakery Delivery Person; Milk Delivery Person; Bread Distributor

47-2081 Drywall & Ceiling Tile Installers

Apply plasterboard or other wallboard to ceilings or interior walls of buildings. Apply or mount acoustical tiles or blocks, strips, or sheets of shock-absorbing materials to ceilings and walls of buildings to reduce or reflect sound. Materials may be of decorative quality. Include lathers who fasten wooden, metal, or rockboard lath to walls, ceilings or partitions of buildings to provide support base for plaster, fire-proofing, or acoustical material.

Examples: Lather; Acoustical Carpenter; Sheet Rock Hanger

47-5021 Earth Drillers, Except Oil & Gas

Operate a variety of drills--such as rotary, churn, and pneumatic--to tap sub-surface water and salt deposits, to remove core samples during mineral exploration or soil testing, and to facilitate the use of explosives in mining or construction. May use explosives.

Examples: Auger Operator; Earth Boring Machine Operator; Tunneling Machine Operator

49-2092 Electric Motor, Power Tool, & Related Repairers

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

Examples: Armature Winder; Generator Mechanic; Electric Golf Cart Repairer

17-3023 Electrical & Electronic Engineering Technicians

Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, calibrate, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions.

Examples: Calibration Laboratory Technician; Semiconductor Development Technician; Instrumentation Technician

51-2022 Electrical & Electronic Equipment Assemblers

Assemble or modify electrical or electronic equipment, such as computers, test equipment telemetering systems, electric motors, and batteries.

Examples: Anode Builder; Battery Builder; Industrial Equipment Wirer

49-9051 Electrical Power-Line Installers & Repairers

Install or repair cables or wires used in electrical power or distribution systems. May erect poles and light or heavy duty transmission towers.

Examples: Pole Climber; High Tension Tester; Electric Utility Wire Stretcher

49-2094 Electrical Commercial & Industrial Repairers, & Industrial

Equipment

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

Examples: Radar Technician; Missile Pad Mechanic; Amplifier Mechanic

47-2111 Electricians

Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Exclude "Security and Fire Alarm Systems Installers" (49-2098).

Examples: Electrical Sign Servicer; House Wirer; Chief Electrician

17-3024 Electro-Mechanical Technicians

Operate, test, and maintain unmanned, automated, servo-mechanical, or electromechanical equipment. May operate unmanned submarines, aircraft, or other equipment at worksites, such as oil rigs, deep ocean exploration, or hazardous waste removal. May assist engineers in testing and designing robotics equipment.

51-2023 Electromechanical Equipment Assemblers

Assemble or modify electromechanical equipment or devices, such as servomechanisms, gyros, dynamometers, magnetic drums, tape drives, brakes, control linkage, actuators, and appliances.

Examples: Appliance Assembler; Vending Machine Assembler

29-2041 Emergency Medical Technicians & Paramedics

Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities.

Example: E.M.T.

13-1071 Employment, Recruitment, & Placement Specialists

Recruit and place workers.

Examples: Employment Interviewer; Personnel Recruiter; Placement Assistant

17-2011 Engineers, Aerospace

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

Examples: Aerodynamicist; Flight Test Engineer; Aeronautical Engineer

17-2041 Engineers, Chemical

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

Examples: Fuels Engineer; Absorption & Adsorption Engineer; Explosives Engineer

17-2051 Engineers, Civil

Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units. Include architectural, structural, traffic, ocean, and geo-technical engineers.

Examples: Municipal Engineer; Bridge Engineer; Construction Engineer; Concrete Engineer

17-2061 Engineers, Computer Hardware

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

computer-related equipment and components.

17-2071 Engineers, Electrical

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

Examples: Power Distribution Engineer; Illuminating Engineer; Relay Engineer

17-2072 Engineers, Electronics, Except Computer

Research, design, develop, and test electronic components and systems for commercial, industrial, military, or scientific use utilizing knowledge of electronic theory and materials properties. Design electronic circuits and components for use in fields such as telecommunications, aerospace guidance and propulsion control, acoustics, or instruments and controls.

Examples: Communications Engineer; Circuit Design Engineer; Guidance & Control Systems Engineer

17-2081 Engineers, Environmental

Design, plan, or perform engineering duties in the prevention, control, and remediation of environmental health hazards utilizing various engineering disciplines. Work may include waste treatment, site remediation, or pollution control technology.

Examples: Public Health Engineer; Soil Engineer; Industrial Hygiene Engineer; Pollution Control Engineer

17-2112 Engineers, Industrial

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

Examples: Industrial Quality Control Engineer; Packaging Engineer; Time Study Engineer; Plant Engineer

17-2131 Engineers, Materials

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

Examples: Ceramic Engineer; Metallurgical Engineer; Corrosion Engineer

17-2141 Engineers, Mechanical

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

Examples: Combustion Engineer; Plant Equipment Engineer; Hydraulic Engineer

17-2151 Engineers, Mining & Geological Engineers, Including Mining Safety

Determine the location and plan the extraction of coal, metallic ores, nonmetallic minerals, and building materials, such as stone and gravel. Work involves conducting preliminary surveys of deposits or undeveloped mines and planning their development; examining deposits or mines to determine whether they can be worked at a profit; making geological and topographical surveys; evolving methods of mining best suited to character, type, and size of deposits; and supervising mining operations.

Examples: Exploration Engineer; Mineral Engineer; Mine Equipment Design Engineer

17-2171 Engineers, Petroleum

Devise methods to improve oil and gas well production and determine the need for new or modified tool designs. Oversee drilling and offer technical advice to achieve economical and satisfactory progress.

Examples: Drilling Engineer; Natural Gas Engineer; Oil Well Surveying Engineer

17-3025 Environmental Engineering Technicians

Apply theory and principles of environmental engineering to modify, test, and operate equipment and devices used in the prevention, control, and remediation of environmental pollution, including waste treatment and site remediation. May assist in the development of environmental pollution remediation devices under direction of engineer.

Examples: Air Analysis Technician; Soil Technician

19-2041 Environmental Scientists & Specialists, Including Health

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

Examples: Environmental Analyst; Water Pollution Specialist

53-7032 Excavating & Loading Machine & Dragline Operators

Operate or tend machinery equipped with scoops, shovels, or buckets, to excavate and load loose materials.

Examples: Back Hoe Operator; Payloader Operator; Shovel Operator

51-4021 Extruding & Drawing Machine Operators

Set up, operate, or tend machines to extrude or draw thermoplastic or metal materials into tubes, rods,

hoses, wire, bars, or structural shapes.

Examples: Draw Bench Operator; Tube Drawer; Wire Drawing Setter

51-9041 Extruding, Forming, Pressing, & Compacting Machine Operators

Set up, operate, or tend machines, such as glass forming machines, plodder machines, and tuber machines, to shape and form products, such as glassware, food, rubber, soap, brick, tile, clay, wax, tobacco, or cosmetics.

Examples: Brick or Block Maker; Briquette Maker; Cigarette Machine Operator; Rubber Laminating Machine Operator

29-1062 Family & General Practitioners

Diagnose, treat, and help prevent diseases and injuries that commonly occur in the general population.

49-3041 Farm Equipment Mechanics

Diagnose, adjust, repair, or overhaul farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.

Examples: Irrigation Equipment Mechanic; Dairy Equipment Installer

35-3021 Fast Food, Combined Food Preparation & Serving Workers

Perform duties which combine both food preparation and food service.

Examples: Caterers Aide; Deli Clerk; Mess Attendant

51-2091 Fiberglass Laminators & Fabricators

Laminate layers of fiberglass on molds to form boat decks and hulls, bodies for golf carts, automobiles, or other products.

Examples: Fiberglass Ski Maker; Fiberglass Boat Builder; Golf Cart Maker

43-4071 File Clerks

File correspondence, cards, invoices, receipts, and other records in alphabetical or numerical order or according to the filing

system used. Locate and remove material from file when requested.

Examples: Computer Tape Librarian; Document Clerk; Records Custodian

13-2051 Financial Analysts

Conduct quantitative analyses of information affecting investment programs of public or private institutions.

Examples: Bond Analyst; Investment Analyst; Securities Consultant

13-2061 Financial Examiners

Enforce or ensure compliance with laws and regulations governing financial and securities institutions and financial and real estate transactions. May examine, verify correctness of, or establish authenticity of records.

Examples: Bank Examiner; Payroll Examiner; Pension Examiner

33-2011 Fire Fighters

Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster management.

Examples: Explosive Ordnance Disposal Technician; Fireboat Operator; Smoke Jumper

47-1011 First-Line Supv./Mgrs. of Const. Trades & Extraction Workers

Directly supervise and coordinate activities of construction or extraction workers.

Examples: Quarry Boss; Cement Contractor

33-1021 First-Line Supv./Mgrs. of Fire Fighting & Prevention Workers

Supervise and coordinate activities of workers engaged in fire fighting and fire prevention and control.

Examples: Fire Chief; Fire Captain; Fire Marshal

35-1012 First-Line Supv./Mgrs. of Food Preparation & Serving Workers

Supervise workers engaged in preparing and serving food.

Examples: Cafeteria Manager; Caterer; Bar Manager

53-1021 First-Line Supv./Mgrs. of Helpers & Movers, Hand

Supervise and coordinate the activities of helpers, laborers, or material movers.

Examples: Cargo Supervisor; Yard Supervisor; Warehouse Supervisor

37-1011 First-Line Supv./Mgrs. of Housekeeping & Janitorial Workers

Supervise work activities of cleaning personnel in hotels, hospitals, offices, and other establishments.

Examples: Building Superintendent; Household Manager; Housekeeping Supervisor

37-1012 First-Line Supv./Mgrs. of Landscaping, Lawn Service, & Groundskeeping Workers

Plan, organize, direct, or coordinate activities of workers engaged in landscaping or groundskeeping activities, such as planting and maintaining ornamental trees, shrubs, flowers, and lawns, and applying fertilizers, pesticides, and other chemicals, according to contract specifications. May also coordinate activities of workers engaged in terracing hillsides, building retaining walls, constructing pathways, installing patios, and similar activities.

Examples: Landscape Contractor; Golf Course Superintendent; Nursery Supervisor

49-1011 First-Line Supv./Mgrs. of Mechanics, Installers, & Repairers

Supervise and coordinate the activities of mechanics, installers, and repairers. Exclude team or work leaders.

Examples: Marine Service Manager; Ground Crew Chief; Engine Repair Supervisor

41-1012 First-Line Supv./Mgrs. of Non-Retail Sales Workers

Directly supervise and coordinate activities of sales workers other than retail sales workers. May

perform duties, such as budgeting, accounting, and personnel work, in addition to supervisory duties.

Examples: District Sales Manager; Dry Cleaning Manager; Blood-Donor Recruiter Supervisor

43-1011 First-Line Supv./Mgrs. of Office & Admin. Support Workers

Supervise and coordinate the activities of clerical and administrative support workers.

Examples: Claims Supervisor; Stock Room Manager; Teller Supervisor

39-1021 First-Line Supv./Mgrs. of Personal Service Workers

Supervise and coordinate activities of personal service workers, such as supervisors of flight attendants, hairdressers, or caddies.

Examples: Caddymaster; Barber Shop Manager; Health Club Manager

33-1012 First-Line Supv./Mgrs. of Police & Detectives

Supervise and coordinate activities of members of police force.

Examples: Police Chief; Precinct Captain

51-1011 First-Line Supv./Mgrs. of Production & Operating Workers

Supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators.

Examples: Laundromat Manager; Station Chief; Assembly Line Supervisor

41-1011 First-Line Supv./Mgrs. of Retail Sales Workers

Directly supervise sales workers in a retail establishment or department. Duties may include management functions, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties.

Examples: Department Manager; Flower Shop Manager; Supervisor of Cashiers

53-1031 First-Line Supv./Mgrs. of Transportation & Material-

Moving Machine & Vehicle Operators

Directly supervise and coordinate activities of transportation and material-moving machine and vehicle operators and helpers.

Examples: Dockmaster; Gas Station Manager; Roadmaster

39-9031 Fitness Trainers & Aerobics Instructors

Instruct or coach groups or individuals in exercise activities and the fundamentals of sports. Demonstrate techniques and methods of participation. Observe participants and inform them of corrective measures necessary to improve their skills. Those required to hold teaching degrees should be reported in the appropriate teaching category.

Examples: Personal Trainer; Exercise Teacher; Yoga Teacher

27-1023 Floral Designers

Design, cut, and arrange live, dried, or artificial flowers and foliage.

Examples: Florist; Corsage Maker; Flower Arranger

51-3092 Food Batchmakers

Set up and operate equipment that mixes or blends ingredients used in the manufacturing of food products. Include candy makers and cheese makers.

Examples: Candy Maker; Honey Blender; Peanut Butter Maker

35-2021 Food Preparation Workers

Perform a variety of food preparation duties other than cooking, such as preparing cold foods and shellfish, slicing meat, and brewing coffee or tea.

Examples: Kitchen Helper; Coffee Maker; Sandwich Maker

35-3041 Food Servers, Nonrestaurant

Serve food to patrons outside of a restaurant environment, such as in hotels, hospital rooms, or cars.

Examples: Tray-Service Worker; Curb Attendant; Hospital Tray-Service Worker; Room Service Clerk

51-7021 Furniture Finishers

Shape, finish, and refinish damaged, worn, or used furniture or new high-grade furniture to specified color or finish.

Examples: Furniture Polisher; Refinisher; Wood Grainer

43-9061 General Office Clerks

Perform duties too varied and diverse to be classified in any specific office clerical occupation, requiring limited knowledge of office management systems and procedures. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of answering telephones, bookkeeping, typing or word processing, stenography, office machine operation, and filing.

Examples: Administrative Clerk; Office Assistant; Real Estate Clerk

19-4041 Geological & Petroleum Technicians

Assist scientists in the use of electrical, sonic, or nuclear measuring instruments in both laboratory and production activities to obtain data indicating potential sources of metallic ore, gas, or petroleum. Analyze mud and drill cuttings. Chart pressure, temperature, and other characteristics of wells or bore holes. Investigate and collect information leading to the possible discovery of new oil fields.

Examples: Field Scout; Crude Tester; Seismic Observer

45-2041 Graders & Sorters, Agricultural Products

Grade, sort, or classify unprocessed food and other agricultural products by size, weight, color, or condition.

Examples: Chicken Grader; Cotton Classifier; Fruit Sorter

27-1024 Graphic Designers

Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.

Examples: Graphic Artist; Catalogue Illustrator; Layout Artist

51-9022 Grinding & Polishing Workers, Hand

Grind, sand, or polish, using hand tools or hand-held power tools, a variety of metal, wood, stone, clay, plastic, or glass objects. Include chippers, buffers, and finishers.

Examples: Glass Finisher, Chipper; Metal Sander; Gun Barrel Finisher; Hand Buffer

51-4033 Grinding, Lapping, Polishing, & Buffing Machine Tool Operators

Set up, operate, or tend grinding and related tools that remove excess material or burrs from surfaces, sharpen edges or corners, or buff, hone, or polish metal or plastic work pieces.

Examples: Barrel Polisher; Jewel Bearing Facer; Metal Filer

49-9021 Heating, Air Conditioning, & Refrigeration Mechanics & Installers

Install or repair heating, central air conditioning, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.

Examples: Furnace Converter; Gas Furnace Installer; Oil Burner Repairer

47-3011 Helpers, Brickmasons, Blockmasons, Stonemasons, & Tile Setters

Help brickmasons, blockmasons, stonemasons, or tile and marble setters by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

Examples: Brick Carrier; Brick Washer; Tile Layers Helper

47-3012 Helpers, Carpenters

Help carpenters by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

Examples: Carpenter's Mate; Joiner's Helper; Cabinetmaker's Helper

47-3013 Helpers, Electricians

Help electricians by performing duties of lesser skill. Duties include using, supplying or holding

materials or tools, and cleaning work area and equipment.

Examples: Utilities Ground Worker; Electrician's Assistant

47-5081 Helpers, Extraction Workers

Help extraction craft workers, such as earth drillers, blasters and explosives workers, derrick operators, and mining machine operators, by performing duties of lesser skill. Duties include supplying equipment or cleaning work area.

Examples: Blaster's Helper; Tunnel Mucker; Mining Helper

49-9098 Helpers, Installation, Maintenance, & Repair Workers

Help installation, maintenance, and repair workers in maintenance, parts replacement, and repair of vehicles, industrial machinery, and electrical and electronic equipment. Perform duties, such as furnishing tools, materials, and supplies to other workers; cleaning work area, machines, and tools; and holding materials or tools for other workers.

Examples: Mechanic's Helper; Diver's Helper; Blacksmith's Helper

47-3014 Helpers, Painters, Paperhangers, Plasterers, & Stucco Masons

Help painters, paperhangers, plasterers, or stucco masons by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

Example: Plaster Tender

47-3015 Helpers, Pipelayers, Plumbers, Pipefitters, & Steamfitters

Help plumbers, pipefitters, steamfitters, or pipelayers by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

Examples: Pipe Cutter; Plumber's Assistant; Water Main Installer's Helper

51-9198 Helpers, Production Workers

Help production workers by performing duties of lesser skill.

Duties include supplying or holding materials or tools, and cleaning work area and equipment.

Examples: Welder's Assistant; Tailor's Aide; Millwright's Helper

47-3016 Helpers, Roofers

Help roofers by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

Example: Roofer's Assistant

47-4051 Highway Maintenance Workers

Maintain highways, municipal and rural roads, airport runways, and rights-of-way. Duties include patching broken or eroded pavement, repairing guard rails, highway markers, and snow fences. May also mow or clear brush from along road or plow snow from roadway.

Examples: Snow Plow Operator; Road Patcher; Road Sign Installer

31-1011 Home Health Aides

Provide routine, personal healthcare, such as bathing, dressing, or grooming, to elderly, convalescent, or disabled persons in the home of patients or in a residential care facility.

Example: Home Attendant

35-9031 Hosts & Hostesses, Restaurant, Lounge, & Coffee Shop

Welcome patrons, seat them at tables or in lounge, and help ensure quality of facilities and service.

Examples: Maitre D'; Dining Room Host

43-4081 Hotel, Motel, & Resort Desk Clerks

Accommodate hotel, motel, and resort patrons by registering and assigning rooms to guests, issuing room keys, transmitting and receiving messages, keeping records of occupied rooms and guests' accounts, making and confirming reservations, and presenting statements to and collecting payments from departing guests.

Examples: Register Clerk; Room Clerk

21-1093 Human & Social Service Assistants

Assist professionals from a wide variety of fields, such as psychology, rehabilitation, or social work, to provide client services, as well as support for families. May assist clients in identifying available benefits and social and community services and help clients obtain them. May assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, or adult daycare.

Examples: Case Aide; Home Visitor; Human Services Worker

43-4161 Human Resources Assistants, Except Payroll & Timekeeping

(Personnel Clerk) Compile and keep personnel records. Record data for each employee, such as address, weekly earnings, absences, amount of sales or production, supervisory reports on ability, and date of and reason for termination. Compile and type reports from employment records. File employment records. Search employee files and furnish information to authorized persons.

17-3026 Industrial Engineering Technicians

Apply engineering theory and principles to problems of industrial layout or manufacturing production, usually under the direction of engineering staff. May study and record time, motion, method, and speed involved in performance of production, maintenance, clerical, and other worker operations for such purposes as establishing standard production rates or improving efficiency.

Examples: Methods Study Analyst; Quality Control Technician; Time Study Analyst

49-9041 Industrial Machinery Mechanics

Repair, install, adjust, or maintain industrial production and

processing machinery or refinery and pipeline distribution systems.

Examples: Conveyor Belt Installer; Turbine Mechanic; Hydroelectric Machinery Mechanic

53-7051 Industrial Truck & Tractor Operators

Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.

Examples: Fork Lift Driver; Skidder Operator; Stacker Operator

51-9061 Inspectors, Testers, Sorters, Samplers, & Weighers

Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications. May use precision measuring instruments and complex test equipment.

Examples: Quality Checker; Bearing Inspector; Testing and Regulating Technician

43-9041 Insurance Claims & Policy Processing Clerks

Process new insurance policies, modifications to existing policies, and claims forms. Obtain information from policyholders to verify the accuracy and completeness of information on claims forms, applications and related documents, and company records. Update existing policies and company records to reflect changes requested by policyholders and insurance company representatives.

Examples: Claim Taker; Policy Issue Clerk; Underwriting Clerk

43-4111 Interviewers, Except Eligibility & Loan

Interview persons by telephone, mail, in person, or by other means for the purpose of completing forms, applications, or questionnaires. Ask specific questions, record answers, and assist persons with completing form. May sort, classify, and file forms.

Examples: Admitting Clerk; Census Taker; Market Research Interviewer; Out-patient Admitting Clerk

37-2011 Janitors & Cleaners, Except Maids & Housekeeping Cleaners

Keep buildings in clean and orderly condition. Perform heavy cleaning duties, such as cleaning floors, shampooing rugs, washing walls and glass, and removing rubbish. Duties may include tending furnace and boiler, performing routine maintenance activities, notifying management of need for repairs, and cleaning snow or debris from sidewalk.

Examples: Floor Cleaner; Building Custodian; Window Washer

51-5021 Job Printers

Set type according to copy; operate press to print job order; and read proof for errors and clarity of impression, and correct imperfections. Job printers are often found in small establishments where work combines several job skills.

Examples: Job Press Operator; Apprentice Job Printer

53-7062 Laborers & Freight, Stock, & Material Movers, Hand

Manually move freight, stock, or other materials or perform other unskilled general labor. Include all unskilled manual laborers not elsewhere classified.

Examples: Cargo Handler; Stevedore; Truck Loader and Unloader

37-3011 Landscaping & Groundskeeping Workers

Landscape or maintain grounds of property using hand or power tools or equipment. Workers typically perform a variety of tasks, which may include any combination of the following: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, sprinkler installation, and installation of mortarless segmental concrete masonry wall units.

Examples: Greenskeeper; Sprinkler Installer; Landscape Gardener; Outdoor Sprinkler Installer

51-6011 Laundry & Dry-Cleaning Workers

Operate or tend washing or dry-cleaning machines to wash or dry-clean industrial or household articles, such as cloth garments, suede, leather, furs, blankets, draperies, fine linens, rugs, and carpets. Include spotters and dyers of these articles.

Examples: Laundry Carpet Cleaner; Silk Spotter; Washing Machine Operator

25-4021 Librarians

Administer libraries and perform related library services. Work in a variety of settings, including public libraries, schools, colleges and universities, museums, corporations, government agencies, law firms, non-profit organizations, and healthcare providers. Tasks may include selecting, acquiring, cataloguing, classifying, circulating, and maintaining library materials; and furnishing reference, bibliographical, and readers' advisory services. May perform in-depth, strategic research, and synthesize, analyze, edit, and filter information. May set up or work with databases and information systems to catalogue and access information.

Examples: School Library Media Specialist; Circulation Manager

25-4031 Library Technicians

(Assistant Librarian, Bookmobile Driver) Assist librarians by helping readers in the use of library catalogs, databases, and indexes to locate books and other materials; and by answering questions that require only brief consultation of standard reference. Compile records; sort and shelve books; remove or repair damaged books; register patrons; check materials in and out of the circulation process. Replace materials in shelving area (stacks) or files. Include bookmobile drivers who operate bookmobiles or light trucks that pull trailers to specific locations on a predetermined schedule and assist with providing

services in mobile libraries.

29-2061 Licensed Practical & Licensed Vocational Nurses

Care for ill, injured, convalescent, or disabled persons in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.

Examples: Maternity Nurse; Licensed Attendant

43-4131 Loan Interviewers and Clerks

Interview loan applicants to elicit information; investigate applicants' backgrounds and verify references; prepare loan request papers; and forward findings, reports, and documents to appraisal department. Review loan papers to ensure completeness, and complete transactions between loan establishment, borrowers, and sellers upon approval of loan.

Examples: Mortgage Clerk; Loan Closer; Loan Processor

13-2072 Loan Officers

Evaluate, authorize, or recommend approval of commercial, real estate, or credit loans. Advise borrowers on financial status and methods of payments. Include mortgage loan officers and agents, collection analysts, loan servicing officers, and loan underwriters.

Examples: Loan Examiner; Loan Reviewer; Escrow Officer; Mortgage Consultant

51-4041 Machinists

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

Examples: Electrical Instrument Maker; Machine Fitter

37-2012 Maids & Housekeeping**Cleaners**

Perform any combination of light cleaning duties to maintain private households or commercial establishments, such as hotels, restaurants, and hospitals, in a clean and orderly manner. Duties include making beds, replenishing linens, cleaning rooms and halls, and vacuuming.

Examples: Bed Maker; Chamber Maid; Housekeeper

43-9051 Mail Clerks & Mail Machine Operators, Except Postal Service

Prepare incoming and outgoing mail for distribution. Use hand or mail handling machines to time stamp, open, read, sort, and route incoming mail; and address, seal, stamp, fold, stuff, and affix postage to outgoing mail or packages. Duties may also include keeping necessary records and completed forms.

Examples: Addressing Machine Operator; Mail Distributor; Mail Opener

49-9042 Maintenance & Repair Workers, General

Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs.

Examples: Maintenance Mechanic; Building Maintenance Repairer; Trouble Shooting Mechanic; Mechanical Adjuster

49-9043 Maintenance Workers, Machinery

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

Examples: Belt Repairer; Grease Packer; Machine Oiler

13-1111 Management Analysts

Conduct organizational studies and evaluations, design systems and procedures, conduct work

simplifications and measurement studies, and prepare operations and procedures manuals to assist management in operating more efficiently and effectively. Include program analysts and management consultants.

Examples: Business Consultant; Program Analyst; Industrial Analyst; Price Analyst

11-3011 Managers, Administrative Services

Plan, direct, or coordinate supportive services of an organization, such as recordkeeping, mail distribution, telephone operator/receptionist, and other office support services. May oversee facilities planning and maintenance and custodial operations.

Example: Space Officer

11-2011 Managers, Advertising & Promotions

Plan and direct advertising policies and programs or produce collateral materials, such as posters, contests, coupons, or give-aways, to create extra interest in the purchase of a product or service for a department, an entire organization, or on an account basis.

Examples: Campaign Director; Circulation Director

11-3021 Managers, Computer & Information Systems

Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming.

Examples: Computer Programming Manager; Data Systems Manager

11-9021 Managers, Construction

Plan, direct, coordinate, or budget, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, and implementation. Include specialized

construction fields, such as carpentry or plumbing. Include general superintendents, project managers, and constructors who manage, coordinate, and supervise the construction process.

Examples: General Contractor; Masonry Contractor Administrator; Developer

11-9032 Managers, Education Administrators, Elementary & Secondary School

Plan, direct, or coordinate the academic, clerical, or auxiliary activities of public or private elementary or secondary level schools.

Examples: School Principal; Director of Physical Education; Curriculum Director

11-9041 Managers, Engineering

Plan, direct, or coordinate activities in such fields as architecture and engineering or research and development in these fields.

Examples: Engineering Research Manager; Safety Director; Technical Director

11-3031 Managers, Financial

Plan, direct, and coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment.

Examples: Bank Director; Comptroller; Budget Director

11-9051 Managers, Food Service

Plan, direct, or coordinate activities of an organization or department that serves food and beverages.

Examples: Banquet Director; Restaurant Manager; Catering Manager

11-1021 Managers, General & Operations

Plan, direct, or coordinate the operations of companies or public and private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in

any one functional area of management or administration, such as personnel, purchasing, or administrative services.

Examples: Industrial Organization Manager; District Manager; Department Store General Manager

11-3051 Managers, Industrial Production

Plan, direct, or coordinate the work activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications.

Examples: Factory Superintendent; Plant Manager

11-9081 Managers, Lodging

Plan, direct, or coordinate activities of an organization or department that provides lodging and other accommodations.

Examples: Hotel Manager; Director of Housing; Innkeeper

11-2021 Managers, Marketing

Determine the demand for products and services offered by a firm and its competitors and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services.

Examples: Fashion Coordinator; Marketing Director

11-9111 Managers, Medical & Health Services

Plan, direct, or coordinate medicine and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.

Examples: Director of Occupational Therapy; Medical Records Administrator; Public Health Administrator

11-9121 Managers, Natural Sciences

Plan, direct, or coordinate activities in such fields as life sciences, physical sciences, mathematics,

statistics, and research and development in these fields.

Examples: Geophysical Manager; Research & Development Director; Wildlife Manager

11-3061 Managers, Purchasing

Plan, direct, or coordinate the activities of buyers, purchasing officers, and related workers involved in purchasing materials, products, and services. Include wholesale or retail trade merchandising managers and procurement managers.

Examples: Director of Purchasing; Merchandise Manager

11-2022 Managers, Sales

Direct the actual distribution or movement of a product or service to the customer. Coordinate sales distribution by establishing sales territories, quotas, and goals and establish training programs for sales representatives. Analyze sales statistics gathered by staff to determine sales potential and inventory requirements and monitor the preferences of customers.

Examples: Director of Sales; Export Manager; Regional Sales Manager

11-9151 Managers, Social & Community Service

Plan, organize, or coordinate the activities of a social service program or community outreach organization. Oversee the program or organization's budget and policies regarding participant involvement, program requirements, and benefits. Work may involve directing social workers, counselors, or probation officers.

Examples: Public Welfare Director; Volunteer Services Manager; Child Welfare Director; Youth Program Director; Director of Casework Services

11-3071 Managers, Transportation, Storage, & Distribution

Plan, direct, or coordinate transportation, storage, or distribution activities in accordance with governmental policies and regulations. Include logistics managers.

Examples: Airport Manager; Schedule Planning Manager; Warehouse Manager

19-3021 Market Research Analysts

Research market conditions in local, regional, or national areas to determine potential sales of a product or service. May gather information on competitors, prices, sales, and methods of marketing and distribution. May use survey results to create a marketing campaign based on regional preferences and buying habits.

Examples: Advertising Analyst; Marketing Consultant; Marketing Forecaster

17-3027 Mechanical Engineering Technicians

Apply theory and principles of mechanical engineering to modify, develop, and test machinery and equipment under direction of engineering staff or physical scientists.

Examples: Heat Transfer Technician; Optomechanical Technician; Tool Analyst

29-2011 Medical & Clinical Laboratory Technologists

Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.

Examples: Blood Bank Technologist; Cytotechnologist; Immunohematologist

31-9092 Medical Assistants

Perform administrative and certain clinical duties under the direction of physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.

Examples: Physician's Aide; Morgue Attendant; Ophthalmic Aide

29-2071 Medical Records & Health Information Technicians

Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Process, maintain, compile, and report patient information for health requirements and standards.

Examples: Medical Records Librarian; Disability Rater; Medical Records Specialist; Medical Library Historian

31-9094 Medical Transcriptionists

Use transcribing machines with headset and foot pedal to listen to recordings by physicians and other healthcare professionals dictating a variety of medical reports, such as emergency room visits, diagnostic imaging studies, operations, chart reviews, and final summaries. Transcribe dictated reports and translate medical jargon and abbreviations into their expanded forms. Edit as necessary and return reports in either printed or electronic form to the dictator for review and signature, or correction.

Example: Medical Stenographer

13-1121 Meeting & Convention Planners

Coordinate activities of staff and convention personnel to make arrangements for group meetings and conventions.

Examples: Conference Planner; Conference Service Coordinator; Convention Manager

27-1026 Merchandise Displayers & Window Trimmers

Plan and erect commercial displays, such as those in windows and interiors of retail stores and at trade exhibitions.

Examples: Mannequin Decorator; Display Artist; Model Dresser

43-5041 Meter Readers, Utilities

Read meter and record consumption of electricity, gas, water, or steam.

Examples: Electric Meter Reader; Meter Record Clerk; Water Meter Reader

51-9023 Mixing & Blending Machine Operators

Set up, operate, or tend machines to mix or blend materials, such as chemicals, tobacco, liquids, color pigments, or explosive ingredients.
Examples: Grain Mixer; Batch Maker; Clay Mixer; Tumbler Tender

49-3042 Mobile Heavy Equipment Mechanics, Except Engines

Diagnose, adjust, repair, or overhaul mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and surface mining. Exclude "Rail Car Repairers" (49-3043) and "Bus and Truck Mechanics and Diesel Engine Specialists" (49-3031).
Examples: Construction Equipment Mechanic; Fork Lift Mechanic; Bulldozer Mechanic

51-9195 Molders, Shapers, & Casters, Except Metal & Plastic

Mold, shape, form, cast, or carve products such as food products, figurines, tile, pipes, and candles consisting of clay, glass, plaster, concrete, stone, or combinations of materials.
Examples: Cigar Roller; Glass Blower; Marble Finisher

51-4072 Molding, Coremaking, & Casting Machine Operators

Set up, operate, or tend metal or plastic molding, casting, or coremaking machines to mold or cast metal or thermoplastic parts or products.
Examples: Centrifugal Casting Machine Operator; Injection Molding Machine Setter; Core Moulder

51-4081 Multiple Machine Tool Operators

Set up, operate, or tend more than one type of cutting or forming machine tool or robot.
Examples: Machine Tool Operator; Combination Machine Tool Setter; Metal and Plastic Transfer Machine Operator

31-1012 Nursing Aides,

Orderlies, and Attendants

Provide basic patient care under direction of nursing staff. Perform duties, such as feed, bathe, dress, groom, or move patients, or change linens.

Examples: Hospital Aide; Certified Nursing Assistant; Infirmary Attendant

43-9071 Office Machine Operators, Except Computer

Operate one or more of a variety of office machines, such as photocopying, photographic, and duplicating machines, or other office machines.

Examples: Check Embosser; Coin Wrapping Machine Operator; Copy Machine Operator

47-2073 Operating Engineers , Construction Equipment

Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties.

Examples: Bulldozer Operator; Power Grader Operator; Steam Shovel Operator

43-4151 Order Clerks

Receive and process incoming orders for materials, merchandise, classified ads, or services such as repairs, installations, or rental of facilities. Duties include informing customers of receipt, prices, shipping dates, and delays; preparing contracts; and handling complaints.

Examples: Catalogue Clerk; Subscription Clerk; Classified Advertisement Clerk

51-9111 Packaging & Filling Machine Operators

Operate or tend machines to prepare industrial or consumer products for storage or shipment. Include cannery workers who pack food products.

Examples: Cannery Worker, Bottler; Bottle Caser; Wrapper Layer; Strapping Machine Operator

53-7064 Packers & Packagers, Hand

Pack or package by hand a wide variety of products and materials.

Examples: Gift Wrapper; Bagger; Boxer

47-2141 Painters, Construction & Maintenance

Paint walls, equipment, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns. May remove old paint to prepare surface prior to painting. May mix colors or oils to obtain desired color or consistency.

Examples: Bridge Painter; Traffic Line Painter; House Painter

51-9123 Painting, Coating, & Decorating Workers

Paint, coat, or decorate articles, such as furniture, glass, plateware, pottery, jewelry, cakes, toys, books, or leather.

Examples: Stenciler; Candy Dipper; Mirror Silverer

51-9196 Paper Goods Machine Operators

Set up, operate, or tend paper goods machines that perform a variety of functions, such as converting, sawing, corrugating, banding, wrapping, boxing, stitching, forming, or sealing paper or paperboard sheets into products.

Examples: Bag Machine Operator; Box Fabricator; Carton Forming Machine Operator

23-2011 Paralegals & Legal Assistants

Assist lawyers by researching legal precedent, investigating facts, or preparing legal documents. Conduct research to support a legal proceeding, to formulate a defense, or to initiate legal action.

Examples: Legal Assistant; Legal Investigator

53-6021 Parking Lot Attendants

Park automobiles or issue tickets for customers in a parking lot or garage. May collect fee.

Examples: Valet Parker; Car Hop; Car Runner

47-2071 Paving, Surfacing, & Tamping Equipment Operators

Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Include concrete and asphalt paving machine operators, form tampers, tamping machine operators, and stone spreader operators.

Examples: Asphalt Spreader Operator; Black Top Machine Operator; Road Grader

43-3051 Payroll & Timekeeping Clerks

Compile and post employee time and payroll data. May compute employees' time worked, production, and commission. May compute and post wages and deductions. May prepare paychecks.

Examples: Attendance Clerk; Payroll Bookkeeper; Timekeeper

39-9021 Personal & Home Care Aides

Assist elderly or disabled adults with daily living activities at the person's home or in a daytime non-residential facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals. May provide meals and supervised activities at non-residential care facilities. May advise families, the elderly, and disabled on such things as nutrition, cleanliness, and household utilities.

Examples: Blind Escort; Caregiver; Geriatric Aide

13-2052 Personal Financial Advisors

Advise clients on financial plans utilizing knowledge of tax and investment strategies, securities, insurance, pension plans, and real estate. Duties include assessing clients' assets, liabilities, cash flow, insurance coverage, tax status, and

financial objectives to establish investment strategies.

Examples: Estate Planner; Budget Counselor; Financial Planner

29-1051 Pharmacists

Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.

Examples: Apothecary; Druggist; Industrial Pharmacist

31-9095 Pharmacy Aides

Record drugs delivered to the pharmacy, store incoming merchandise, and inform the supervisor of stock needs. May operate cash register and accept prescriptions for filling.

Examples: Dispensary Attendant; Prescription Clerk

29-2052 Pharmacy Technicians

Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications.

51-9131 Photographic Process Workers

Perform precision work involved in photographic processing, such as editing photographic negatives and prints, using photo-mechanical, chemical, or computerized methods.

Examples: Photo Finisher; Photographic Colorist; Darkroom Technician

51-9132 Photographic Processing Machine Operators

Operate photographic processing machines, such as photographic printing machines, film developing machines, and mounting presses.

Examples: Film Processor; Film Printer; Reproduction Machine Loader

31-2021 Physical Therapist Assistants

Assist physical therapists in providing physical therapy

treatments and procedures. May, in accordance with State laws, assist in the development of treatment plans, carry out routine functions, document the progress of treatment, and modify specific treatments in accordance with patient status and within the scope of treatment plans established by a physical therapist. Generally requires formal training.

Example: Corrective Therapy Assistant

31-2022 Physical Therapist Aides

Under close supervision of a physical therapist or physical therapy assistant, perform only delegated, selected, or routine tasks in specific situations. These duties include preparing the patient and the treatment area.

Example: Physiotherapy Aide

29-1123 Physical Therapists

Assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and decrease or prevent deformity of patients suffering from disease or injury.

Examples: Physiotherapist; Pulmonary Physical Therapist

29-1071 Physician Assistants

Provide healthcare services typically performed by a physician, under the supervision of a physician. Conduct complete physicals, provide treatment, and counsel patients. May, in some cases, prescribe medication. Must graduate from an accredited educational program for physician assistants.

Example: Anesthesiologist Assistant

47-2151 Pipelayers

Lay pipe for storm or sanitation sewers, drains, and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe, or seal joints.

Examples: Trench Pipe Layer; Pipe Liner; Sewer Connector

47-2161 Plasterers & Stucco Masons

Apply interior or exterior plaster,

cement, stucco, or similar materials. May also set ornamental plaster.

Examples: Dry Plasterer; Stucco Worker; Ornamental Plasterer

51-4193 Plating & Coating Machine Operators

Set up, operate, or tend plating or coating machines to coat metal or plastic products with chromium, zinc, copper, cadmium, nickel, or other metal to protect or decorate surfaces. Include electrolytic processes.

Examples: Anodizer; Electroplater; Galvanizer

47-2152 Plumbers & Pipefitters

Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems.

Examples: Gas Line Installer; Hot Water Heater Installer; Sprinkling System Installer

33-3051 Police and Sheriff's Patrol Officers

Maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district. Perform combination of following duties: patrol a specific area on foot or in a vehicle; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts.

Examples: Border Guard; Campus Police; City Constable

43-5051 Postal Service Clerks

Perform any combination of tasks in a post office, such as receive letters and parcels; sell postage and revenue stamps, postal cards, and stamped envelopes; fill out and sell money orders; place mail in pigeon holes of mail rack or in bags according to State, address, or other scheme; and examine mail for correct postage.

Examples: Parcel Post Clerk; Special Delivery Clerk; Stamp Clerk

43-5052 Postal Service Mail Carriers

Sort mail for delivery. Deliver mail on established route by vehicle or on foot.

Examples: Letter Carrier; Mail Deliverer; Route Carrier

51-5022 Prepress Technicians & Workers

Set up and prepare material for printing presses. Include prepress functions, such as compositing, typesetting, layout, paste-up, camera operating, scanning, film stripping, and photoengraving.

Examples: Compositor; Lithographer; Photoengraving Etcher

51-6021 Pressers, Textile, Garment, & Related Materials

Press or shape articles by hand or machine.

Examples: Clothes Ironer; Garment Steamer; Steam Operator

51-5023 Printing Machine Operators

Set up or operate various types of printing machines, such as offset, letterset, intaglio, or gravure presses or screen printers to produce print on paper or other materials.

Examples: Silk Screen Printer; Embosser; Bag Printer; Offset Press Operator; Lithoplate Maker

43-3061 Procurement Clerks

Compile information and records to draw up purchase orders for procurement of materials and services.

Examples: Property & Supply Officer; Purchasing Clerk

43-5061 Production, Planning, & Expediting Clerks

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

Examples: Assignment Agent; Production Dispatcher; Expediter

19-3031 Psychologists, Clinical, Counseling, and School

Diagnose and treat mental disorders; learning disabilities; and cognitive, behavioral, and emotional problems using individual, child, family, and group therapies. May design and implement behavior modification programs.

Examples: Vocational Psychologist; Child Psychologist

27-3031 Public Relations Specialists

Engage in promoting or creating good will for individuals, groups, or organizations by writing or selecting favorable publicity material and releasing it through various communications media. May prepare and arrange displays, and make speeches.

Examples: Publicist; Lobbyist; Press Secretary

13-1023 Purchasing Agents, Except Wholesale, Retail, & Farm Products

Purchase machinery, equipment, tools, parts, supplies, or services necessary for the operation of an establishment. Purchase raw or semi-finished materials for manufacturing. Include contract specialists, field contractors, purchasers, price analysts, tooling coordinators, and media buyers.

Examples: Fuel Buyer; Lumber Buyer; Radio Time Buyer

29-2034 Radiologic Technologists & Technicians

Take X-rays and CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes. Include technologists who specialize in other modalities, such as computed tomography and magnetic resonance. Include workers whose primary duties are to demonstrate portions of the human body on X-ray film or fluoroscopic screen.

Examples: X-Ray Technician; CAT Scan Operator; Skiagrapher

43-4171 Receptionists & Information Clerks

Answer inquiries and obtain information for general public, customers, visitors, and other interested parties. Provide information regarding activities conducted at establishment; location of departments, offices, and employees within organization.
Examples: Appointment Clerk; Front Desk Clerk; Referral & Information Aide

39-9032 Recreation Workers

Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members.

Examples: Camp Counselor; Playground Director; Activities Director

53-7081 Refuse & Recyclable Material Collectors

Collect and dump refuse or recyclable materials from containers into truck. May drive truck.

Examples: Trash Collector; Garbage Collector; Scrap Metal Collector

29-1111 Registered Nurses

Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Include advance practice nurses such as: nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists. Advanced practice nursing is practiced by RNs who have specialized formal, post-basic education and who function in highly autonomous and specialized roles.

Examples: Nurse Practitioner; Nurse Midwife; Nursing Supervisor

43-4181 Reservation & Transportation Ticket Agents & Travel Clerks

Make and confirm reservations and sell tickets to passengers and for large hotel or motel chains. May check baggage and direct passengers to designated concourse, pier, or track; make reservations, deliver tickets, arrange for visas, contact individuals and groups to inform them of package tours, or provide tourists with travel information, such as points of interest, restaurants, rates, and emergency service.

Examples: Gate Agent; Ticket Clerk; Hotel Reservationist

47-5061 Roof Bolters, Mining

Operate machinery to install roof support bolts in underground mine.

47-2181 Roofers

Cover roofs of structures with shingles, slate, asphalt, aluminum, wood, and related materials. May spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures.

Examples: Slater; Hot Tar Roofer; Terra Cotta Roofer

47-5012 Rotary Drill Operators, Oil & Gas

Set up or operate a variety of drills to remove petroleum products from the earth and to find and remove core samples for testing during oil and gas exploration.

Examples: Cable Tool Operator; Core Driller; Well Driller

47-5071 Roustabouts, Oil & Gas

Assemble or repair oil field equipment using hand and power tools. Perform other tasks as needed.

Examples: Connection Worker; Oil Field Laborer

41-3011 Sales Agents, Advertising

Sell or solicit advertising, including graphic art, advertising space in publications, custom made signs, or TV and radio advertising time.

May obtain leases for outdoor advertising sites or persuade retailer to use sales promotion display items.

Examples: Radio Time Salesperson; Yellow Pages Salesperson; Leasing Agent Outdoor Advertising

41-2031 Sales Clerk, Retail

Sell merchandise, such as furniture, motor vehicles, appliances, or apparel in a retail establishment.

Examples: Car Dealer; Haberdasher; Wallpaper Salesperson

41-4011 Sales Representatives, Technical

Sell goods for wholesalers or manufacturers where technical or scientific knowledge is required in such areas as biology, engineering, chemistry, and electronics, normally obtained from at least 2 years of post-secondary education.

Examples: Electronics Sales Representative; Oilfield Equipment Sales Representative; Pharmaceutical Representative

41-4012 Sales Representatives, Non-Technical

Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.

Examples: Diamond Broker; Oil Distributor; Wool Merchant

41-2022 Salespersons, Parts

Sell spare and replacement parts and equipment in repair shop or parts store.

Examples: Parts Clerk; Auto Parts Salesperson; Electronic Parts Salesperson

51-7041 Sawing Machine Operators, Wood

Set up, operate, or tend wood sawing machines. Include head sawyers.

Examples: Head Sawyer; Crozer Operator; Sawyer; Wood Cutter

43-6014 Secretaries, Except Legal, Medical, & Executive

Perform routine clerical and administrative functions such as drafting correspondence,

scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers.

Examples: Personal Secretary; Office Secretary; Receptionist Secretary

43-6012 Secretaries, Legal

Perform secretarial duties utilizing legal terminology, procedures, and documents. Prepare legal papers and correspondence, such as summonses, complaints, motions, and subpoenas. May also assist with legal research.

43-6013 Secretaries, Medical

Perform secretarial duties utilizing specific knowledge of medical terminology and hospital, clinic, or laboratory procedures. Duties include scheduling appointments, billing patients, and compiling and recording medical charts, reports, and correspondence.

Examples: Psychiatric Secretary; Dental Secretary

33-9032 Security Guards

Guard, patrol, or monitor premises to prevent theft, violence, or infractions of rules.

Examples: Bouncer; Bodyguard; Watchguard

51-6031 Sewing Machine Operators

Operate or tend sewing machines to join, reinforce, decorate, or perform related sewing operations in the manufacture of garment or nongarment products.

Examples: Blind Stitch Machine Operator; Loop Tacker; Hemmer

47-2211 Sheet Metal Workers

Fabricate, assemble, install, and repair sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings. Work may involve any of the following: setting up and operating fabricating machines to cut, bend, and straighten sheet metal; shaping metal over anvils, blocks, or forms using hammer; operating soldering and welding equipment to join sheet metal parts; inspecting, assembling, and smoothing seams and joints of

burred surfaces. Include sheet metal duct installers who install prefabricated sheet metal ducts used for heating, air conditioning, or other purposes.

Examples: Tinsmith; Duct Installer, Metal

43-5071 Shipping, Receiving, & Traffic Clerks

Verify and keep records on incoming and outgoing shipments. Prepare items for shipment. Duties include assembling, addressing, stamping, and shipping merchandise or material; receiving, unpacking, verifying and recording incoming merchandise or material; and arranging for the transportation of products.

Examples: Freight Clerk; Receiver; Garment Sorter; Freight Separator

21-1021 Social Workers, Child, Family, & School

Provide social services and assistance to improve the social and psychological functioning of children and their families and to maximize the family well-being and the academic functioning of children. May assist single parents, arrange adoptions, and find foster homes for abandoned or abused children. In schools, they address such problems as teenage pregnancy, misbehavior, and truancy. May also advise teachers on how to deal with problem children.

Examples: Foster Care Worker; Adoption Agent; Child Abuse Worker

21-1023 Social Workers, Mental Health & Substance Abuse

Assess and treat individuals with mental, emotional, or substance abuse problems, including abuse of alcohol, tobacco, and/or other drugs. Activities may include individual and group therapy, crisis intervention, case management, client advocacy, prevention, and education.

Examples: Community Mental Health Worker; Psychiatric Social Worker

21-1022 Social Workers, Medical & Public Health

Provide persons, families, or

vulnerable populations with the psychosocial support needed to cope with chronic, acute, or terminal illnesses, such as Alzheimer's, cancer, or AIDS. Services include advising family care givers, providing patient education and counseling, and making necessary referrals for other social services.

Examples: Bereavement Counselor; Hospice Social Worker; Medical Caseworker

43-5081 Stock Clerks & Order Fillers

Receive, store, and issue sales floor merchandise, materials, equipment, and other items from stockroom, warehouse, or storage yard to fill shelves, racks, tables, or customers' orders. May mark prices on merchandise and set up sales displays.

Examples: Tool-Crib Attendant; Inventory Control Clerk; Warehouse Clerk

47-2221 Structural Iron & Steel Workers

Raise, place, and unite iron or steel girders, columns, and other structural members to form completed structures or structural frameworks. May erect metal storage tanks and assemble prefabricated metal buildings.

Examples: Bolter; Guard Rail Installer; Construction Ironworker

51-2041 Structural Metal Fabricators & Fitters

Fabricate, lay out, position, align, and fit parts of structural metal products.

Examples: Manufacturing Ornamental Metal Worker; Metal Box Maker; Protector Plate Attacher

29-2055 Surgical Technologists

Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. May help set up operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeon's assistants, hold retractors, cut sutures, and help

count sponges, needles, supplies, and instruments.

Examples: Surgical Orderly; Operating Room Technician; Scrub Technician

17-3031 Surveying & Mapping Technicians

Perform surveying and mapping duties, usually under the direction of a surveyor, cartographer, or photogrammetrist to obtain data used for construction, mapmaking, boundary location, mining, or other purposes. May calculate mapmaking information and create maps from source data, such as surveying notes, aerial photography, satellite data, or other maps to show topographical features, political boundaries, and other features. May verify accuracy and completeness of topographical maps.

Examples: Cartographic Technician; Map Drafter; Stereo Map Plotter Operator

43-2011 Switchboard Operators, Including Answering Service

Operate telephone business systems equipment or switchboards to relay incoming, outgoing, and interoffice calls. May supply information to callers and record messages.

Examples: Communication Center Operator; Exchange Operator; Telephone Answering Service Operator

47-2082 Tapers

Seal joints between plasterboard or other wallboard to prepare wall surface for painting or papering.

Examples: Sheet Rock Taper; Wall Taper

25-9041 Teacher Assistants

Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher or another professional has ultimate responsibility for the design and implementation of educational programs and services.

Examples: Teacher Aide; Examination Proctor; Paper Grader; Paraprofessional Teacher Aide

25-2021 Teachers, Elementary

School, Except Special Education

Teach pupils in public or private schools at the elementary level basic academic, social, and other formative skills.

25-2022 Teachers, Middle School, Except Special and Vocational Education

(Junior High School Teacher) Teach students in public or private schools in one or more subjects at the middle, intermediate, or junior high level, which falls between elementary and senior high school as defined by applicable State laws and regulations.

25-2011 Teachers, Preschool, Except Special Education

Instruct children (normally up to 5 years of age) in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold State certification.

Examples: Nursery School Teacher; Day Care Teacher; Head Start Teacher; Childhood Development Teacher

25-2031 Teachers, Secondary School, Except Special and Vocational Education

(High School Teacher) Instruct students in secondary public or private schools in one or more subjects at the secondary level, such as English, mathematics, or social studies. May be designated according to subject matter specialty, such as typing instructors, commercial teachers, or English teachers.

51-2092 Team Assemblers

Work as part of a team having responsibility for assembling an entire product or component of a product. Team assemblers can perform all tasks conducted by the team in the assembly process and rotate through all or most of them rather than being assigned to a specific task on a permanent basis. May participate in making

management decisions affecting the work. Team leaders who work as part of the team should be included.

27-3042 Technical Writers

Write technical materials, such as equipment manuals, appendices, or operating and maintenance instructions. May assist in layout work.

Examples: Documentation Writer; Assembly Instructions Writer; Specifications Writer

49-2022 Telecomm. Equipment Installers & Repairers, Except Line Installers

Set-up, rearrange, or remove switching and dialing equipment used in central offices. Service or repair telephones and other communication equipment on customers' property. May install equipment in new locations or install wiring and telephone jacks in buildings under construction.

Examples: Central Office Equipment Installer; Electronics Installer; Exchange Mechanic

49-9052 Telecomm. Line Installers & Repairers

String and repair telephone and television cable, including fiber optics and other equipment for transmitting messages or television programming.

Examples: Telecommunications Cable Splicer; Telecommunications Wire Stretcher; Cable Television Installer

41-9041 Telemarketers

Solicit orders for goods or services over the telephone.

Examples: Telephone Salesperson; Telephone Solicitor

43-3071 Tellers

Receive and pay out money. Keep records of money and negotiable instruments involved in a financial institution's various transactions.

Examples: Foreign Exchange Clerk; Money Order Clerk; Securities Teller

49-3093 Tire Repairers & Changers

Repair and replace tires.

Examples: Tire Balancer; Tire Fixer

51-4111 Tool and Die Makers

Analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinists' hand tools.

Examples: Die Sinker; Die Finisher; Sawsmith

39-6021 Tour Guides

Escort individuals or groups on sightseeing tours or through places of interest, such as industrial establishments, public buildings, and art galleries.

Examples: Page; Sightseeing Guide

13-1073 Training & Development Specialists

Conduct training and development programs for employees.

Examples: Training Coordinator; Workforce Development Specialist; Supervisor, Training Personnel

53-3032 Truck Drivers, Heavy & Tractor-Trailer

Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license.

Examples: Auto Carrier Driver; Cement Truck Driver; Moving Van Driver

53-3033 Truck Drivers, Light or Delivery Services

Drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May require use of automatic routing or location software. May load and unload truck.

Example: Parcel Post Truck Driver

39-3031 Ushers, Lobby Attendants, & Ticket Takers

Assist patrons at entertainment events by performing duties, such as collecting admission tickets and

passes from patrons, assisting in finding seats, searching for lost articles, and locating such facilities as rest rooms and telephones.

Examples: Door Attendant; Ticket Collector

35-3031 Waiters & Waitresses

Take orders and serve food and beverages to patrons at tables in dining establishment.

Examples: Cocktail Waiter; Wine Steward; Head Waitress

51-8031 Water & Liquid Waste Treatment Plant & System Operators

Operate or control an entire process or system of machines, often through the use of control boards, to transfer or treat water or liquid waste.

Examples: Disposal Operator; Filtration Plant Operator; Sewage Plant Operator

51-4121 Welders, Cutters, Solderers, & Brazers

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

Examples: Acetylene Burner; Arc Welder; Blow Torch Operator

51-4122 Welding, Soldering, & Brazing Machine Operators

Set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Include workers who operate laser cutters or laser-beam machines.

Examples: Laser Cutter Machine Operator; Electron Beam Welder Setter; Laser-Beam Machine Operator; Ultrasonic Welding Machine Operator

51-7042 Woodworking Machine Operators, Except Sawing

Set up, operate, or tend woodworking machines, such as drill presses, lathes, shapers, routers, sanders, planers, and wood nailing machines.

Examples: Frazer; Molding Sander

43-9022 Word Processors & Typists

Use word processor/computer or typewriter to type letters, reports, forms, or other material from rough draft, corrected copy, or voice recording. May perform other clerical duties as assigned. Include composing data keyers.

Examples: Composing Data Keyer; Clerk Typist; Dictaphone Typist