

Career Clusters

The training and/or education requirements for all of the clusters are the same. Entry-level positions typically require a high school diploma, GED and/or on-the-job training. Technical/skilled positions may require an associate degree or apprenticeship. Professional positions may require a bachelors, masters or doctoral degree.

Cluster: Agriculture Science and Technology Careers

Typical Characteristics: Nature lover. Curious about the physical world and interested in plants and animals. Physically active. Like to learn, investigate or solve problems.

Sample Occupational Areas: earth sciences--botanist, geologist; environmental sciences--chemist, microbiologist, urban planner, landscape architect; marine sciences--fish farmer, aquatic geologist; plant science--nursery worker, floral designer, horticulturist, forest ranger; animal science--veterinarian, gamekeeper, biochemist.

Selected Examples:

Agricultural Mechanics		
Entry Level	Technical/Skilled	Professional
Farm Equipment Sales	Agricultural Fabrication	Agricultural Engineer
Farm Machine Operator	Diesel Mechanic	Agricultural Extension Agent
Farm Mechanic	Gas Engine Mechanic	Construction Contractor

Animal and Veterinary Science		
Entry Level	Technical/Skilled	Professional
Animal Caretaker	Animal Equipment Sales	Agriculture Teacher
Veterinary Attendant	Veterinary Assistant	Veterinarian
Ranch Worker	Cattle Buyer	Animal Scientist

Crop and Soil Science		
Entry Level	Technical/Skilled	Professional
Agricultural Worker	Equipment Operator	Agricultural Scientist
Farm Laborer	Forest Conservation Worker	Agri-Engineer
Greenhouse Keeper	Plant Grower/Retailer	Landscape Architect

Cluster: Art, Communications, and Media Careers

Typical Characteristics: Creative thinker. Imaginative, innovative, original. Likes to communicate ideas.

Sample Occupational Areas: communications--interpreter/translator, public relations specialist, radio/television announcer or newscaster, reporter/correspondent, technical or creative writer, editor, journalist, computer graphics technician; performing arts--actor, director, producer, dancer, choreographer, model, musician; visual arts--fashion designer, architect, floral designer, florist, graphic artist or designer, industrial or interior designer, merchandise display technician, motion picture camera operator, photographer, set designer, visual artist.

Selected Examples:

Fine Arts, Graphic Arts and Printing Technology		
Entry Level	Technical/Skilled	Professional
Image Converter	Dark Room Assistant	Animator
Sign maker	Layout Artist	Graphic Designer
Lab Technician	Landscape Artist	Architect

Dance		
Entry Level	Technical/Skilled	Professional
Dancer	Teacher Assistant	Choreographer
Dance Teacher	Costume Designer	Dance Studio Owner
Show Producer	Dance Center Manager	Producer

Instrumental Music		
Entry Level	Technical/Skilled	Professional
Recording Technician	Recording Engineer	Recording Artist
Community Ensemble Conductor	Symphony Orchestra Manager	Symphony Orchestra Conductor
Music Store Employee	Piano Tuner or Technician	Music Store Owner Pianist/organist for local church

Cluster: Business and Marketing Careers

Typical Characteristics: Leader. Planner/organizer. Likes to work with numbers or ideas. Likes things neat and orderly. Enjoys carrying through with an idea and seeing the end product.

Sample Occupational Areas: executive, administrative and managerial--accountant/auditor, construction contractor or manager, education administrator, health services administrator, hotel manager, personnel, training or labor relations specialist, property and real estate manager, restaurant and food service manager, retail sales manager; marketing and sales--cashier, insurance agent, real estate agent, broker or appraiser, retail sales worker, stockbroker, securities and financial services, travel agent; computer, mathematical and operations research occupations--computer systems analyst, mathematician, statistician; administrative and support--adjuster, investigator, collection worker, bank teller, bookkeeper, accountant, auditor, computer operator, court clerk, court reporter, dispatcher, file clerk, general office clerk, postal worker, receptionist, secretary, word processor, data entry operator.

Selected Examples:

Accounting		
Entry Level	Technical/Skilled	Professional
Accounting Assistant	Accounting Clerk	Accountant (CPA)
Bookkeeper	Payroll Clerk	Auditor
Adjustment Clerk	Accounts Payable/Receivable Clerk	Accounting Programmer

Business Information Systems		
Entry Level	Technical/Skilled	Professional
Insurance Clerk	Insurance Underwriter	Insurance Agency Owner
Receptionist	Office Manager	Business Teacher
File Clerk	Administrative Assistant	Personnel Supervisor

Computer Information Systems		
Entry Level	Technical/Skilled	Professional
Data Entry Clerk	Word Processor	Programmer
Telephone Operator	Telecommunications Technician	Technical Writer
General Office Clerk	Computer Technician	Systems Analyst

Cluster: Health Science Technology Careers

Typical Characteristics: Care for people or animals that are sick or help them stay well. Interested in diseases and how the body works. Enjoy observing patients and looking for changes in how they are doing. Enjoy working in a lab.

Sample Occupational Areas: health assessment and treating--activities therapist, dietitian, nutritionist, occupational therapist, pharmacist, physical, respiratory, or recreational therapist, registered nurse, speech therapist, audiologist; health services--dental assistant, medical assistant, nursing and psychiatric aide; health technologies--chiropractor, dentist, optometrist, physician, podiatrist, veterinarian, dental hygienist, dialysis technician, electroencephalogram (EEG) or electrocardiograph (EKG) technician, emergency medical technician, licensed practical nurse, medical records technician, optician, radiologic or ultrasound technologist.

Selected Examples:

Biomedical Technology		
Entry Level	Technical/Skilled	Professional
Lab assistant	Laser Technician	Biomedical Engineer
	Computer Technician	Systems Engineer
Lab Equipment Cleaner	Electrical Technician	

Health Services		
Entry Level	Technical/Skilled	Professional
Ambulance Driver	Licensed Practical Nurse	Registered Nurse
Dental Assistant	Dental Lab Technician	Dentist
Health Record Technician	Emergency Medical Technician	Physician

Medical		
Entry Level	Technical/Skilled	Professional
Home Health Aide	Physician's Assistant	Pediatrician
Hospital Aide	EEK Technician	Cardiologist
Physical Therapist Aide	Physical Therapist	Anesthesiologist

Cluster: Human Development, Management and Service Careers

Typical Characteristics: Friendly, open, outgoing, understanding and cooperative. Like to work with people to solve problems. Want to make things better for other people.

Sample Occupational Areas: Child development, education and services--child care worker, teacher, teacher aide, child protective services case worker; hospitality--cook, chef, baker, catering manager, hotel/motel manager, food services director; nutrition and wellness--dietitian, consumer products specialist, food production chemist; environmental design--interior or set designer; consumer and resource management--credit counselor, product demonstrator, personal shopper, extension home economist; social scientist--foster parent, elder care aide, retirement facility administrator, recreation supervisor; textiles and apparel--alteration specialist, visual displayer, fashion buyer or illustrator, wardrobe supervisor.

Selected Examples:

Child and Family Services		
Entry Level	Technical/Skilled	Professional
Nursery School Assistant	Child Care Director	Child Psychologist
Domestic Worker	Human Services Worker	Case Manager
Teacher's Aide	Substitute Teacher	Teacher

Education		
Entry Level	Technical/Skilled	Professional
Social Service Aide	Computer Assistant	College Professor
Special Education Aide	Foster Parent	School Administrator
Child Care Aide	Preschool Teacher	Counselor

Hospitality Services		
Entry Level	Technical/Skilled	Professional
Maid/Housekeeper	Reservations Clerk	Hotel Manager
Cook	Food Technologist	Dietitian/Nutritionist
Dining Room Attendant	Preparation Cook	Chef

Cluster: Industrial and Engineering Technology Careers

Typical Characteristics: Mechanically inclined. Like to use your hands and build things. Are curious about how things work.

Sample Occupational Areas: engineers--aerospace, chemical, civil, electrical/electronics, industrial, mechanical, nuclear, petroleum; architects and surveyors--architect, landscape architect, surveyor, mechanics--aircraft or automotive mechanics; metalworking and plastics--machinist, jeweler, tool and die maker, welder; printing--bindery worker, typesetter, plate maker, press operator, graphics technician; construction--bricklayer, carpenter, carpet installer, drywall worker, electrician, glazier, insulation worker, painter/paperhanger, plasterer, plumber/pipefitter, roofer, sheet metal worker; plant and systems operators--power generating or water treatment plant operator, stationary engineer, instrumentation technician; technologists (except health)--semiconductor manufacturer, broadcast technician, computer programmer, drafter, engineer technologist, telecommunications technician.

Selected Examples:

Automotive and Transportation		
Entry Level	Technical/Skilled	Professional
Auto Service Center Attendant	Diagnostician	Automotive Engineer
Brake Technician	Parts Store Manager	Manufacturing Representative
Detailer	Auto Collision Technician	Body Shop Owner/Manager

Construction		
Entry Level	Technical/Skilled	Professional
Roofer's Helper	Roofer	Builder/Developer
Carpenter's Apprentice	Carpenter	Construction Supervisor
Journeyman Plumber	Licensed Plumber	Master Plumber

Industrial Technology		
Entry Level	Technical/Skilled	Professional
Computer Operator	Computer Maintenance	Architect
Technician's Assistant	Construction Foreman	Construction Superintendent
Drafter Trainee	Designer	Civil Engineer

Cluster: Personal and Protective Services Careers

Typical Characteristics: Like to work with people in social, recreational and leisure environments. Want to help others. Responsible. Like to travel. Like to work with your mind as well as your hands.

Sample Occupational Areas: legal occupations--court reporter, paralegal, lawyer, judge; protective services--corrections officer, firefighter, military personnel; materials and people moving--bus or truck driver, ticket agent, flight attendant, aircraft pilot; social services and rehabilitation--social worker, probation officer, case worker; personal and building service--barber, cosmetologist, housekeeper, custodian, pet groomer, dry cleaner.

Selected Examples:

Cosmetology		
Entry Level	Technical/Skilled	Professional
Manicurist	Beauty School Owner	Cosmetology Inspector
Shampoo Technician	Hairdresser	Color/Cosmetics Chemist
Nail Technician	Makeup Artist	Teacher

Government, County and City Services		
Entry Level	Technical/Skilled	Professional
Military Service	Military Service	Military Officer
Postal Clerk	Postmaster	Public Administrator
Hazardous Waste Technician	Surveyor	Parks and Recreation Manager

Legal Services		
Entry Level	Technical/Skilled	Professional
Courier	Court Reporter	District/State Attorney
File Clerk	Legal Secretary	Defense Attorney
Receptionist	Paralegal	Tax, Family, Corporate Law Corporate