

CAREER BRIEFS / PROFILES

This section outlines 209 occupations — only a sample of those available in N.C. The following information is included for each occupation.

Occupation — Titles and clusters are from the federal Standard Occupational Classification (SOC) system. Definitions are derived from SOC and O*NET systems.

Holland Code (HC) — Holland personality types (3-letter codes) corresponding to work environments, taken from O*NET. Some occupations have only 1 or 2 codes; others have no Holland code assigned yet in the O*NET system, and are designated “N/A” for not available.

Work Description — The nature of the duties performed in the occupation.

Education Suggested — The minimum level of education or training suggested to enter and perform the job effectively.

Codes Used:

- **Apprent.** – Apprenticeship training
- **ST OJT** – Short-term on-the-job training

- **Mod. OJT** – Moderate on-the-job training (1-12 mos.)
- **LT OJT** – Long-term on-the-job training (>12 mos.)
- **Wk. Exp.** – Work experience in a related occupation
- **PS Voc.** – Postsecondary vocational training
- **Assoc.** – Associate’s degree
- **Bach.** – Bachelor’s degree
- **Bach. +** – Bachelor’s degree or higher plus work experience
- **Master’s** – Master’s degree
- **Ph.D.** – Doctorate degree
- **1st Prof.** – First professional degree, such as Juris Doctor (J.D.) for law or Medical Doctor (M.D.)

Licensed Occupations — Occupations for which a license, certification, or registration is required to practice in North Carolina. **Codes Used:** L, C, R

Where — This refers to the types of businesses, industries, or employers that primarily hire workers for the occupation in North Carolina.

Salary — The first (top) salary amount (followed by e) represents the average entry wage.

The second salary amount represents the average rate of pay for the majority of employees in that occupation. Wage data have been annualized from Employment Security Commission source (hourly wage) data. Averages, therefore, may be high or low if an occupation requires more or less than 40 hours a week.

The actual pay for a specific job may vary according to geographic areas, the qualifications of the person holding the job, and the employer’s pay scale.

Outlook — This gives the projected rate of increase for each occupation based on North Carolina labor market information. It is an indicator of projected growth rather than projected openings.

Codes Used:

- **Above Average** – The occupation is expected to grow by more than 2.1 percent per year.
- **Average** – The occupation is expected to grow between 1 percent and 2.1 percent per year.
- **Below Average** – The rate of growth is less than 1 percent per year.

Index Career	Page	Career	Page
Management Occupations	8	Protective Service Occupations	20
Business & Financial Occupations	9	Food Preparation & Serving Related Occupations	21
Computer & Mathematical Occupations	10	Building & Grounds Cleaning & Maintenance Occupations	21
Architecture & Engineering Occupations	11	Personal Care & Service Occupations	22
Life, Physical & Social Science Occupations	12	Sales & Related Occupations	23
Community & Social Service Occupations	12	Office & Administrative Support Occupations	24
Legal Occupations	13	Farming, Fishing & Forestry Occupations	25
Education, Training & Library Occupations	14	Construction & Extraction Occupations	25
Art, Design, Entertainment, Sports & Media Occupations	14	Installation, Maintenance & Repair Occupations	26
Health Care Practitioners & Technical Occupations	15	Production Occupations	27
Career Profiles	18-19	Transportation & Material Moving Occupations	28
Health Care Support Occupations	20		

Management Occupations



This cluster includes top-level managers and middle managers. Top-level managers are concerned with policy making, planning, staffing, directing, and/or controlling activities that are common to many organizations. Middle managers plan, organize, staff, or direct activities at an operational level. People in these occupations usually have interests and skills in “people” and “data.” Many have leadership qualities and possess a high degree of creative thinking, as well as decision-making and problem-solving abilities.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Administrative Services Managers	ECS	Plan, direct, or coordinate supportive services of an organization, e.g. recordkeeping, mail distribution, telephone operator/receptionist and other office support services. May oversee facilities planning & maintenance and custodial operations.	Bach. +		Educational services; religious organizations; management & public relations firms; local government; hospitals; personnel services; wholesale companies selling machinery, equipment & supplies; nursing, residential care facilities; commercial sports; textile mill products; electronic & electrical equipment mfgs.	\$34,320e \$63,920	Above Average
Computer and Information Systems Managers	ECI	Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming.	Bach. +		Computer & data processing services; chemical products; industrial machinery, electronic, electrical equipment products; banks; educational services; management, research & testing firms; hospitals; government agencies	\$57,340e \$94,490	Above Average
Construction Managers	ERC	Plan, direct, coordinate, or budget activities concerning construction & maintenance of structures, facilities & systems. Participate in conceptualizing development of a construction project & oversee its organization, scheduling, & implementation.	Bach.		Building contractors, residential, non-residential, and heavy construction; special trades; plumbing, heating, air-conditioning; electrical work; highway construction; management & public relations firms; masonry, stonework, carpentry, flooring, other construction projects	\$39,380e \$66,390	Average

CAREER BRIEFS / PROFILES

Education Administrators, Elem. & Secondary	SEI	Plan, direct, or coordinate the academic, clerical, or auxiliary activities of public or private elementary or secondary level schools.	Bach. +		Schools and local & state school systems; government agencies	\$44,710e \$62,410	Average
Education Administrators, Postsecondary	ECI	Plan, direct, or coordinate research, instruction, student administration & services, and other educational activities at postsecondary institutions, including universities, colleges, and junior & community colleges.	Bach. +		Schools and local & state school systems; government agencies	\$41,750e \$70,500	Above Average
Financial Managers	ECS	Plan, direct & coordinate accounting, investing, banking, insurance, securities & other financial activities of a branch, office, or department of an establishment.	Apprent. Bach. +		Banks; mortgage bankers; wholesale companies selling auto parts, lumber machinery, equipment & supplies; computer & data processing firms; local government; management & public relations firms; educational and business services	\$50,020e \$85,700	Average
Marketing Managers	AES	Determine demand for products & services offered by a firm & its competitors and identify potential customers. Develop pricing strategies to maximize the firm's profits or marketshare while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services.	Bach. +		Communications equipment; wholesale trade, durable & nondurable goods; business services; computer & data processing services; health services; engineering & management services; management & public relations	\$51,140e \$93,290	Average
Medical & Health Services Managers	ESI	Plan, direct, or coordinate medicine and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.	Bach. +	L	Hospitals; physicians offices; home health care organizations; residential facilities; medical and diagnostic laboratories	\$45,570e \$70,240	Above Average
Natural Sciences Managers	IER	Plan, direct, or coordinate activities in such fields as life sciences, physical sciences, mathematics, statistics, and research & development in these fields.	Bach. +		Scientific research & development companies; pharmaceutical and medicine manufacturers; federal government offices	\$68,960e \$114,170	Above Average
Property, Real Estate & Community Association Managers	EC	Plan, direct, or coordinate selling, buying, leasing, or governance activities of commercial, industrial, or residential real estate properties.	Bach.		Real estate agencies; real estate management companies; local government offices	\$34,910e \$59,970	Average
Social & Community Service Managers	SEA	Plan, organize, or coordinate the activities of a social service program or community outreach organization. Oversee the program or organization's budget & policies regarding participant involvement, program requirements, and benefits.	Bach.		Religious, civic & social organizations; local & state government; nursing, residential care; social, family services; hospitals	\$31,360e \$49,140	Above Average

Business & Financial Occupations



This cluster includes occupations primarily pertaining to planning, organizing, and controlling specialized operational functions. People in these occupations generally have interests and skills in “data” and “people.” They usually have good analytical, problem-solving, and/or good interpersonal skills. Their work may include examining, analyzing, reviewing, purchasing, enforcing, and/or personnel responsibilities.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Accountants and Auditors	CEI	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.	Bach.	C	Accounting and auditing firms; government agencies; wholesale companies; educational services; industrial machinery, equipment manufacturers; hotels & motels; banks; management, personnel supply, computer companies; textile product manufacturers	\$34,250e \$53,440	Average
Claims Adjusters, Examiners, and Investigators	CE	Review settled claims to determine that payments & settlements have been made in accordance with company practices & procedures, ensuring that proper methods have been followed. Report overpayments, underpayments & irregularities. Confer on claims requiring litigation.	LT OJT	L	Insurance agents, brokers & companies; computer companies; government, business and health services	\$29,300e \$42,770	Average
Compensation, Benefits & Job Analysis Specialists	ESC	Conduct programs of compensation and benefits and job analysis for employer. May specialize in specific areas, such as position classification and pension programs.	Bach.		Private companies; local government offices; colleges; employment service agencies	\$33,340e \$50,060	Above Average
Cost Estimators	CE	Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service.	Apprent. Wk. Exp.		Plumbing, heating, air-conditioning, roofing, electrical contractors; building and trade contractors; heavy construction companies; printing & publishing companies; fabricated metals products	\$32,820e \$50,250	Average
Employment, Recruitment and Placement Specialists	ESC	Recruit, select and place workers in jobs.	Bach.		Personnel supply services; computer companies; government services; hospitals; banks and management services; eating and drinking places	\$27,840e \$42,670	Above Average

CAREER BRIEFS / PROFILES

Financial Analysts	ICE	Conduct quantitative analyses of information affecting investment programs of public or private institutions.	Bach.		Security and commodity brokers and services; banks and non-depository institutions; insurance services	\$34,990e \$66,990	Above Average
Loan Officers	ESC	Evaluate, authorize, or recommend approval of commercial, real estate, or credit loans. Advise borrowers on financial status and methods of payments.	Bach.	L	Commercial banks; credit and savings institutions; mortgage bankers and brokers	\$32,760e \$55,700	Above Average
Management Analysts	CEI	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.	Bach. +		Management & public relations firms; computer & data processing firms; government agencies; banks and business services; medical & health services; wholesale companies selling electrical goods, groceries, transportation equipment; engineering services; self-employed	\$42,760e \$76,210	Above Average
Personal Financial Advisors	SEC	Advise clients on financial plans, tax & investment strategies, securities, insurance, pension plans & real estate. May assess clients' assets, liabilities, cash flow, insurance coverage, tax status, and financial objectives.	Bach.		Banks, security brokers, dealers & services; computer companies; insurance companies and services	\$31,720e \$58,770	Above Average
Tax Preparers	CE	Prepare tax returns for individuals or small businesses but do not have the background or responsibilities of an accredited or certified public accountant.	Mod. OJT		Private & public organizations providing accounting, tax preparation, bookkeeping, and payroll services	\$16,010e \$33,260	Above Average
Training and Development Specialists	ESC	Conduct training and develop programs to help employees make effective use of skills and to be satisfied in their jobs.	Bach.		Banks; government agencies; computer companies; hospitals; textile products; merchandise stores; management, health and business services	\$28,270e \$47,400	Above Average

Computer & Mathematical Occupations



This cluster includes occupations pertaining to the application of math and/or computer science in research, development, and related activities. People in these occupations generally have interests in “data” and “ideas.” They are creative thinkers who apply mathematical principles to solve problems and research new ideas. Their responsibilities require them to organize, maintain, and evaluate information.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Computer Programmers	IRC	Conduct research into fundamental computer & information science as theorists, designers, or inventors. Solve or develop solutions to problems in the field of computer hardware & software.	Apprent. Bach.		Computer, data processing firms; industrial machinery and electronic, electric equipment manufacturers; educational services; banks; wholesale companies selling business equipment; research & testing companies; textile products; hospitals; management, personnel and business services	\$43,350e \$67,990	Below Average
Computer Software Engineers, Applications	IRC	Develop, create & modify general computer applications software or specialized utility programs. Analyze user needs & develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May analyze & design databases.	Bach.		Computer & data processing services; industrial machinery & electronic, electrical equipment manufacturers; banks; management & business services; government agencies	\$50,810e \$74,860	Above Average
Computer Software Engineers, Systems	IRC	Research, design, develop & test operating systems-level software, compilers & network distribution software. Set specifications & analyze requirements. Use principles of computer science, engineering & mathematical analysis.	Bach.		Computer systems design companies; navigational, measuring, electromedical, and control instruments manufacturers; wireless telecommunications carriers	\$55,520e \$82,020	Above Average
Computer Support Specialists	CIR	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 & software, including printing, installation, word processing, electronic mail & operating systems.	Assoc.		Computer & data processing services; banks & business services; educational services; wholesale trades; management & communication companies; industrial machinery & equipment manufacturers; government agencies; hospitals & labs; furniture companies	\$27,650e \$45,110	Above Average
Computer Systems Analysts	ICR	Analyze science, engineering, business & all other data processing problems for application to electronic data processing systems. Analyze user requirements, procedures & problems to automate or improve existing systems and review computer system capabilities, workflow & scheduling limitations.	Bach.		Computer & data processing services; banks; industrial machinery & electronic, electrical equipment manufacturers; hospitals; chemical products; government agencies; building materials; utilities services; self-employed	\$44,750e \$68,150	Above Average
Database Administrators	ICR	Coordinate changes to computer databases, test & implement the database applying knowledge of database management systems. May plan, coordinate & implement security measures to safeguard computer databases.	Bach.		Computer & data processing services; wholesale companies selling business equipment; communication & business services; banks; electronic, electrical equipment manufacturers; hospitals; health services	\$37,860e \$63,070	Above Average

CAREER BRIEFS / PROFILES

Network and Computer Systems Administrators	N/A	Install, configure & support a local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system. Maintain network hardware & software. Monitor network to ensure availability and perform necessary maintenance. May supervise others, plan, coordinate & implement network security measures.	Bach.		Computer & data processing services; educational services; wholesale companies selling business equipment; communication, banks & business services; government agencies; hospitals; electronic, electrical equipment manufacturers	\$41,540e \$67,020	Above Average
Network Systems & Data Communications Analysts	IR	Analyze, design, test & evaluate network systems -- local area networks (LAN), wide area networks (WAN), Internet, intranet, and other data communications systems. Perform network modeling, analysis & planning. Research and recommend network & data communications hard/software.	Bach.		Computer & data processing services; banks; management, utilities & sanitary services; industrial machinery & equipment, communication, business services; hospitals, health services	\$41,770e \$62,840	Above Average

Architecture & Engineering Occupations



This cluster includes occupations pertaining to the design and construction of buildings, equipment, highways, roads, utilization of land, and processing systems. People in these occupations often have interests and skills in “data,” “ideas,” and/or “things.” They use technical skills to perform their responsibilities and have high aptitudes in mathematics, creative thinking, and problem solving.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Architects, except Landscape & Naval	ARI	Plan & design structures, such as private residences, office buildings, theaters, factories & other structural property.	Bach.	L	Self-employed; utilities & sanitary services; engineering & architectural firms; computer & data processing services	\$38,880e \$62,240	Above Average
Biomedical Engineers	IRE	Design, develop & evaluate biological & health systems & products, such as artificial organs, prostheses, instrumentation, medical information systems, and health management & care delivery systems.	Bach.	L	Hospitals; chemical companies; engineering & architectural services	\$46,110e \$62,000	Above Average
Civil Engineers	RIC	Plan, design & oversee construction & maintenance of structures & facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water & sewage systems, and waste disposal units.	Bach.	L	Engineering & architectural firms; government agencies; general building & heavy construction contractors; management & public relations firms	\$42,910e \$61,600	Average
Electrical & Electronic Engineering Technicians	RI/RIC	Apply electrical & electronic theory & related knowledge, usually under the direction of engineering staff, to design, build, repair, calibrate & modify electrical components, circuitry, controls & machinery for subsequent evaluation & use by engineering staff to make design decisions.	Apprent. Assoc.	L	Communication; wholesale trades; industrial machinery & electronic, electric equipment companies; engineering & architectural firms; instrument manufacturers; government agencies; research & testing services; utility companies	\$32,530e \$45,050	Average
Electronics Engineers, except Computer	IR	Research, design, develop & test electronic components & systems for commercial, industrial, military, or scientific use. Design electronic circuits & components for use in telecommunications, aerospace guidance & propulsion control, acoustics, or instruments & controls.	Bach.	L	Electronic, electrical equipment & industrial machinery manufacturers; communication companies; wholesale companies selling machinery, equipment & supplies; engineering & architectural firms	\$49,980e \$70,880	Average
Environmental Engineering Technicians	N/A	Apply theory & principles of environmental engineering to modify, test & operate equipment & devices used in the prevention, control & remediation of environmental pollution, including waste treatment & site remediation.	Assoc.	L	Engineering & architectural firms; government agencies; management & public relations firms; utilities & sanitary services; chemical companies; research & testing services; paper products	\$26,270e \$38,770	Above Average
Environmental Engineers	N/A	Design, plan, or perform engineering duties in the prevention, control & remediation of environmental health hazards using engineering disciplines. May include waste treatment, site remediation, or pollution control technology.	Bach.	L	Engineering & architectural firms; government agencies; management & public relations firms; utilities & sanitary services; chemical companies; research & testing services; paper products	\$44,780e \$64,600	Above Average
Surveying & Mapping Technicians	RCI	Perform surveying & mapping duties to obtain data used for construction, mapmaking, boundary location, mining, or other purposes. May calculate mapmaking information & create maps from source data to show topographical features, political boundaries & other features. May verify accuracy & completeness of maps.	Apprent. Mod. OJT	L	Engineering & architectural services; government agencies; utilities & sanitary services; research & testing	\$21,250e \$28,360	Above Average
Surveyors	IER	Make exact measurements & determine property boundaries. Provide data on the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction & other purposes.	Bach.	L	Architectural & engineering firms; government; construction companies	\$25,550e \$39,740	Average

CAREER BRIEFS / PROFILES

Life, Physical & Social Science Occupations



This cluster includes occupations pertaining to research and application of scientific knowledge to specific problems and situations. People in these occupations generally have interests and skills in “ideas.” They usually have good research and problem-solving skills, and they do well in one or more scientific subjects.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Biochemists & Biophysicists	IR/IRC	Study the chemical composition & physical principles of living cells & organisms, their electrical & mechanical energy, and related phenomena. May conduct research of complex chemical combinations & reactions involved.	Ph.D.		Pharmaceutical manufacturers; pesticide, fertilizer & other agricultural chemical manufacturers	\$43,830e \$63,990	Above Average
Biological Technicians	RIC	Assist biological & medical scientists in laboratories. Set up, operate & maintain laboratory instruments & equipment, monitor experiments, make observations, and calculate & record results. May analyze blood, food & drugs.	Assoc.		Research & testing services; chemical, food companies; government agencies; management & public relations firms; medical & dental labs	\$26,830e \$35,380	Above Average
Chemists	IRC	Conduct qualitative & quantitative chemical analyses or chemical experiments in laboratories for quality or process control or to develop new products or knowledge.	Bach.		Chemical manufacturers; research and testing services; tobacco companies; government agencies	\$36,700e \$61,460	Above Average
Clinical, Counseling & School Psychologists	IAS/ SIA/IS	Diagnose & treat mental disorders; learning disabilities; and cognitive, behavioral & emotional problems using individual, child, family & group therapies. May design & implement behavior modification programs.	Ph.D.		Government; hospitals; private practice offices; outpatient clinics; colleges	\$35,890e \$54,340	Average
Environmental Science & Protection Technicians	IR	Performs laboratory and field tests to monitor the environment & investigate sources of pollution, including those that affect health. Under direction of a scientist or specialist, may collect samples of gases, soil, water & other materials for testing and take corrective actions as assigned.	Apprent. Assoc.		Government agencies; management & public relations firms; research & testing services; engineering & architectural, utilities services; chemical companies	\$25,510e \$34,560	Above Average
Environmental Scientists & Specialists, including Health	IR	Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population using knowledge of scientific disciplines.	Master's		Government; private consulting firms; architectural & engineering companies	\$33,690e \$50,190	Above Average
Geoscientists, except Hydrologists & Geographers	IRC	Apply knowledge of geology, physics & mathematics in the study of the earth's atmosphere, oceans, and the physical aspects of the earth.	Master's	L	Government; private consulting firms; architectural & engineering companies	\$35,700e \$53,490	Above Average
Market Research Analysts	IEC	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 & methods of marketing & distribution.	Master's		Research & testing services; industrial machinery & electronic, electrical equipment manufacturers; banks; accounting firms; communication & computer companies	\$36,160e \$66,930	Average
Medical Scientists, except Epidemiologists	IRS	Conduct research dealing with the understanding of human diseases and the improvement of human health. Engage in clinical investigation or research, production, technical writing, or related activities.	Ph.D.		Research and testing services; chemical companies; management and public relations firms; wholesale companies; government, education and health agencies	\$48,300e \$83,300	Above Average
Microbiologists	IR	Investigate the growth, structure, development & other characteristics of microscopic organisms, such as bacteria, algae, or fungi. Includes study of the relationship between organisms & disease or the effects of antibiotics.	Ph.D.		Pharmaceutical manufacturers; government	\$36,320e \$53,720	Above Average

Community & Social Service Occupations



This cluster includes occupations pertaining to the needs of people and their communities, families, and spiritual development. They usually have interests and skills primarily in “people” to resolve personal and societal issues. People in these occupations value helping others and have high interpersonal skills, including working with cultural diversity. They are creative thinkers, problem solvers, and good listeners.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Child, Family & School Social Workers	SAE	Provide social services & assistance to improve the social & psychological functioning of children & their families and to maximize the family well-being and academic functioning of children.	Bach.	C	Government; schools; community relief agencies; social advocacy organizations; private practice offices	\$26,790e \$34,910	Average
Directors, Religious Activities & Education	SEA	Direct & coordinate activities of a denominational group to meet religious needs of students. Plan, direct, or coordinate church school programs designed to promote religious education among church membership. May provide counseling.	Bach.		Religious organizations	\$23,640e \$38,330	Above Average

CAREER BRIEFS / PROFILES

Educational, Vocational & School Counselors	SAC/E	Counsel individuals and provide educational and vocational guidance services.	Master's	L	Schools; colleges; vocational rehabilitation agencies; government	\$28,970e \$40,120	Average
Health Educators	SEI/A	Promote, maintain & improve individual & community health by helping others adopt healthy behaviors. Collect & analyze data to identify community needs prior to planning, implementing, monitoring, and evaluating programs designed to encourage healthy lifestyles, policies and environments.	Master's		Government; hospitals; private practice offices	\$27,160e \$38,570	Average
Medical & Public Health Social Workers	SIA	Give advice to individuals or businesses on legal problems; study laws, write legal papers, may represent clients in courts of law.	Bach.	C	Hospitals; government; outpatient clinics & homes; community & residential care facilities	\$29,610e \$38,520	Above Average
Mental Health & Substance Abuse Social Workers	SIA	Assess and treat individuals with mental, emotional, or substance abuse problems, including abuse of alcohol, tobacco, and/or other drugs.	Master's	L	Government; outpatient clinics; residential care facilities; hospitals; private practice offices	\$27,780e \$36,350	Above Average
Probation Officers & Correctional Treatment Specialists	SC	Provide social services to assist in rehabilitation of law offenders in custody or on probation or parole. Make recommendations involving formulation of rehabilitation plan & treatment of offender, including conditional release and education & employment stipulations.	Apprent. Bach.		State & local government agencies	\$28,040e \$32,660	Average
Rehabilitation Counselors	N/A	Counsel individuals to maximize the independence and employability of persons coping with personal, social, and vocational difficulties that result from birth defects, illness, disease, accidents, or the stress of daily life.	Master's	L	Residential care facilities; educational, social and health services; job training and government agencies; hospitals	\$21,030e \$30,920	Above Average
Social & Human Service Assistants	SC	Assist professionals in psychology, rehabilitation, or social work to provide client services & support for families. May assist in identifying available benefits & services and help clients obtain them. May assist with developing, organizing & conducting programs relevant to substance abuse, human relationships, rehabilitation, or adult daycare.	Apprent. Mod. OJT		Government agencies; social service agencies; residential care facilities; religious organizations; job training services	\$18,840e \$25,050	Above Average

Legal Occupations



This cluster includes occupations concerned with the application of principles related to statute law and its administration. People in these occupations usually have interests and skills primarily in “people” to resolve legal issues. They value helping and/or influencing others, and have high interpersonal skills. They are creative thinkers with strong problem-solving and communication abilities.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Court Reporters	CE	Use verbatim methods & equipment to capture, store, retrieve & transcribe pretrial and trial proceedings or other information. May operate computerized stenographic captioning equipment to provide captions of live or prerecorded broadcasts for hearing-impaired viewers.	PS Voc.		Government	\$30,400e \$39,150	Average
Judges, Magistrate Judges, and Magistrates	ES	Arbitrate, advise, adjudicate, or administer justice in a court of law. May sentence defendant in criminal cases according to government statutes. May determine liability of defendant in civil cases. May issue marriage licenses and perform wedding ceremonies.	Bach. +	L	Government	\$32,080e \$59,790	Average
Lawyers	ECI/S	Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, and manage or advise clients on legal transactions. May specialize in a single area or may practice broadly in many areas of law.	Juris Doctor (J.D.)	L	Law firms and legal agencies; government agencies; self-employed; commercial banks and business services	\$45,960e \$97,600	Above Average
Paralegals and Legal Assistants	ECS	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.	Apprent. Assoc.	C	Legal firms and services; government agencies; banks, security brokers	\$24,680e \$35,090	Above Average

CAREER BRIEFS / PROFILES

Education, Training & Library Occupations



This cluster includes occupations that involve direct contact with individuals to provide for their education and training. People in these occupations generally have interests and skills in “people” and value helping others to learn and develop. Their skills include speaking, listening, teaching, and serving others. They demonstrate a high level of social skills.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Art, Drama, & Music Teachers, Postsecondary	ASI	Teach courses in drama, music & the arts including fine & applied art, such as painting & sculpture, or design & crafts.	Master's		Junior colleges, colleges and universities	\$32,190e \$48,570	Above Average
Business Teachers, Postsecondary	SRE	Teach courses in business administration and management, such as accounting, finance, human resources, labor relations, marketing, and operations research.	Master's		Junior colleges, colleges and universities	\$36,990e \$70,410	Above Average
Education Teachers, Postsecondary	SRE	Teach courses pertaining to education, such as counseling, curriculum, guidance, instruction, teacher education, and teaching English as a second language.	Ph.D.		Junior colleges, colleges and universities	\$35,100e \$51,960	Above Average
Elementary School Teachers, except Special Education	SAI	Teach pupils in public or private schools at the elementary level basic academic, social, and other formative skills.	Bach.	L	Public and private elementary schools	\$28,420e \$37,660	Average
Library Technicians	CS	Assist librarians by helping readers use library catalogs, databases, and indexes to locate books & other materials; answer questions requiring 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.	ST OJT		Government agencies; schools, colleges, and universities	\$20,250e \$28,190	Average
Preschool Teachers, except Special Education	SAI	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.	PS Voc.	L	Private day cares; elementary schools; individual & family service organizations	\$14,050e \$18,380	Above Average
Secondary School Teachers, except Special and Vocational Education	SAI	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.	Bach.	L	High schools	\$28,760e \$38,890	Average
Self-Enrichment Education Teachers	SA	Teach or instruct courses other than those that normally lead to an occupational objective or degree. Courses may include self-improvement, nonvocational, and nonacademic subjects.	Wk. Exp.		Educational services; religious organizations; civic, social associations; social, recreational services; government and job training agencies; self-employed	\$21,990e \$35,200	Above Average
Special Education Teachers, Preschool, Kindergarten	SAI	Teach elementary and preschool subjects to educationally and physically handicapped students. Include teachers who specialize and work with audibly & visually handicapped students and the mentally impaired.	Bach.	L	Schools, rehabilitation facilities for disabled children	\$28,920e \$38,070	Above Average
Teacher Assistants	SC	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.	Apprent. ST OJT* *See pg. 17 for NCLB requirements		Elementary, middle/junior and high schools; government agencies; child care and social services agencies; religious organizations	\$15,430e \$17,860	Average
Vocational Education Teachers, Postsecondary	SRE	Teach or instruct vocational or occupational subjects at the postsecondary level (but at less than the baccalaureate) to students who have graduated or left high school.	Wk. Exp.		Public and private trade schools and community colleges	\$29,270e \$40,490	Above Average

Art, Design, Entertainment, Sports & Media Occupations



This cluster includes occupations pertaining to the creation and performance of artistic works in various forms. People in these occupations usually have interests and skills in “ideas” and “people,” and some in “data” and/or “things.” Many value creativity and independence. They are skilled in creative thinking and are very expressive in nature. Many have aptitudes in writing, presenting ideas, communicating information, public speaking, and performing.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Broadcast Technicians	RA	Set up, operate & maintain electronic equipment used to transmit radio & television programs. Control audio equipment to regulate volume & quality during broadcasts.	Assoc.		Government; colleges; cable companies; radio and TV companies	\$15,690e \$28,140	Above Average

CAREER BRIEFS / PROFILES

Coaches and Scouts	ERS	Instruct or coach groups or individuals in the fundamentals of sports. Demonstrate techniques and methods of participation. May evaluate athletes' strengths and weaknesses as possible recruits or to improve the athletes' technique to prepare them for competition.	LT OJT	Commercial sports; educational services; amusement and recreational services; self-employed; civic & social associations	\$16,410e \$37,420	Above Average
Editors	AES	Perform variety of editorial duties, such as laying out, indexing, and revising content of written materials, in preparation for final publication. Includes technical editors.	Bach.	Printing & publishing companies; radio and TV companies; computer companies	\$28,260e \$45,760	Average
Graphic Designers	AER	Design or create graphics to meet a client's specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.	Apprent. Bach.	Printing & publishing companies; mailing & reproduction companies; advertising, management & public relations firms; wholesale companies; business services; self-employed	\$23,750e \$37,420	Average
Interior Designers	AER	Plan, design, and furnish interiors of residential, commercial, or industrial buildings. Formulate design that is practical, aesthetic & conducive to intended purposes, such as raising productivity, selling merchandise, or improving life style.	Apprent. Bach.	Design consulting businesses; architectural & engineering companies; building material & supplies dealers; furniture stores; self-employed	\$25,040e \$40,790	Above Average
News Analysts, Reporters, and Correspondents	AIE	Collect, analyze and report newsworthy events for radio, TV or news publications.	Bach. +	Printing & publishing companies; radio and TV companies	\$20,650e \$36,690	Average
Public Relations Specialists	EAS	Engage in promoting or creating good will for individuals, groups, or organizations by writing or selecting favorable publicity material & releasing it through various media. May prepare and arrange displays, and make speeches.	Bach.	Religious organizations; educational services; communication and research & testing companies; government agencies; banks and business services; advertising, management & public relations firms	\$27,890e \$43,630	Above Average
Technical Writers	AI	Write technical materials, such as equipment manuals, appendices, or operating and maintenance instructions. May assist in layout work.	Bach.	Architectural & engineering companies; employment service agencies; private consulting firms; government	\$36,430e \$55,230	Above Average
Writers and Authors	A	Originate and prepare written material, such as scripts, stories, advertisements, and other material.	Bach.	Printing & publishing companies; self-employed; advertising & computer companies; educational services	\$21,100e \$40,920	Average

Health Care Practitioners & Technical Occupations



This cluster includes occupations dealing with the prevention and diagnosis of human and animal ailments, as well as prescription of medical and surgical treatments. People in these occupations often have interests and skills in “people” and “data,” and they value helping others in a medical setting. They have aptitudes in acquiring and evaluating information, and they must interpret and communicate information effectively to others. Good problem-solving and decision-making skills are also necessary.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Cardiovascular Technologists and Technicians	IRS	Conduct tests on pulmonary or cardiovascular systems of patients for diagnostic purposes. May conduct or assist in electrocardiograms, cardiac catheterizations, pulmonary-functions, lung capacity, and similar tests.	Assoc.		Offices and clinics of medical doctors; hospitals	\$26,400e \$40,100	Above Average
Dental Hygienists	SCR/E	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.	Assoc.	L	Offices and clinics of dentists; government agencies	\$45,430e \$56,240	Above Average
Emergency Medical Technicians and Paramedics	SRI	Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities.	Apprent. PS Voc.	C	Local government agencies; local and suburban transportation services; hospitals	\$19,380e \$27,050	Above Average
Family and General Practitioners	IES/R	Diagnose, treat, and help prevent diseases and injuries that commonly occur in the general population.	M.D.	L	Physician offices; hospitals; outpatient care centers; government	\$91,260e \$144,650	Above Average
Licensed Practical and Licensed Vocational Nurses	SRI	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.	PS Voc.	L	Nursing and personal care facilities; hospitals; offices and clinics of medical doctors; education services	\$26,820e \$33,520	Average
Medical & Clinical Laboratory Technologists	IR	Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.	Apprent. Bach.	L	Hospitals; medical and dental laboratories; offices and clinics of medical doctors; government agencies	\$31,060e \$41,680	Above Average
Medical Records and Health Information Technicians	CR	Compile, process, report and maintain patient medical records according to health care system requirements.	Apprent. Assoc.		Hospitals; offices and clinics of medical doctors; nursing and personal care facilities; government agencies	\$18,490e \$26,150	Above Average

CAREER BRIEFS / PROFILES

Occupational Therapists	SRI/A	Assess, plan, organize & participate in rehabilitative programs that help restore vocational, homemaking, and daily living skills & general independence to disabled persons.	Bach.	L	Hospitals; nursing and personal care facilities; offices and clinics of medical doctors & health professionals; home health care services; nursing care facilities; educational services	\$44,080e \$58,430	Above Average
Pharmacists	ICR/E	Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise on the selection, dosage, interactions, and side effects of medications.	1st Prof.	L	Drug stores and pharmacies; hospitals; general merchandise and food stores; government agencies; wholesale companies	\$69,600e \$83,490	Above Average
Pharmacy Technicians	CRI	Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications.	Apprent. Mod. OJT		Pharmacies; retail and general merchandise stores; hospitals	\$16,480e \$22,820	Above Average
Physical Therapists	SRI	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.	Master's	L	Hospitals; offices of health professionals; home health care agencies	\$47,300e \$61,030	Above Average
Physician Assistants	ISA/R	Provide healthcare services typically performed by a physician, under the supervision of a physician. Conduct complete physicals, provide treatment, and counsel patients. May prescribe medication.	Bach.	L	Offices and clinics of medical doctors and health practitioners; hospitals; government agencies	\$53,920e \$71,430	Above Average
Psychiatric Technicians	SR	Care for mentally impaired or emotionally disturbed individuals, following physician instructions and hospital procedures. Monitor patients' physical and emotional well-being and report to medical staff. May participate in rehabilitation and treatment programs.	Mod. OJT		Hospitals; government	\$18,900e \$25,890	Above Average
Radiologic Technologists and Technicians	RIS/ RCI	Take X-rays, CT and MRI scans. Administer non-radioactive materials to help doctors diagnose and treat patients.	Apprent. Assoc.		Hospitals; offices and clinics of medical doctors	\$34,030e \$43,560	Above Average
Registered Nurses	SIR	Assess patient health problems and needs, develop & implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance & disease prevention or provide case management.	Assoc.	L	Hospitals; offices and clinics of medical doctors; nursing, personal care, residential care facilities; medical, health and home health and family services; education and government agencies	\$38,860e \$49,580	Above Average
Respiratory Therapists	IRS/A	Assess, treat, & care for patients with breathing disorders. Assume primary responsibility for respiratory care modalities, including supervision of respiratory therapy technicians. Initiate & conduct therapeutic procedures; maintain records; select, assemble, check & operate equipment.	Assoc.	L	Hospitals; offices of health practitioners	\$35,050e \$43,100	Above Average
Speech-Language Pathologists	SIR	Assess and treat persons with speech, language, voice, and fluency disorders. May select alternative communication systems and teach their use. May perform research related to speech and language problems.	Master's	L	Education services; offices and clinics of health professionals and medical doctors; hospitals; self-employed	\$38,450e \$63,010	Above Average
Surgeons	IRS/A	Treat diseases, injuries, and deformities by invasive methods, such as manual manipulation or by using instruments and appliances.	1st Prof.	L	Hospitals	\$170,160e \$189,410	Above Average
Surgical Technologists	RSC	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.	PS Voc.		Hospitals	\$25,480e \$31,980	Above Average
Veterinarians	IR	Diagnose & treat diseases & dysfunctions of animals. May engage in a particular function, such as research & development, consultation, administration, technical writing, sale or production of commercial products, or rendering of technical services to commercial firms or other organizations.	Doctor of Veterinary Medicine (DVM / VDM)	L	Agricultural services; veterinary hospitals or clinics; agricultural production; self-employed	\$43,140e \$72,660	Average
Veterinary Technologists and Technicians	ISR	Perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals. Prepare vaccines and serums for prevention of diseases. Prepare tissue samples, take blood samples, and execute laboratory tests. Clean and sterilize instruments & materials and maintain equipment and machines.	Assoc.	L	Agricultural services; veterinary hospitals or clinics; agricultural production; self-employed	\$17,890e \$24,300	Above Average

CAREER BRIEFS / PROFILES

Health Care Support Occupations



This cluster includes occupations pertaining to providing health services to assist medical practitioners and technicians. People in these occupations have interests and skills primarily in “people” and “data,” and they value helping others in a medical setting. They usually have good communication and interpersonal skills.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Dental Assistants	SRE	Assist dentist, set up patient and equipment, and keep records.	Apprent. Mod. OJT		Offices and clinics of dentists	\$22,790e \$31,960	Above Average
Home Health Aides	SR	Provide routine, personal healthcare such as bathing, dressing, or grooming to elderly, convalescent, or disabled persons at home or in a residential care facility.	Apprent. ST OJT		Home health care services; residential care and nursing care facilities; hospitals; social service agencies	\$15,170e \$17,390	Above Average
Medical Assistants	SCR	Perform administrative & clinical duties under direction of a physician. May schedule appointments, maintain medical records, billing & coding for insurance purposes. May take and record vital signs & medical histories, prepare patients for examination, draw blood & administer medications.	Apprent. Mod. OJT		Offices and clinics of medical doctors and health practitioners; hospitals; government agencies	\$19,500e \$25,140	Above Average
Medical Transcriptionists	N/A	Use transcribing machines to listen to recordings by physicians and other healthcare professionals dictating medical reports, such as emergency room visits, diagnostic imaging studies, operations, chart reviews, and final summaries. Transcribe reports & translate jargon & abbreviations. Edit as necessary and return reports for review.	PS Voc.		Offices & clinics of medical doctors and health practitioners; hospitals	\$22,670e \$28,250	Above Average
Nursing Aides, Orderlies, and Attendants	SRE	Provide basic patient care under direction of nursing staff. Perform duties, such as feed, bathe, dress, groom, or move patients, or change linens.	ST OJT		Nursing, residential and personal care facilities; hospitals; personnel supply services; home health care services; religious organizations; social service agencies; education services	\$15,530e \$19,720	Above Average
Occupational Therapist Assistants	SR	Assist occupational therapists in providing occupational therapy treatments and procedures. May assist in development of treatment plans, carry out routine functions, direct activity programs, and document the progress of treatments.	Assoc.	L	Offices of health practitioners; hospitals; residential, nursing and personal care facilities; home health services	\$27,290e \$39,180	Above Average
Physical Therapist Aides	SR	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.	ST OJT		Hospitals; offices and clinics of medical and health practitioners; home health care services; nursing & personal care facilities	\$17,470e \$22,480	Above Average
Physical Therapist Assistants	SR	Assist physical therapists in providing physical therapy treatments & procedures. May assist in development of treatment plans, carry out routine functions, document progress & modify treatments in accordance with patient status & within scope established by a physical therapist.	Assoc.	L	Hospitals; offices and clinics of medical and health practitioners; home health care services; nursing & personal care facilities	\$31,310e \$39,190	Above Average

Protective Service Occupations



This cluster includes occupations pertaining to providing protective services to individuals and the community. People in these occupations usually have interests and skills in “people,” and they work in a variety of settings. They usually have strong communication and interpersonal skills.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Correctional Officers and Jailers	RS	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.	Apprent. Mod. OJT		Government agencies	\$24,490e \$27,390	Average
Detectives and Criminal Investigators	ESI/ EIS	Conduct investigations related to suspected violations of Federal, State, or local laws to prevent or solve crimes.	Wk. Exp.		Government agencies	\$29,610e \$42,040	Average

CAREER BRIEFS / PROFILES

Fire Fighters	RS	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.	Apprent. LT OJT		Government agencies; business services	\$21,250e \$31,330	Average
First-Line Supervisors/ Managers of Fire Fighting	RES	Supervise and coordinate activities of workers engaged in fire fighting and fire prevention and control.	Wk. Exp.		Government agencies; business services	\$34,780e \$49,880	Average
First-Line Supervisors/ Managers of Police & Detectives	ESR	Supervise and coordinate activities of members of police force.	Wk. Exp.		Government agencies and police departments	\$34,930e \$49,290	Average
Police and Sheriff's Patrol Officers	RSE/C ESR/C	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.	LT OJT	L	Government agencies and police departments	\$27,150e \$36,680	Average
Security Guards	SEC	Guard, patrol, or monitor premises to prevent theft, violence, or infractions of rules.	ST OJT	L	Education and business services; eating & drinking places; hospitals; general merchandise stores; real estate managers and building services; recreation services; hotels & motels	\$14,870e \$22,300	Above Average

Food Preparation & Serving Related Occupations



This cluster includes occupations pertaining to the preparation and serving of food. People in these occupations usually have interests and skills in “people” and/or “things.” Most must serve their clients, customers, and the general public with good communication and interpersonal skills.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Chefs & Head Cooks	ER	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.	Wk. Exp.		Eating & drinking places; hotels & motels; recreation services	\$18,710e \$31,490	Above Average
Cooks, Restaurant	REA	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.	Apprent. LT OJT		Eating and drinking places; recreational services; hotels and motels; food stores	\$13,760e \$19,010	Above Average
First-Line Supervisors/Managers of Food Preparation	ERC	Supervise workers engaged in preparing and serving food.	Apprent. Wk. Exp.		Eating & drinking places; hotels & motels	\$18,080e \$27,450	Average
Waiters and Waitresses	SEC/R	Take orders and serve food and beverages to patrons at tables in dining establishment.	ST OJT		Eating and drinking places; hotels and motels; nursing & personal care, residential care facilities; civic & social associations	\$12,330e \$15,020	Above Average

Building & Groundskeeping Cleaning & Maintenance Occupations



This cluster includes occupations pertaining to the cleaning and maintenance of private residences, public buildings, and/or their grounds. People in these occupations usually have interests and skills in “people” and/or “things,” and they pay attention to detail.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	ECR/ ERC	Supervise work activities of cleaning personnel in hotels, hospitals, offices, and other establishments.	Apprent. Wk. Exp.		Building services; educational services; personnel supply and government agencies; hospitals; general merchandise stores; business and health services	\$18,760e \$27,800	Average
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	RE	Plan, organize, direct, or coordinate activities of workers engaged in landscaping or groundskeeping activities. May coordinate activities including terracing hillsides, building retaining walls, constructing pathways, installing patios & similar activities per a landscape design plan. May review contracts, answer inquiries, and prepare estimates.	Wk. Exp.		Agricultural services; amusement and recreation services; local government agencies; real estate managers, developers; educational services	\$22,630e \$35,340	Average

CAREER BRIEFS / PROFILES

Janitors and Cleaners, except Maids and Housekeeping Cleaners	R	Keep buildings in clean and orderly condition. Perform heavy cleaning duties, such as cleaning floors, shampooing rugs, washing walls and glass, and removing rubbish. May tend furnace and boiler, perform routine maintenance, and clean snow or debris from sidewalk.	ST OJT		Building services; educational services; personnel supply and government agencies; hospitals; general merchandise stores; business and health services	\$13,560e \$18,240	Above Average
Landscaping and Groundskeeping Workers	R	Landscape or maintain grounds of property using hand or power tools or equipment. May include sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, sprinkler installation, and installation of masonry wall units.	Apprent. ST OJT		Agricultural services; amusement and recreation services; local government agencies; real estate managers, developers; educational services	\$15,140e \$20,300	Above Average
Maids and Housekeeping Cleaners	RCS	Perform light cleaning duties to maintain private households or commercial establishments, such as hotels, restaurants, and hospitals, in a clean and orderly manner; making beds, replenishing linens, cleaning rooms and halls & vacuuming.	Apprent. ST OJT		Hotels and motels; hospitals; building services; nursing and personal care facilities; real estate managers; education services	\$12,620e \$16,270	Average
Pest Control Workers	RC	Spray or release chemical solutions or toxic gases and set traps to kill pests and vermin, such as mice, termites, and roaches, that infest buildings and surrounding areas.	Mod. OJT	L	Building services; self-employed	\$17,690e \$25,310	Above Average
Tree Trimmers & Pruners	RA	Cut away dead or excess branches from trees or shrubs to maintain right-of-way for roads, sidewalks, or utilities, or to improve appearance, health, and value of tree. Prune or treat trees or shrubs. May fill cavities in trees to promote healing and prevent deterioration.	Apprent. ST OJT		Government		Above Average

Personal Care & Service Occupations



This cluster includes occupations pertaining to providing personal services to individuals. People in these occupations usually have interests and skills in “people.” Most must serve their clients, customers, and the general public with good speaking, listening, and interpersonal skills.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Amusement & Recreation Attendants	RCE	Perform variety of duties at amusement or recreation facility. May schedule use of facilities, maintain and provide equipment to participants of sporting events or recreational pursuits, or operate amusement concessions and rides.	ST OJT		Amusement and recreation services such as golf courses, bowling alleys, pool halls; government agencies; commercial sports	\$12,410e \$15,310	Above Average
Barbers	RSE	Provide barbering services, such as cutting, trimming, shampooing, and styling hair, trimming beards or shaving.	Apprent. PS Voc.	L	Barber shops; self-employed	\$18,040e \$30,640	Below Average
Child Care Workers	SA	Attend to children at schools, businesses, private households & child care institutions. Perform a variety of tasks such as dressing, feeding, bathing & overseeing play.	Apprent. ST OJT		Child care services; religious organizations; self-employed; amusement & recreational services; hospitals; residential care facilities; government and social service agencies	\$13,310e \$17,410	Average
Fitness Trainers and Aerobics Instructors	SRE	Instruct or coach groups or individuals in exercise activities & the fundamentals of sports. Demonstrate techniques & methods of participation. Observe participants & inform them of corrective measures needed to improve their skills.	PS Voc.	C	Civic and social associations; amusement and recreation; hospitals; eating and drinking places	\$15,340e \$26,210	Above Average
Flight Attendants	ESA	Work to insure the safety and comfort of airline passengers; give information, and serve food and drinks.	LT OJT		Airline companies	\$17,700e \$30,500	Above Average
Hairdressers, Hairstylists & Cosmetologists	EAS	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.	Apprent. PS Voc.	L	Beauty shops; self-employed; general merchandise stores	\$14,410e \$23,430	Average
Nonfarm Animal Caretakers	R	Feed, water, groom, bathe, exercise & care for pets & nonfarm animals, such as dogs, cats, ornamental fish or birds, zoo or circus animals, and mice. May keep records of feedings, treatments & animals received or discharged. May clean, disinfect & repair cages, pens, or fish tanks.	Apprent. ST OJT		Animal shelters; pet stores; pet grooming & boarding businesses	\$14,040e \$18,840	Above Average
Personal and Home Care Aides	SR	Assist elderly or disabled adults with daily living activities at the person's home or in a daytime non-residential facility. May include keeping house (making beds, doing laundry, washing dishes) and preparing meals.	ST OJT		Residential and nursing care facilities; home health care services; social services; government agencies	\$14,550e \$17,190	Above Average

CAREER BRIEFS / PROFILES

Recreation Workers	SAR	Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts & crafts, sports, games, music, dramatics, social recreation, camping & hobbies, taking into account the needs & interests of individuals.	Bach.	Government agencies; civic and social associations; nursing and personal care facilities; amusement and recreation parks and services	\$13,800e \$20,650	Above Average
Tour Guides and Escorts	SE	Escort individuals or groups on sightseeing tours or through places of interest, such as industrial establishments, public buildings, and art galleries.	Mod. OJT	Museums; historical sites; travel agencies	\$13,570e \$17,090	Above Average
Ushers, Lobby Attendants, and Ticket Takers	SCE	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.	ST OJT	Theaters	\$12,540e \$14,260	Above Average

Sales & Related Occupations



This cluster includes occupations pertaining to selling goods and services, and purchasing commodities and property for resale, including the wholesale and retail markets. People in these occupations usually have interests and skills in “people” and often are persuasive in nature. They are skilled in speaking and listening, and they must effectively serve their clients and customers.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Advertising Sales Agents	ECS	Sell or solicit advertising, including graphic art, advertising space in publications, custom made signs, or TV & radio advertising time. May obtain leases for outdoor advertising or persuade retailer to use sales promotion display items.	Mod. OJT		Printing and publishing companies; communications and advertising companies; mailing & reproduction services; public relations & management firms	\$22,640e \$44,730	Average
Cashiers	CER	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.	ST OJT		Food stores; merchandise and department stores; auto dealers and service stations; eating and drinking places; building materials & garden supplies; apparel and furniture stores; recreation and laundry services; government agencies and business services	\$12,560e \$16,190	Average
Counter & Rental Clerks	CER	Receive orders for repairs, rentals, and services. May describe available options, compute cost, and accept payment.	ST OJT		Laundries and cleaners; auto dealers, auto repair & service stations; wholesale companies selling hardware, plumbing, electrical supplies; equipment rental and video rental stores; building materials & garden supplies; general merchandise and food stores	\$14,270e \$23,300	Above Average
First-Line Supervisors/Managers of Retail Sales Workers	ECS	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.	Apprent. Wk. Exp.		Grocery, clothing, general merchandise, electronics & department stores; automobile dealerships, parts departments	\$20,810e \$33,970	Average
Insurance Sales Agents	ESC	Sell life, property, casualty, health, automotive, or other types of insurance. May refer clients to independent brokers, work as independent broker, or be employed by an insurance company.	Bach.	L	Insurance agencies	\$23,720e \$49,720	Average
Retail Salespersons	ES	Sell merchandise, such as furniture, motor vehicles, appliances, or apparel in a retail establishment.	ST OJT		General merchandise and retail stores; apparel, accessory goods; building & garden supply stores; furniture & home furnishing stores; auto dealers & service stations; food stores	\$14,190e \$21,810	Average
Sales Engineers	ERI	Sell business goods or services, the selling of which requires a technical background equivalent to a baccalaureate degree in engineering.	Bach.		Machinery, equipment, & supplies wholesalers; automotive rental & leasing companies; telecommunication carriers & resellers	\$40,720e \$69,920	Above Average
Sales Representatives, Wholesale and Manufacturing, except Technical & Scientific Products	ESC/R	Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.	Mod. OJT		Wholesale electronic markets; grocery wholesalers; machinery, equipment & supplies companies; construction supplies wholesale businesses	\$25,170e \$48,750	Average
Securities, Commodities and Financial Service Sales Agents	ECS	Buy and sell securities in investment and trading firms, or call upon businesses and individuals to sell financial services. Provide financial services, such as loan, tax, and securities counseling. May advise securities customers about such things as stocks, bonds, and market conditions.	Bach		Security brokers and dealers; banks; personal credit institutions; self employed	\$34,790e \$94,490	Above Average

CAREER BRIEFS / PROFILES

Office & Administrative Support Occupations



This cluster includes occupations pertaining to preparing, transcribing, and preserving written and electronic communications and records, including the collection, gathering, and dissemination of information. People in these occupations usually have interests and skills in “data” and operate various types of office equipment. They often participate as a member of a team, and they perform their duties with close attention to detail and a high level of accuracy. Those interacting with the public need good communication skills.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Bill and Account Collectors	CE	Locate & notify customers of delinquent accounts by mail, telephone, or personal visit to solicit payment. Receive payment & post amount to customer's account; prepare statements to credit department; initiate repossession proceedings or service disconnection; keep records.	ST OJT		Personal credit institutions; hospitals and medical offices; credit collections agencies; wholesale trades; banks and business services; communication companies; general merchandise stores	\$20,680e \$27,330	Above Average
Bookkeeping, Accounting and Auditing Clerks	CE	Compute, classify, and record numerical data to keep financial records complete. Perform routine calculating, posting, and verifying duties to obtain primary financial data used to maintain accounting records. May also check work pertaining to business transactions recorded by others.	Mod. OJT		Wholesale companies; banks and businesses; food stores; accounting firms; government agencies; auto dealers, religious organizations; hospitals and medical offices	\$20,330e \$28,480	Below Average
Customer Service Representatives	N/A	Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints.	Apprent. Mod. OJT		Banks; telephone and communication companies; food stores; business and personnel supply services; health insurance companies; wholesale companies; printing companies; utilities & sanitary services; general merchandise stores	\$18,030e \$28,000	Above Average
Executive Secretaries & Administrative Assistants	CE	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 & scheduling meetings. May train & supervise others.	Apprent. Mod. OJT		Religious organizations; banks; government, business and personnel supply services; wholesale trades; computer and engineering firms; hospitals; education services	\$24,340e \$33,230	Average
First-Line Supervisors/Managers of Office and Administrative Support Workers	ECS	Supervise and coordinate the activities of clerical and administrative support workers.	Apprent. Wk. Exp.		State & local governments; educational services; wholesale trades; trucking and warehousing; industrial machinery & equipment manufacturers; medical offices & clinics; banks and legal services; building contractors; auto dealers; real estate, business services	\$27,180e \$41,910	Average
Interviewers, except Eligibility and Loan	CSE	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.	ST OJT.		Hospitals; business and research services; management & public relations firms; medical offices & clinics	\$18,150e \$23,250	Above Average
Legal Secretaries	CE	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.	Apprent. PS Voc.		Legal firms and services	\$22,690e \$32,570	Above Average
Medical Secretaries	CE	Perform secretarial duties using knowledge of medical terminology and hospital, clinic, or laboratory procedures. Schedule appointments, bill patients, and compile & record medical charts, reports, and correspondence.	PS Voc.		Offices and clinics of medical doctors and dentists; hospitals	\$19,480e \$25,040	Average
Receptionists and Information Clerks	CES	Answer inquiries and obtain information for general public, customers, visitors, & others. Provide information regarding activities conducted at establishment; location of departments, offices, and employees within organization.	ST OJT		Medical and dental offices and clinics; wholesale trades; hospitals; government agencies; real estate agents & managers; educational, recreation and business services	\$16,060e \$21,740	Above Average
Reservation and Transportation Ticket Agents	CES	Make & confirm reservations & sell tickets to passengers 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 & groups to provide travel informations.	ST OJT		Airline companies; hotels & motels; transport and intercity transit services	\$15,170e \$28,170	Above Average
Tellers	CE	Receive and pay out money. Keep records of money and negotiable instruments involved in a financial institution's various transactions.	Apprent. ST OJT		Commercial and savings banks; credit unions; computer companies; business services	\$19,070e \$22,490	Average

CAREER BRIEFS / PROFILES

Farming, Fishing & Forestry Occupations



This cluster includes occupations pertaining to the production, propagation, and gathering of animals, animal products, and plants, and with providing related services. People in these occupations usually have interests and skills in “things” and “data.” They generally value working outdoors, in natural settings and with ecological systems. They often work independently and have self-management skills.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Agricultural Equipment Operators	R	Drive & control farm equipment to till soil, plant, cultivate, and harvest crops. May perform tasks such as crop baling or hay bucking. May operate equipment for husking, shelling, threshing, and ginning.	Apprent. Mod. OJT		Farms and agricultural production	\$14,710e \$19,040	Below Average
Farmworkers, Farm and Ranch Animals	RCI	Attend to live farm, ranch, or aquacultural animals such as cattle, sheep, swine, goats, horses and other equines, poultry, finfish, shellfish, and bees -- animals produced for their products, such as meat, fur, skins, feathers, eggs, milk.	Apprent. ST OJT		Farms; agricultural and food production	\$13,430e \$18,180	Below Average
Log Graders and Scalers	CRE	Grade logs or estimate the marketable content or value of logs or pulpwood in sorting yards, millpond, log deck, or similar locations. Inspect logs for defects or measure logs to determine volume.	Apprent. Mod. OJT		Lumber and logging companies; paper companies	\$21,380e \$26,660	Below Average
Logging - Tractor Operators	RES	Drive logging tractor or wheeled vehicle to fell trees; skid, load, unload, or stack logs; or to pull stumps or clear brush.	Apprent. Mod. OJT		Agricultural (crop) production; lumber and logging companies; paper companies	\$17,630e \$27,110	Below Average

Construction & Extraction Occupations



This cluster includes occupations pertaining to working on materials at a specific site, which will change over time. People in these occupations usually have interests and skills in “things” and use a variety of tools to perform their duties. Depending on the specific occupation, they must have a certain degree of physical strength and/or mechanical aptitude. Most have to effectively manage their time, materials, and resources to meet construction deadlines.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Brickmasons and Blockmasons	R	Lay & bind building materials, such as brick, structural tile, concrete block, cinder block, glass block, and terra-cotta block, with mortar & other substances to construct or repair walls, partitions, arches, sewers, and other structures.	Apprent. LT OJT		Masonry, stonework and plastering contractors; building and special trades contractors; self-employed	\$24,700e \$34,760	Average
Carpenters	R	Construct, erect, install, or repair structures & fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding & rafters; wood stairways, window & door frames, and hardwood floors. May install cabinets, siding, drywall and batt or roll insulation.	Apprent. LT OJT		Residential and non-residential building contractors; self-employed; lumber & wood products companies	\$21,540e \$29,230	Average
Cement Masons and Concrete Finishers	R	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.	Apprent. Mod. OJT		Building & highway contractors; concrete product manufacturers	\$18,990e \$27,130	Above Average
Construction and Building Inspectors	CRI/E	Inspect structures using engineering skills to determine structural soundness and compliance with specifications, building codes & other regulations. Inspections may be general or specific, such as electrical systems or plumbing.	Apprent. Wk. Exp.	L	Local and state government; engineering and architectural firms; research & testing services	\$31,220e \$42,590	Average
Construction Laborers	RC	Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate tools of all types, clean & prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, clean up debris, and remove asbestos, lead & other hazardous wastes.	Apprent. Mod. OJT		Building & highway contractors; utility companies; government	\$15,870e \$21,740	Above Average
Drywall and Ceiling Tile Installers	R	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.	Apprent. Mod. OJT		Masonry, stonework, and plastering companies; residential, non-residential building and special trades contractors; self-employed	\$22,460e \$29,890	Above Average
Electricians	RI	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.	Apprent. LT OJT	R	Electrical and residential building contractors; textile, rubber and tobacco manufactures; plumbing, heating, air conditioning and utilities services; heavy construction; government agencies; self-employed	\$25,860e \$35,180	Average

CAREER BRIEFS / PROFILES

Hazardous Materials Removal Workers	N/A	Identify, remove, pack, transport, or dispose of hazardous materials, including asbestos, lead-based paint, waste oil, fuel, transmission fluid, radioactive materials, contaminated soil, etc. Usually requires specialized training & certification. May operate earth-moving equipment or trucks.	Apprent. Mod. OJT	R	Personnel supply services; special trades contractors; business services	\$19,700e \$26,730	Above Average
Painters, Construction and Maintenance	R	Paint walls, equipment, buildings, bridges & 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.	Apprent. Mod. OJT		Painting companies; self-employed; building contractors; personnel supply and government services	\$18,930e \$26,160	Average
Plumbers, Pipefitters and Steamfitters	R	Assemble, install, alter & repair pipelines or systems that carry water, steam, air, or other liquids or gases. May install heating/cooling equipment & mechanical control systems.	Apprent. LT OJT	L	Plumbing, heating, and air conditioning contractors; heavy construction and special trades contractors; local government	\$23,330e \$31,850	Average
Roofers	R	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.	Apprent. Mod. OJT		Roofing, siding and sheet metal contractors; self-employed; masonry, plastering and general building contractors	\$19,500e \$25,740	Average
Sheet Metal Workers	R	Fabricate, assemble, install & repair sheet metal products & equipment, such as ducts, control boxes, drainpipes & furnace casings. May set up & operate fabricating machines to cut, bend, and straighten sheet metal; join sheet metal parts; inspect, assemble, and smooth seams and joints.	Apprent. Mod. OJT		Plumbing, heating, & air conditioning contractors; residential building contractors; roofing, siding, and sheet metal work contractors; fabricated metal & structural metal, and industrial machinery manufacturers	\$21,210e \$29,220	Average
Tile and Marble Setters	RC	Apply hard tile, marble, and wood tile to walls, floors, ceilings, and roof decks.	Apprent. LT OJT		Contractors	\$19,030e \$29,860	Above Average

Installation, Maintenance & Repair Occupations



This cluster includes occupations pertaining to the adjustment, maintenance, part replacement, and repair of tools, equipment, and machines. People in these occupations usually have interests and skills primarily in “things.” They are skilled in problem solving and often must be creative thinkers and decision-makers. They must manage their time and materials effectively, and they value accuracy and attention to details.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Aircraft Mechanics and Service Technicians	RC	Diagnose, adjust, repair, or overhaul aircraft engines and assemblies, such as hydraulic and pneumatic systems.	Apprent. PS Voc.		Major airlines, airports and flying services; government agencies	\$29,340e \$43,130	Above Average
Automotive Service Technicians and Mechanics	RC	Diagnose, adjust, repair, or overhaul automotive vehicles.	Apprent. PS Voc.	L	Automotive dealers and service stations; auto repair shops; wholesale companies selling gasoline & oil products; commercial sports; automobile services	\$21,920e \$36,390	Average
Bus and Truck Mechanics, and Diesel Engine Specialists	RC	Diagnose, adjust, repair, or overhaul trucks, buses, and all types of diesel engines. Include mechanics working primarily with automobile diesel engines.	Apprent. PS Voc.	L	Trucking and warehousing companies; education services; wholesale companies selling motor vehicles, parts and machinery, equipment, supplies; auto dealers, rentals and repair shops; heavy construction contractors; government agencies	\$25,050e \$34,860	Average
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	ERC	Supervise and coordinate the activities of mechanics, installers, and repairers.	Wk. Exp.		Automotive repair & maintenance businesses; building equipment contractors; automobile dealerships; automotive parts stores; government	\$33,770e \$50,380	Average
Heating, Air Conditioning, and Refrigeration Mechanics	RC	Install or repair heating, central air conditioning, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.	Apprent. LT OJT	L	Plumbing, heating, air conditioning businesses; wholesale companies selling hardware, plumbing & heating equipment; textile products	\$22,730e \$31,850	Above Average

CAREER BRIEFS / PROFILES

Maintenance and Repair Workers, General	RC	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.	Apprent. Mod. OJT		Textile products manufacturers; real estate agents & services, wholesale companies; government agencies; food, drug and chemical companies; electrical, electronic equipment manufacturers; hotels and motels; rubber, paper and fabricated metal products manufacturers; variety of businesses and industries	\$21,410e \$31,400	Average
Manufactured Building and Mobile Home Installers	R	Move or install mobile homes or prefabricated buildings.	Mod. OJT	L	Special trades contractors; building & garden supplies	\$12,960e \$20,150	Above Average
Mobile Heavy Equipment Mechanics, except Engines	R	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.	PS Voc.	L	Wholesale companies; equipment rental companies; highway and heavy construction contractors; lumber products manufacturers; government agencies	\$26,560e \$34,300	Average
Security and Fire Alarm Systems Installers	N/A	Install, program, maintain, and repair security and fire alarm wiring and equipment. Ensure that work is in accordance with relevant codes.	PS Voc.	C	Building equipment contractors; investigation & security services	\$24,390e \$32,500	Above Average
Telecommunications Line Installers and Repairers	R	String and repair telephone and television cable, including fiber optics and other equipment for transmitting messages or television programming.	LT OJT		Communication companies; heavy construction companies; electrical contractors	\$22,490e \$33,050	Above Average

Production Occupations



This cluster includes occupations pertaining to production tasks — with the setup, operation, adjustment, and tending of machines, with hand production work, and/ or with tasks requiring a high degree of precision. People in these occupations often have interests and skills in “things” and value attention to details and specifications.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Bakers	RAE/R	Mix & bake ingredients according to recipes to produce breads, rolls, cookies, cakes, pies, pastries, or other baked goods.	Apprent. LT OJT		Food stores; eating and drinking places; general merchandise and retail stores; bakeries	\$14,240e \$19,980	Average
Computer-Controlled Machine Tool Operators, Metal	RC	Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.	Apprent. Mod. OJT		Industrial machinery and equipment companies; electronic, electric and transportation equipment companies; fabricated metal products manufacturers	\$22,890e \$31,650	Average
First-Line Supervisors/Managers of Production and Operating Workers	ERC	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.	Wk. Exp.		Furniture, plastics, & pharmaceutical manufacturers; fabric mills; printers	\$28,790e \$44,370	Below Average
Laundry and Dry-Cleaning Workers	RC	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.	Apprent. Mod. OJT		Laundry and cleaning businesses; hotels and motels; nursing and personal care and residential care facilities; hospitals	\$13,420e \$17,240	Average
Machinists	RIC	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.	Apprent. LT OJT		Fabricated metal products and industrial machinery, electronic, electrical equipment manufacturers; transportation equipment companies; wholesale companies selling construction materials, metals, machinery, equipment & supplies	\$21,820e \$31,890	Average
Meat, Poultry, and Fish Cutters and Trimmers	RC	Use hand tools to perform routine cutting and trimming of meat, poultry, and fish.	Apprent. ST OJT		Meat product companies; wholesale companies; food stores	\$15,120e \$17,750	Average
Packaging & Filling Machine Operators & Tenders	RC	Operate or tend machines to prepare industrial or consumer products for storage or shipment. Include cannery workers who pack food products.	Apprent. ST OJT		Chemical products and drug companies; business and personnel supply services; food products, textile and tobacco products manufacturers; wholesale companies selling equipment, apparel, chemicals	\$15,990e \$25,550	Average
Painters, Transportation Equipment	RC	Operate or tend painting machines to paint surfaces of transportation equipment, such as automobiles, buses, trucks, trains, boats, and airplanes. Includes painters in auto body repair facilities.	Apprent. Mod. OJT		Auto repair shops; automobile dealerships; motor vehicle body & trailer manufacturers	\$22,430e \$38,230	Average

CAREER BRIEFS / PROFILES

Team Assemblers	N/A	Work as part of a team having responsibility for assembling an entire product or component. Team assemblers can perform all tasks conducted by the team in the assembly process & 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 work.	Apprent. Mod. OJT		Manufacturers of furniture, auto parts, electronic & electric equipment, medical equipment & supplies, and heavy machinery	\$16,950e \$24,110	Below Average
Water & Liquid Waste Treatment Plant and System Operators	RC	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.	Apprent. LT OJT	C	Government agencies; utilities and sanitary services; chemical products manufacturers	\$23,280e \$31,430	Average
Welders, Cutters, Solderers & Brazers	RC	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.	Apprent. LT OJT		Industrial machinery and equipment companies; fabricated metal products and transportation equipment manufacturers; plumbing, heating, a/c contractors; wholesale companies	\$22,490e \$30,820	Above Average

Transportation & Material Moving Occupations



This cluster includes occupations pertaining to operating and controlling equipment used to move people and/or materials. People in these occupations usually have interests and skills in “things.” They have the mechanical aptitude to operate the various modes of transportation and perform minor repairs. They must manage their time and materials effectively to keep their equipment operable.

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Airline Pilots, Copilots and Flight Engineers	REI/C	Pilot and navigate regularly scheduled multi-engine aircraft to transport cargo and people.	Bach.	L	Airline companies; airports	\$57,600e \$104,480	Above Average
Bus Drivers, School	RS	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.	ST OJT	L	School systems	\$15,860e \$20,130	Average
Bus Drivers, Transit and Intercity	RSC	Drive bus or motor coach, including regular route operations, charters, and private carriage. May assist passengers with baggage. May collect fares or tickets.	Mod. OJT	L	Local suburban intercity and rural bus transportation companies; local government; charter services	\$15,880e \$24,360	Average
Commercial Pilots	REI/C	Pilot and navigate the flight of small fixed or rotary winged aircraft, primarily for the transport of cargo and passengers.	PS Voc.	L	Airlines	\$38,220e \$76,280	Average
Conveyor Operators and Tenders	RC	Control or tend conveyors or conveyor systems to move materials from stockpiles, departments or vehicles.	Apprent. ST OJT		Airline companies; wholesale trades; food and furniture manufacturers; textile, rubber and lumber products manufacturers	\$18,860e \$27,660	Above Average
Driver/Sales Workers	ERS	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.	ST OJT		Trucking & warehousing companies; wholesale companies; eating and drinking places; airlines, food and retail stores; building materials, garden supplies and furniture stores	\$12,620e \$22,510	Below Average
Industrial Truck and Tractor Operators	RC	Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.	Apprent. ST OJT	L	Warehouses; building material & supplies companies; courier businesses; trucking companies; grocery wholesalers; fabric mills	\$19,090e \$26,350	Below Average
Laborers & Freight, Stock & Material Movers, Hand	RC	Manually move freight, stock, or other materials or perform other unskilled general labor.	Apprent. ST OJT	L	Temporary services; warehouses; grocery wholesalers; furniture manufacturers; government	\$15,030e \$21,610	Below Average
Packers and Packagers, Hand	RC	Pack or package by hand a wide variety of products and materials.	ST OJT		Grocery stores; mills & manufacturers of plastics products, furniture & paper products	\$13,990e \$18,730	Average
Refuse and Recyclable Material Collectors	RC	Collect and dump refuse or recyclable materials from containers into truck. May drive truck.	ST OJT		Government & private waste collection, treatment & disposal companies	\$16,290e \$21,960	Average
Truck Drivers, Heavy and Tractor-Trailer	R/RC	Drive a tractor-trailer combination or heavy truck to transport and deliver goods, livestock, or materials.	Apprent. Mod. OJT	L	Trucking & warehousing services; wholesale companies; stone, clay, glass companies; food stores; lumber products; building & garden supplies	\$23,100e \$34,250	Above Average
Truck Drivers, Light or Delivery Services	RC	Drive trucks or vans to deliver and pick up merchandise within a local area; may load and unload.	Apprent. ST OJT	L	Trucking & warehousing services; airline companies; wholesale companies; furniture, building materials & garden supplies; eating & drinking places; retail stores	\$16,950e \$26,470	Above Average