

How can career clusters help me?

Chapter 5

Types of Careers

Chapter Objectives

After studying this chapter, you will be able to

- **identify** 16 career clusters.
- **describe** a wide range of pathways and career options within each career cluster.
- **determine** the requirements for and opportunities in one or more careers that interest you.

Key Concepts

- Knowing the growth potential of various industries and occupations can help you choose a career that will be in demand.
- Each career cluster has a range of pathways and career options to consider.

Key Terms

paraprofessional
logistics
e-marketing

paraprofessional

A trained aid with one to three years of advanced training who assists professionals.

logistics

The process of managing, controlling, and moving goods, energy, information, services, or people from a point of origin to a destination in the most timely and cost-efficient manner possible.

e-marketing

Computer technologies combined with marketing and sales of goods and services.

Exploring Careers

In this chapter, you will read about the 16 career clusters identified by the U.S. Department of Education. The careers in each cluster are based on common interests and skills. If one career interests you, it is likely that other careers in the same cluster will also interest you.

A variety of jobs requiring different levels of education and training exist within each cluster. You may notice that some jobs belong in more than one cluster. For example, *food scientist* belongs in the Agriculture, Food, and Natural Resources cluster and the Science, Technology, Engineering, and Mathematics cluster.

When you find a career that appeals to you, you will want to find out more about it. You may want to research several career paths. Keep your interests in mind. This will help you choose a career that you will enjoy.

You learned in Chapter 1 that transferable skills can be used successfully in many different careers. For example, foodservice workers, office assistants, and salespeople are just a few of the workers who must know how to schedule activities. Customer service representatives, waiters, and nurses must have good listening skills. If you begin a career and your interests change, many skills used in one career can be used in another.

Using the techniques you learned in Chapter 4, begin exploring the career clusters. The *Occupational Outlook Handbook* and the O*NET contain extensive information to help guide you in choosing a career.

Job Growth

In general, employment between 2006 and 2016 is expected to increase by 15.6 million jobs. This growth will be seen in some industries and occupations much more than others. The chart in 5-1 shows the occupational areas that will experience the greatest growth of salaried and paid positions across the nation. (Your teachers may have similar information that pertains specifically to your state.)

Top 10 Areas of Largest Employment Growth, 2006–2016

Occupational Areas	Percent Job Increase	Total Jobs in 2016
Management, scientific, and technical consulting services	77.9	1,639,000
Home health care services	55.4	1,348,000
Computer systems design and related services	38.3	1,768,000
Offices of physicians	24.8	2,687,000
Employment services	18.9	4,348,000
Colleges, universities, and professional schools, public and private	14.5	3,933,000
General medical and surgical hospitals, public and private	13.9	5,679,000
Limited-service eating places	13.2	4,548,000
Local government, excluding education and hospitals	10.9	6,206,000
Elementary and secondary schools, public and private	7.6	8,983,000

Note: Covers all wage/salary positions

U.S. Department of Labor

5-1

The top 10 fast-growing occupational areas all involve positions in the services sector.

An overall picture of the sectors that make up the U.S. job market shows that the agriculture sector will offer little job growth, while the goods-producing sector will offer somewhat more. The services sector, however, currently employs the vast majority of U.S. workers and will continue to outpace the job growth of all other sectors combined.

As you examine the career clusters in this chapter, consider their potential for job growth. When an occupational area is expanding, many new workers are needed. These areas often present the greatest employment opportunities for individuals.



Your Reading

How can knowing about career clusters guide your career decisions?



Careers in this cluster involve working with plants, animals, and food processing. Power, structural, and technical systems as well as natural resources, the environment, and agribusiness are also included in this cluster.

Farmers grow crops, and ranchers tend livestock. Food scientists and technologists discover new food sources, analyze food content, and develop ways to process, preserve, package, and store food. Foresters plan and supervise the growing and using of trees. Conservationists and environmentalists work on problems regarding the responsible use of air, land, and water. They also preserve marine life and wildlife. Animal scientists study genetics, nutrition, and reproduction.

Entry-level jobs are available in this career cluster. Many technical jobs require two or more years of advanced training. Engineers, scientists, and top managers need to complete at least four years of college.

An expanding population, globalization, and an increasing public focus on diet will result in more job opportunities in this career cluster. Many specialists work for the Environmental Protection Agency, the National Park Service, and the Fish and Wildlife Service. The federal government is one of the biggest employers in this career area. Other possible employers include landscape nurseries, golf courses, mining and logging operations, and oil exploration companies.



Agriculture, Food, and Natural Resources

Pathways and Career Options

Food Products and Processing Systems	Agricultural Communications Specialist • Business-Educator • Food Scientist • Meat Processor • Toxicologist • Biochemist • Nutritionist • Dietician • Food Broker • Food Inspector • Meat Cutter-Grader • Food Meal Supervisor • Cheese Maker • Microbiologist • Produce Buyer • Bacteriologist • Food & Drug Inspector • Bioengineer • Biochemist • Food & Fiber Engineer
Plant Systems	Bioinformatics Specialist • Plant Breeder & Geneticist • Biotechnology Lab Technician • Soil & Water Specialist • Crop Farm Manager • Agricultural Educator • Plant Pathologist • Aquaculturalist • Sales Representative • Greenhouse Manager • Grower • Farmer • Rancher • Botanist • Tree Surgeon • Education & Extension Specialist • Agricultural Journalist
Animal Systems	Agricultural Educator • Livestock Producer • Aquaculturalist • Animal Caretaker • Poultry Manager • Equine Manager • Veterinarian • Veterinary Assistant • Feedlot Specialist • Animal Scientist • Embryo Technologist • Pet Shop Operator • USDA Inspector • Livestock Buyer • Feed Sales Representative • Vivarian Technician • Wildlife Biologist • Livestock Geneticist • Animal Nutritionist
Power, Structural, and Technical Systems	Machine Operator • Electronics Systems Technician • Agricultural Engineer • Heavy Equipment Maintenance Technician • Recycling Technician • Waste Water Treatment Plant Operator • Parts Manager • Welder • Machinist • Communication Technician • Agricultural Applications Software Developer • Programmer • Database Administrator • Information Lab Specialist • Engineering Specialist
Natural Resource Systems	Cartographer • Wildlife Manager • Range Technician • Ecologist • Park Manager • Environmental Interpreter • Fish & Game Officer • Fishing Vessel Operator • Logger • Forest Technician • Log Grader • Pulp & Paper Manager • Soil Geology Technician • Geologist • Mining Engineer
Environmental Service Systems	Pollution Prevention & Control Manager • Pollution Prevention & Control Technician • Environmental Sampling & Analysis Scientist • Health & Safety Sanitarian • Environmental Compliance Assurance Manager • Hazardous Materials Handler • Hazardous Materials Technician • Manager • Water Environment Manager • Water Quality Manager
Agribusiness Systems	Field Representative for Bank, Insurance Company, or Government Program • Farm Investment Manager • Agricultural Commodity Broker • Agricultural Economist • Farmer • Rancher • Feedlot Operator • Farm Manager • Livestock Rancher • Breeder • Dairy Herd Supervisor • Agricultural Products Buyer • Animal Health Products Distributor





People in this career cluster design and build roads, bridges, and buildings. They construct homes, offices, shopping centers, hospitals, and factories. Engineers make sure all structures are sound. Employees in maintenance/operations inspect and move new equipment into position. They determine the correct placement of machines in a plant, repair structures and machinery, and perform preventive maintenance. Most careers involving planning, designing, and engineering require college degrees or completion of certificate programs.

Many other workers with special training actually build, restore, repair, and

maintain the structures. These workers include roofers, bricklayers, cement masons, ironworkers, welders, glaziers, and painters. They work on-site wherever structures are built. Much of their work occurs outdoors and in potentially dangerous conditions.

Most construction workers learn their skills in technical schools or apprenticeship programs. Industry plays a major training role by supporting apprenticeships, craft training, joint industry/training programs leading to certification, and college training.

Many opportunities exist within this high-skilled field. Employment opportunities vary by specialty and level of responsibility



Architecture and Construction

Pathways and Career Options

Design and Pre-Construction

Architect • Drafter • Regional & Urban Planner • Designer • Industrial Engineer • Materials Engineer • Environmental Designer • Civil Engineer • Programmer • Mechanical Engineer • Electrical Engineer • Preservationist • Environmental Engineer • Surveyor • Fire Prevention & Protection Engineer • Cost Estimator • Electrical & Electronic Engineering Technician

Construction

General Contractor & Builder • Construction Foreman • Estimator • Project Inspector • Sales & Marketing Manager • Education & Training Director • Safety Director • Construction Inspector • Subcontractor • Field Supervisor • Mason • Iron & Metalworker • Carpenter • Electrician • Boilermaker • Electronic Systems Technician • Sheetmetal Worker • Painter

Maintenance and Operations

General Maintenance Contractor • Construction Engineer • Construction Manager • Estimator • Facilities Engineer • Environmental Engineer • Demolition Engineer • Project Inspector • Manufacturer's Representative • Equipment & Material Manager • Maintenance Estimator • Security Controls Manager • Preservationist • Remodeler • Safety Director • Construction Inspector





People with careers in the arts, audio/video technology, and communications include photographers, printers, painters, sculptors, singers, and dancers. Others are agents, cartoonists, stage managers, and lighting directors.

You notice the results of work done in the communications field every day. You see newspapers, magazines, books, photographs, and movies. You hear music, radio, and movie sound effects. People in these careers work for publishers, radio and television stations, movie studios, and telephone companies.

Many careers in this cluster are rewarding, creative, and challenging.

They are constantly changing, too, because of technological advances. Satellites and computers have led the way for these advances. The creative aspects of this cluster are rapidly merging with the technological aspects.

Careers in this area require the ability to communicate effectively in both oral and written form. The training and education needed are as varied as the careers themselves. Some people have special talents and become instant successes. However, most people spend years training to gain the skills and knowledge needed.



Arts, Audio/Video Technology, & Communications

Pathways and Career Options

Audio and Video Technology and Film	Video Systems Technician • Video Graphics, Special Effects, & Animation Designer • Audio-Video Designer & Engineer • Technical Computer Support Technician • Audio-Video System Service Technician • Audio Systems Technician
Printing Technology	Graphics & Printing Equipment Operator • Lithographer & Platemaker • Computer Typography & Composition Equipment Operator • Desktop Publishing Specialist • Web Page Designer
Visual Arts	Commercial Photographer • Commercial Interior Designer • Residential & Home Furnishings Coordinator • Graphic Designer • Computer-Aided Design Technician • Fashion Illustrator • Textile Designer • Commercial Artist • Illustrator • Artist • Curator • Gallery Manager • Fashion Designer
Performing Arts	Production Manager (Digital, Video, or Stage) • Cinematographer • Video Editor • Dancer • Playwright • Screen Writer • Screen Editor • Script Writer • Director & Coach • Performer • Actors • Musician • Make-Up Artist • Costume Designer • Stagecraft Designer & Lighter • Set Designer & Painter • Stagecraft Sound Effects & Acoustics Coordinator • Composer • Conductor • Music Instructor
Journalism and Broadcasting	Audio & Video Operations • Control Room Technician • Station Manager • Radio & TV Announcer • Editor • Journalist • Reporter • Broadcast Technician
Telecommunications	Telecommunication Technician • Telecommunication Equipment, Cable, or Line Repairer • Installer • Telecommunication Computer Programmer & Systems Analyst



Business, Management & Administration

Careers in this cluster involve clerical, computer, accounting, management, and administrative work. An office setting is the most common job site for people working in these careers.

Most entry-level jobs require basic data entry, bookkeeping, and filing skills. Technological advances are forcing workers to upgrade their computer skills. Knowledge of commonly used software programs is especially important. The educational background required to work in this career cluster depends on the level of job responsibilities.

Administrative assistants, clerks, word processors, and receptionists are needed in all kinds of offices. Some workers input data, organize documents, prepare work

schedules, and assemble reports. Managers and administrators solve problems, analyze data, and make decisions.

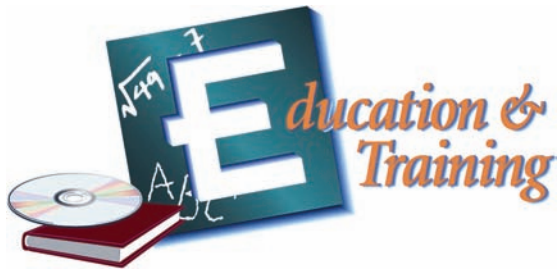
Because of technological innovations, changes in government regulations, and growing environmental concerns, employers will need well-trained, well-informed business, management, and administrative professionals. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service, and communication. Jobs in this career cluster occur everywhere there is office work. Business and administration functions exist throughout government, education, and business.



Business, Management, and Administration

Pathways and Career Options

Management	Entrepreneur • Chief Executive • General Manager • Accounting Manager • Accounts Payable Manager • Assistant Credit Manager • Billing Manager • Business & Development Manager • Compensation & Benefits Manager • Credit & Collections Manager • Payroll Manager • Risk Manager • Operations Manager • Public Relations Manager • Human Resources Manager
Business Financial Management and Accounting	Accountant • Accounting Clerk • Accounting Supervisor • Adjuster • Adjustment Clerk • Assistant Treasurer • Auditor • Bookkeeper • Budget Analyst • Budget Manager • Billing Supervisor • Cash Manager • Controller • Merger & Acquisitions Manager • Price Analyst • Top Collections Executive • Top Investment Executive • Treasurer • Chief Financial Officer • Finance Director
Human Resources	Human Resources Manager • Human Resources Coordinator • Industrial Relations Director • Compensation & Benefits Manager • Employee Assistance Plan Manager • Training & Development Manager • Corporate Trainer • Arbitrator • Employer Relations Representative • Affirmative Action Coordinator • Equal Employment Opportunity Specialist • Pay Equity Officer
Business Analysis	Systems Analyst • E-commerce Analyst • Requirements Specialist • Marketing Analyst • Operations Research Analyst • Business Consultant • Business Analyst • Budget Analyst • Product Manager • Price Analyst
Marketing	Marketing Manager • Sales Manager • Assistant Store Manager • Department Manager • Salesperson • Customer Service Supervisor • Customer Service Clerk • Research & Development Manager • Small Business Owner & Entrepreneur • E-commerce Manager & Entrepreneur • Wholesale & Retail Buyer • International Distribution Manager • Warehouse Manager • Logistics Manager
Administration and Information Support	Administrative Assistant • Executive Assistant • Office Manager • Medical Front Office Assistant • Information Assistant • Desktop Publisher • Customer Service Assistant • Data Entry Specialist • Receptionist • Communications Equipment Operator • Computer Operator • Court Reporter • Stenographer • Dispatcher • Shipping & Receiving Worker • Records Processor • Library Assistant



People who enjoy working with and helping people will find this career cluster very rewarding. People with careers in education and training include teacher's aides, parent educators, counselors, and librarians. They work with individuals on a one-to-one basis as well as groups of students. Often the job site is a school. However, other sites include offices, gyms, health clubs, private homes, and business settings. Related occupations include occupational trainers, administrators, and human resource specialists.

People in this field need a solid background in academic, technical, and presentation skills. Teachers and trainers must have the ability to communicate, inspire trust and confidence, and motivate learners as well as

understand their educational needs. They must be able to recognize and respond to individual differences in diverse learners and employ different teaching and training methods that will result in learner achievement. Most of these occupations require licensing or certification. Practically all occupations in this career cluster, even for entry-level positions, require training beyond high school. Most occupations require an advanced college degree.

A growing emphasis on improving education will increase the demand for workers in this cluster. Training programs will be needed in response to the increasing complexity of many jobs and technological advances across all industries.



Education and Training

Pathways and Career Options

Administration and Administrative Support

Superintendent • Principal • Administrator • Supervisor & Instructional Coordinator
• Education Researcher • Test Measurement Specialist • College President •
Dean • Curriculum Developer • Instructional Media Designer

Professional Support Services

Psychologist (Clinical, Developmental, or Social) • Social Worker • Parent
Educator • Counselor • Speech & Language Pathologist • Audiologist

Teaching and Training

Preschool Teacher • Kindergarten Teacher • Elementary Teacher • Secondary
Teacher • Special Education Teacher • Teacher Aid • College & University Lecturer
• Professor • Human Resource Trainer • Physical Trainer • Coach • Child Care
Director • Child Care Worker • Child Life Specialist • Nanny • Early Childhood
Teacher & Assistant • Group Worker & Assistant





People holding jobs in this career cluster generally handle tasks that involve money. Some professionals work for individual clients, while others work for various firms and organizations.

Professionals who work with clients may sell banking services or other financial products. They may give investing advice or arrange a mortgage. They may give credit counseling or process an insurance claim. Whatever their job, they explain the pros and cons of various financial decisions so people can choose what's best for their particular situation.

Every organization, whether profit-making or nonprofit, has one or more financial specialists to prepare the required financial reports. They may also manage the accounting and purchasing departments and credit card operations. If the firm buys or sells beyond U.S. borders, these specialists must know the financial systems of other countries.

People in this cluster need a solid background in math, organization, time management, customer service, and communication. Although people in positions such as bank tellers and other clerks usually need only a high school education, most occupations in this cluster require advanced training or a college degree. Professional organizations offer certification programs that are recognized levels of competency in the profession. Examples are Certified Financial Analyst, Certified Financial Planner,

and Certified Public Accountant. Securities and commodities sales agents must meet state licensing requirements, which usually include passing an examination.

Career opportunities are available in every sector of the economy. Jobs will increase due to greater levels of global investments in securities and commodities along with the growing need for investment advice. Advances in technology and trends toward direct marketing provide challenging opportunities for careers across all areas of the cluster.



Finance

Pathways and Career Options

Financial and Investment Planning

Personal Financial Advisor • Tax Preparation Professional • Securities & Commodities Sales Agent • Investment Advisor • Brokerage Clerk • Brokerage Assistant • Development Officer

Business Financial Management

Accountant • Financial Analyst • Treasurers, Controllers & Chief Revenue Agent • Auditor • Economist • Tax Examiner • Collector • Revenue Agent

Banking and Related Services

Credit Analyst • Loan Officer • Bill & Account Collector • Teller • Loan Processor • Customer Service Representative • Data Processor • Accountant • Internal Auditor • Compliance Officer • Title Researcher & Examiner • Abstractor • Credit Report Provider • Repossession Agent • Network Service & Operations Manager • Debt Counselor

Insurance Services

Claims Agent, Examiner, & Investigator • Claims Clerk • Insurance Appraiser • Underwriter • Actuary • Sales Agent • Customer Service Agent • Processing Clerk • Direct Marketing





Careers in this cluster provide government, legislative, administrative, security, and regulatory services. All of these services are needed at federal, state, and local government levels.

People in this career cluster need a solid background in social studies, political science, foreign language, and history. People involved in revenue and taxation need a strong background in accounting. Many occupations in public service are also called *civil service jobs*. These are government jobs obtained by taking a competitive exam. Many public service positions have residency requirements. A *residency requirement* demands that an applicant live in a certain area. Usually, this is the area served by the branch of government offering the job. For many federal occupations, U.S. citizenship is required.

The qualifications for public service careers vary. All branches of the armed forces require high school graduation or its equivalent for certain enlistment options. Many jobs require education beyond high school. Administrative assistants and secretaries can obtain entry-level jobs, but office training or experience is

often expected. Administrators generally need college degrees. Regulators may be required to hold the same licenses, certifications, or registries as practitioners in the industries or activities they regulate.

The factors that influence government employment levels are unique. Elected officials determine the payroll budget of the government. Each administration has different public policy priorities, which increase employment levels in some programs and decrease it in others.



Government and Public Administration

Pathways and Career Options

Governance	President • Vice President • Governor • Lieutenant Governor • Mayor • Cabinet Level Secretary (Federal or State) • Representative (Federal or State) • Senator (Federal or State) • Assistant, Deputy, & Chief of Staff • Commissioner (County, Parish, or City) • Commissioner (State Agency) • Congressional Aide • Legislative Aide • Legislative Assistant • Specialist • Lobbyist • Policy Advisor
National Security	National Security Advisor • Staff or Field Officer • Electronic Warfare Specialist • Combat Operations Officer • Infantry Field Officer • Artillery Officer • Air Defense Artillery Officer • Special Forces Officer • Nuclear Weapons Officer & Specialist • Missile & Space Systems Officer • Military Intelligence Specialist • Signals Intelligence Officer • Surface Ship Warfare Officer •
Foreign Service	Ambassador Foreign Service Officer • Consular Officer • Administrative Officer • Political Officer • Economic Officer • Diplomatic Courier
Planning	Business Enterprise Official • Chief of Vital Statistics • Commissioner • Director (Various Agencies) • Economic Development Coordinator • Federal Aid Coordinator • Census Clerk • County Director • Census Enumerator • Census Planner • Program Associate • Global Imaging Systems Specialist
Revenue and Taxation	Assessor • Tax Auditor • Internal Revenue Investigator • Revenue Agent & Officer • Tax Examiner Assistant or Clerk • Inspector General • Tax Attorney • Tax Policy Analyst
Regulation	Business Regulation Investigator • Chief of Field Operations • Code Inspector or Officer • Equal Opportunity Officer, Inspector, Investigator, or Examiner • Chief Bank Examiner • Bank Examiner • Aviation Safety Officer • Border Inspector • Cargo Inspector • Election Supervisor • Enforcement Specialist • Immigration Officer
Public Management and Administration	City Manager • City Council Member • City or County Clerk • Court Administrator or Clerk • Executive or Associate Director • Officer • General Service Officer • Management Analysis Officer • Program Administration Officer



The health science career cluster offers many opportunities for employment in careers that promote health, wellness, and diagnosis as well as treat injuries and diseases. Jobs are available in hospitals, clinics, and nursing homes. Other workplaces include laboratories, dentists' offices, and pharmacies.

Workers in this cluster help people recover from illness or injury and stay healthy. Dietitians help people meet their nutritional needs. Dentists and orthodontists focus on keeping teeth healthy. Podiatrists specialize in the care of feet. Optometrists and ophthalmologists are concerned with proper vision and good eye care.

Because the health field is so broad, there are jobs at all levels. Entry-level jobs include those of orderlies and stockroom attendants. **Paraprofessionals** are trained aids, with one to three years of advanced training, who assist professionals. Many of their jobs require licensing. Examples of workers at this level are dental hygienists, medical data analysts, physical therapists, practical nurses, paramedics, laboratory assistants, and X-ray technicians. Advanced degrees are usually needed for professions in specialty areas such as pharmacists and registered nurses. Professions, such as physician or dentist, require a doctoral degree.

Health care is the largest and fastest-growing industry in the United States. Based on an aging population and increased use of technology, the demand for health care workers will grow.



Health Science

Pathways and Career Options

Therapeutic Services	Acupuncturist • Anesthesiologist Assistant • Art, Music, or Dance Therapist • Athletic Trainer • Audiologist • Certified Nursing Assistant • Chiropractor • Dentist • Hygienist • Dietician • Emergency Medical Technician • Home Health Aide • Licensed Practical Nurse • Massage Therapist • Medical Assistant • Mortician • Occupational Therapist or Assistant • Optometrist • Paramedic
Diagnostics Services	Cardiovascular Technologist • Clinical Lab Technician • Computer Tomography (CT) Technologist • Cytotechnologist • Diagnostic Medical Sonographer • Electrocardiographic (ECG) Technician • Electronic Diagnostic (EEG) Technologist • Exercise Physiologist • Geneticist • Histotechnician • Histotechnologist • Magnetic Resonance (MR) Technologist
Health Informatics	Admitting Clerk • Applied Researcher • Community Services Specialist • Data Analyst • Epidemiologist • Ethicist • Health Educator • Health Information Coder • Health Information Services • Healthcare Administrator • Medical Assistant • Medical Biller • Patient Financial Services Coordinator • Medical Information Technologist • Medical Librarian & Cybrarian
Support Services	Biomedical Engineer • Clinical Engineer • Biomedical Technician • Clinical Technician • Environmental Services Worker • Facilities Manager • Food Service Worker • Hospital Maintenance Engineer • Industrial Hygienist • Materials Manager • Transport Technician
Biotechnology Research and Development	Biochemist • Bioinformatics Associate • Bioinformatics Scientist • Bioinformatics Specialist • Biomedical Chemist • Biostatistician • Cell Biologist • Clinical Trials Research Associate • Clinical Trials Research Coordinator • Geneticist • Genetics Lab Assistant • Lab Technician • Microbiologist • Molecular Biologist • Pharmaceutical Scientist • Quality Assurance Technician





This cluster prepares people for careers in the management, marketing, and operations of restaurants, other food services, lodging, attractions, recreational events, and travel-related services. People in this career cluster work in hotels, restaurants, travel agencies, amusement parks, country clubs, tourist attractions, and on cruise ships. In general, their work focuses on making visitors happy. Hospitality and tourism operations are located throughout the world.

Hotel employees, from greeters to managers, try to make visitors comfortable. Food and beverage service workers satisfy customer appetites. Travel agents, tour guides, and ticket takers make sight-seeing trips and vacations enjoyable. People learn to ski, play golf, tennis, and other recreational activities with the help of teaching pros on staff.

The level of education required depends on the level of job responsibilities. Knowledge of geography and the psychology of dealing with people and their expectations are very important. Also important are computer and map-reading skills and strong problem-solving skills. Being familiar with foreign languages is a plus. Many careers in hospitality and tourism offer on-the-job training. Experience and/or career/technical training may help workers advance. College degrees are usually needed for top jobs. Many colleges offer degrees related to hospitality and tourism. Some

technical schools offer training programs. Many trade associations offer seminars that lead to certifications.

An increase in leisure time and personal income means more business in this career cluster. Also, business-related travel is common. Both trends are likely to keep the number of jobs in the hospitality and tourism industry growing. People who enjoy hard work, variety, and working with people will have many opportunities to advance in this industry.



Hospitality and Tourism

Pathways and Career Options

Restaurants and Food and Beverage Services

General Manager • Food & Beverage Manager • Kitchen Manager • Catering & Banquets Manager • Service Manager • Maitre'd • Restaurant Owner • Baker • Brewer • Caterer • Executive Chef • Cook • Pastry & Specialty Chef • Bartender • Restaurant Server • Banquet Server • Cocktail Server • Banquet Set-Up Employee • Bus Person • Room Service Attendant

Lodging

Front Office Manager • Executive Housekeeper • Director of Sales & Marketing • Director of Human Resources • Director of Security • Controller • Food & Beverage Director • General Manager • Quality Assurance Manager • Owner & Franchisee • Communications Supervisor • Front Desk Supervisor • Reservations Supervisor • Laundry Supervisor • Room Supervisor

Travel and Tourism

Executive Director • Assistant Director • Director of Tourism Development • Director of Communications • Director of Visitor Services • Director of Sales • Director of Marketing & Advertising • Director of Volunteer Services • Events Manager • Sales Manager • Destination Manager • Convention Services Manager • Travel Agent • Event Planner • Meeting Planner

Recreation, Amusements, and Attractions

Club Manager & Assistant Manager • Club Membership Developer • Parks & Gardens Safety & Security • Parks & Garden Ranger • Resort Trainer & Instructor • Gaming & Casino Manager • Gaming & Casino Dealer • Gaming & Casino Security & Safety • Fairs & Festival Facility Manager • Fairs & Festival Promotional Developer • Theme Parks & Amusement Parks Area Ride Operations Manager





The many job opportunities available in this career cluster all relate to families, human needs, and improving a person's quality of life. Some jobs assist individuals or families. Others involve entire communities.

People in human services work in homes, schools, child care centers, clinics, and community centers. They work with all age groups. Sometimes they work with people who are underprivileged or have physical or mental disabilities. At times, they serve as consultants to doctors, nurses, and other professionals. They can work as counselors or in consumer services. People in personal care services can work as barbers, spa attendants, or funeral directors.

People in this career cluster need a solid background in communication, science, and technical skills. Some occupations in this career cluster require only on-the-job training. Many require career/technical training. Each state has its own licensing requirements that regulate training for many of the careers in this area. Professionals in this field have college degrees, many of which are advanced.

Based on statistics, human services careers have a good employment outlook, especially those careers that involve working with the elderly. The employment outlook is also growing for people working in consumer services.



Human Services

Pathways and Career Options

<p>Early Childhood Development and Services</p>	<p>Childcare Facility Director • Childcare Facility Assistant Director • Elementary School Counselor • Preschool Teacher • Educator for Parents • Nanny • Teachers' Assistant • Childcare Assistant or Worker</p>
<p>Counseling and Mental Health Services</p>	<p>Clinical & Counseling Psychologist • Industrial-Organizational Psychologist • Sociologist • School Counselor • School Psychologist • Substance Abuse & Behavioral Disorder Counselor • Mental Health Counselor • Vocational Rehabilitation Counselor • Career Counselor • Employment Counselor • Residential Advisor • Marriage, Child, & Family Counselor</p>
<p>Family and Community Services</p>	<p>Community Service Director • Adult Day Care Coordinator • Volunteer Coordinator • Licensed Professional Counselor • Religious Leader • Religious Activities & Education Program Director • Human Services Worker • Social Services Worker • Vocational Rehabilitation Counselor • Employment Counselor • Career Counselor • Vocational Rehabilitation Service Worker</p>
<p>Personal Care Services</p>	<p>Barber • Cosmetologist, Hairdresser, & Hairstylist • Shampooer • Nail Technician, Manicurist, & Pedicurist • Skin Care Specialist & Esthetician • Electrolysis Technician • Electrologist • Funeral Director • Mortician • Embalmer • Funeral Attendant • Personal & Home Care Aide • Companion • Spa Attendant • Personal Trainer • Massage Therapist</p>
<p>Consumer Services</p>	<p>Consumer Credit Counselor • Consumer Affairs Officer • Consumer Advocate • Certified Financial Planner • Insurance Representative • Banker • Real Estate Services Representative • Financial Advisor • Investment Broker • Employee Benefits Representative • Hospital Patient Accounts Representative • Customer Service Representative • Consumer Research Department Representative</p>

The logo for Information Technology features a stylized 'IT' in a blue and green circuit-like font. To the right, the words 'Information' and 'Technology' are written in a blue, serif font, with 'Information' on the top line and 'Technology' on the bottom line. Dotted lines extend from the top and bottom of the 'IT' graphic towards the text.

Information Technology

Occupations in this career cluster design, develop, manage, and support hardware and software information systems. Careers in this area are available in every sector of the economy—from financial services to medical services, from business to engineering and environmental services. People with careers in this cluster might be network administrators, technical writers, game programmers, or Web designers.

Many information technology careers are available for people with strong computer, math, and science skills. Workers in this field attend computer workshops, seminars, and classes after earning a college degree. They must constantly upgrade their skills because of ever-changing

technology. They continue earning various certifications to verify their advanced knowledge and skill level.

Careers tend to cluster in four areas of concentration. Some workers design and run network systems. Some focus on providing technical support and services. Others focus on programming and software development. Yet others concentrate on interactive media.

This career cluster is perhaps the fastest growing and most rapidly changing of all career areas. People who pursue careers in the information technology field will discover ongoing opportunities to learn about and work with new technologies that are transforming the world.



Information Technology

Pathways and Career Options

Network Systems

Data Communications Analyst • Information Systems Administrator • Information Systems Operator • Information Technology Engineer • Technical Support Specialist • User Support Specialist • Telecommunications Network Technician • Network Administrator • Network Analyst • Network Engineer • Network Operations Analyst • Network Security Analyst • Network Transport Administrator

Information Support and Services

Data Administrator • Data Analyst • Data Modeler • Database Administration Associate • Database Developer • Knowledge Architect • Systems Administrator • Technical Writer • Desktop Publisher • Instructional Designer • Online Publisher • Technical Support Analyst • Call Center Support Representative • Customer Service Representative • Product Support Engineer

Interactive Media

2D & 3D Artist • Animator • Audio & Video Engineer • Media Specialist • Media Designer • Instructional Designer • Multimedia Author • Multimedia Developer • Multimedia Specialist • Producer • Production Assistant • Programmer • Streaming Media Specialist • Virtual Reality Specialist • Web Designer • Web Administrator • Web Page Developer • Web Site Developer • Webmaster

Programming and Software Development

Applications Analyst • Applications Engineer • Business Analyst • Computer Engineer • Data Modeler • Operating Systems Designer & Engineer • Operating Systems Programmer • Operating Systems Analyst • Program Manager • Programmer • Analyst • Software Applications Specialist • Software Applications Architect • Software Applications Design Engineer





This career cluster involves planning, managing, and providing judicial, legal, and protective services. Employed by state and local levels, emergency service personnel fight fires and prevent crime. Attorneys, dispatchers, bailiffs, security guards, and inspectors are some related positions in this cluster.

At the federal level, public safety work is more specialized. FBI agents work on cases involving terrorism, organized crime, and violations of federal law. Treasury Department agents investigate the suspicious use of credit cards and illegal gun sales.

Criminal matters plus many other issues are handled by the U.S. court system. Other issues include labor disputes, wills, divorces, business contracts, real estate, and bankruptcy. Lawyers advise clients of their legal rights and represent them in court. Law clerks help research the facts of a case.

Many careers in this cluster require, at minimum, technical training and successful completion of preemployment tests. For instance, applicants for firefighting jobs generally must pass a written exam as well as tests of strength, physical stamina, coordination, and agility. Law enforcement officers are often trained in their agency's police academy, which includes classroom instruction in laws and accident investigation along with training in traffic control, use of firearms, first aid,

and emergency response. Training requirements in legal services depend on the type of work performed. Some careers require a two-year degree, and many require a master's or doctoral degree.

Renewed national interest in public safety and security has expanded opportunities for employment in this career cluster. Numerous job openings will stem from employment growth in corporate, industrial, and homeland security.



Law, Public Safety, Corrections, and Security

Pathways and Career Options

Correction Services	<p>Warden • Jail Administrator • Mid-level Manager • Program Coordinator & Counselor • Public Information Officer • Correctional Trainer • Case Manager • Community Corrections Practitioner • Probation & Parole Officer • Corrections Educator • Corrections Officer • Detention Deputy • Youth Services Worker • Facility Maintenance Worker • Transport Officer •</p>
Emergency and Fire Management Services	<p>Emergency Management & Response Coordinator • Emergency Planning Manager • Emergency Medical Technician • Fire Fighter • Fire Fighter Manager & Supervisor • Forest Fire Fighter • Forest Fire Fighter Manager & Supervisor • Forest Fire Inspector & Investigator • Hazardous Materials Responder • Dispatcher • Training Officer • Grant Writer & Coordinator • Rescue Worker</p>
Security and Protective Services	<p>Security Director • Security Systems Designer & Consultant • Information Systems Security Specialist • Computer Forensics Specialist • Private & Corporate Investigator • Loss Prevention & Security Manager • Security Trainer & Educator • Security Sales Representative • Loss Prevention Specialist • Security Systems Technician • Private Investigative Assistant</p>
Law Enforcement Services	<p>Animal Control Officer • Bailiff • Child Support Investigator • Missing Persons Investigator • Unemployment Fraud Investigator • Criminal Investigator & Special Agent • Gaming Investigator • Bomb Technician • Highway Patrol • Immigration & Customs Inspector • Police & Detective Manager & Supervisor • Police Detective & Criminal Investigator • Police, Fire, & Ambulance Dispatcher • Police & Patrol Officers</p>
Legal Services	<p>Attorney • Case Management Specialist • Court Reporter • File & Document Manager • Information Officer • Investigator Judge • Law Clerk • Legal Assistant • Legal Secretary • Magistrate Mediator & Arbitrator • Negotiator • Paralegal</p>



People in manufacturing careers produce cars, computers, appliances, furniture, toys, and other products. They refine ore and produce steel. They knit and weave textiles. They process chemicals and foods. They work in quality assurance, maintenance, installation, and repair. Health, safety, and environmental assurance are a part of this cluster. This cluster also includes inventory control and logistics. (*Logistics* is the process of managing, controlling, and moving goods, energy, information, services, or people from a point of origin to a destination in the most timely and cost-efficient manner possible.) Most people in this career cluster work in factories or plants.

People in the manufacturing cluster need a solid background in math, science, and technical skills. Although entry-level jobs exist, the next level, *semiskilled labor*,

requires experience and/or technical training. To qualify for most of the *skilled labor* positions, workers must complete a formal training program beyond high school, such as an apprenticeship or community college program. Companies and trade unions also offer training programs.

Skilled labor positions are called *skilled trades*. Examples of workers in skilled trades are machinists, tool and die makers, drafters, and welders. The manufacturing field also employs people in positions such as engineers and scientists, which require a college degree.

Due to manufacturing plants moving toward more automation of their processes, the employment outlook for this career cluster will grow more slowly than other fields. However, people with a broad range of skills or a specific skill that cannot be automated will experience job growth and find their services in demand.



Manufacturing

Pathways and Career Options

<p>Production</p>	<p>Assembler • Automated Manufacturing Technician • Bookbinder • Calibration Technician • Electrical Installer & Repairer • Extruding & Drawing Machine Setter • Extrusion Machine Operator • Foundry Worker • Grinding, Lapping, & Buffing Machine Operator • Hoist & Winch Operator • Instrument Maker • Large Printing Press Machine Setter • Milling Machine Set-Up Operator</p>
<p>Manufacturing Production Process Development</p>	<p>Design Engineer • Electrical & Electronic Technician & Technologist • Electronics Engineer • Engineering Technician & Technologist • Engineering Technician • Industrial Engineer • Labor Relations Manager • Manufacturing Engineer • Manufacturing Technician • Power Generating & Reactor Plant Operator • Precision Inspector, Tester, & Grader</p>
<p>Maintenance, Installation, and Repair</p>	<p>Biomedical Equipment Technician • Boilermaker • Communication System Installer & Repairer • Computer Installer & Repairer • Computer Maintenance Technician • Electrical Equipment Installer & Repairer • Facility Electrician • Industrial Facilities Manager • Industrial Machinery Repair Technician • Industrial Maintenance Electrician</p>
<p>Quality Assurance</p>	<p>Calibration Technician • Inspector • Lab Technician • Process Control Technician • Quality Control Technician • Quality Engineer • Statistical Process Control (SPC) Coordinator</p>
<p>Logistics and Inventory Control</p>	<p>Communications, Transportation, & Utilities Manager • Dispatcher • Freight, Stock, & Material Mover • Industrial Truck & Tractor Operator • Logistical Engineer • Logistician • Material Associate • Material Handler • Material Mover • Process Improvement Technician • Quality Control Technician • Traffic Manager • Traffic, Shipping, & Receiving Clerk</p>
<p>Health, Safety, and Environmental Assurance</p>	<p>Environmental Engineer • Environmental Specialist • Health & Safety Representative • Safety Coordinator • Safety Engineer • Safety Team Leader • Safety Technician</p>



Careers in this cluster involve the marketing, promoting, buying, selling, and distribution of goods and services. Market researchers look for ways to find new customers. Advertisers try to promote products and services by making them appealing. Buyers and purchasing agents get the supplies, equipment, and products their companies need to conduct business. People in marketing information management and research work to maintain customer databases and use statistics to predict trends and buyer behavior. People in distribution and logistics handle products and materials, manage movement and storage of raw materials and finished products, and coordinate inventory.

Unlike most other career clusters, sales and service offer many opportunities for semiskilled and skilled workers. Warehouse workers and stock clerks are examples of entry-level jobs. An increasing number of positions, however, require familiarity with a computer. Those who provide services such as Web page design need technical training. Real estate agents must be licensed. College degrees are helpful in many jobs and are required for positions in promotion and management. Advancement in this career cluster is accelerated by participation in company training programs, training programs sponsored by various industry and trade associations, and conferences and seminars.

Opportunities in this cluster may change from year to year because sales are affected by changing economic conditions, legislative issues, and consumer preferences. Earnings vary widely by industry, occupation, type and level of responsibilities, and experience. Employment opportunities for retail salespeople are expected to be good. People with a college degree or computer skills will be sought for managerial positions in sales, logistics, management information systems, marketing, and e-marketing. (*E-marketing* is computer technologies combined with marketing and sales of goods and services.)



Marketing, Sales, and Service

Pathways and Career Options

Management and Entrepreneurship	Entrepreneur • Owner • Small Business Owner • President • Chief Executive Officer • Principal • Partner • Proprietor • Franchisee • Independent Distributor • Administrative Support Representative
Professional Sales and Marketing	Inbound Call Manager • Channel Sales Manager • Regional Sales Manager • Client Relationship Manager • Business Development Manager • Territory Representative • Key Account Manager • National Account Manager • Account Executive • Sales Engineer • Sales Executive
Buying and Merchandising	Store Manager • Retail Marketing Coordinator • Merchandising Manager • Merchandise Buyer • Operations Manager • Visual Merchandise Manager • Sales Manager • Department Manager • Sales Associate • Stock Clerk • Receiving Clerk
Marketing Communications and Promotion	Advertising Manager • Public Relations Manager • Public Information Director • Sales Promotion Manager • Co-op Manager • Trade Show Manager • Circulation Manager • Promotions Manager • Art & Graphics Director • Creative Director • Account Executive • Account Supervisor • Sales Representative
Marketing Information Management and Research	Database Manager • Research Specialist & Manager • Brand Manager • Marketing Services Manager • Customer Satisfaction Manager • Research Project Manager • Constituent Relationship Management (CRM) Manager • Forecasting Manager • Strategic Planner • Product Planner • Planning Analyst
Distribution and Logistics	Warehouse Manager • Materials Manager • Traffic Manager • Logistics Manager • Transportation Manager • Inventory Manager • Logistics Analyst & Engineer • Distribution Coordinator • Shipping & Receiving Administrator • Shipping & Receiving Clerk
E-Marketing	Fulfillment Manager • E-Merchandising Manager • E-Commerce Director • Web Site Project Manager • Internet Project Director • Brand Manager • Forum Manager • Web Master • Web Designer • Interactive Media Specialist • Internet Sales Engineer • Site Architect • User Interface Designer

A graphic featuring a large, stylized letter 'S' in the center. The 'S' is white with a blue outline and is set against a dark blue background with white stars and a white satellite or space station orbiting it. To the right of the 'S', the words "Science, Technology, Engineering & Mathematics" are written in a stylized, orange-brown font. The text is arranged in three lines: "Science, Technology," on the first line, "Engineering &" on the second line, and "Mathematics" on the third line. The background of the graphic is a dark blue square with a white border.

People working in this career cluster provide basic research as well as laboratory and testing services. Often their work results in a new discovery with the potential for improving life.

Careers range from engineers to teachers to technologists. Conducting research is often involved in this career area. Researchers generally specialize in one area of the life, physical, earth, and space sciences or technology. Technical writers are needed to interpret scientific and mathematical results.

Engineers generally specialize in distinct branches of their profession. They take scientific principles and apply them in new ways. Engineers focus on designing efficient machinery, products, systems, and processes.

Often scientific work goes in unexpected directions. It is common for researchers and engineers to work closely with experts in other disciplines. Computer-aided tools allow scientists and engineers to quickly modify experiments and run tests.

Advanced degrees are common among scientists, mathematicians, technologists, and engineers. Even entry-level jobs in this cluster, such as lab technicians, often require a four-year college degree. Many people can receive training and experience through the armed forces.

Advancing technology will compel companies to improve and update product designs and processes. The job outlook for this area is good for people with highly developed technical, science, and math skills.



Science, Technology, Engineering, and Mathematics

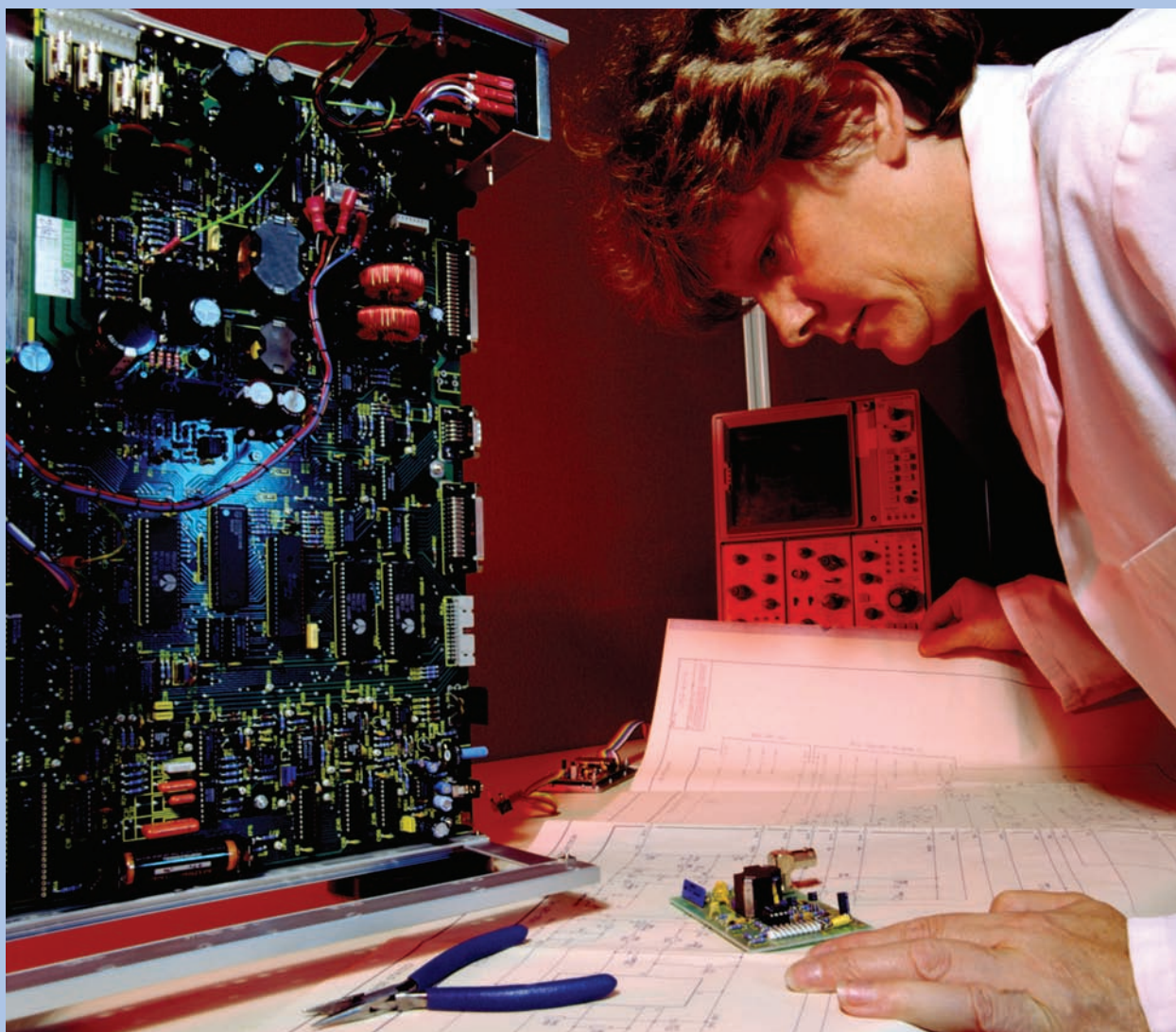
Pathways and Career Options

Engineering and Technology

Aerospace Engineer • Application Engineer • Automotive Engineer • Biotechnology Engineer • Chemical Engineer • Civil Engineer • Energy Transmission Engineer • Environmental Engineer • Facilities Technician • Geothermal Engineer • Hazardous Waste Technician • Human Factors Engineer • Industrial Engineering Technician

Science and Math

Research Chemist or Technician • Science Teacher • Lab Technician • Scientific Visualization & Graphics Expert • Statistician • Analytical Chemist • Anthropologist • Applied Mathematician • Archeologist • Astronomer • Astrophysicist • Atmospheric Scientist • Biologist • Botanist • Computer-Aided Design (CAD) Operator





Transportation involves moving passengers, cargo, and mail on land, at sea, and in the air. Workers are needed to design, operate, and maintain the vehicles used and the systems that track them. Planning, management, customer service, and regulation of transportation systems and their effects on safety and the environment are also a part of this cluster. Distribution and logistics are behind-the-scenes activities that make the transportation system run well. Workers in this career area make sure shipments arrive in good condition at the correct destinations on time in the most economical manner. They also arrange for adjustments for lost or damaged goods.

Transportation workers on land include school bus drivers, railroad workers, repair technicians, and shipping and receiving clerks. Workers at sea include ship captains and deckhands. Airline and helicopter flight engineers and air traffic controllers are needed for air transportation.

Jobs in the transportation industry rely on computers. Even repair technicians

and shipping clerks now use computerized tools to do their jobs. One such important tool is the GPS system. A *global positioning system (GPS)* is a highly accurate satellite-based tracking system. It signals where specific cargo is in the world at any given time.

Most jobs in this career cluster require technical training. Drivers need a commercial driving permit called a *chauffeur's driver's license* or *commercial driver's license (CDL)*. Airline pilots and ship captains must have on-the-job experience and a federal license. Many career/technical schools and community colleges offer training programs in equipment maintenance and repair.

The growth in the nation's economy is expected to require significant increases in the use of air, rail, and ship transportation operations. Companies increasingly depend on technicians and engineers to guard against equipment malfunction. As tourism and business travel expands, growth is expected in this career cluster.



Transportation, Distribution, and Logistics

Pathways and Career Options

Transportation Operations	Air & Space Transportation Manager • Airplane Pilot & Copilot • Flight Attendant • Air Traffic Controller • Aircraft Cargo Handling Supervisor • Rail Dispatcher • Locomotive Engineer • Railroad Brake, Signal, & Switch Operator • Train Crew Member • Yard Worker • Water Transportation Manager • Captain • Sailor & Marine • Ship & Boat Captain • Ship Engineer
Logistics Planning and Management Services	Logistician • Logistics Manager • Logistics Engineer • Logistics Analyst • Logistics Consultant • International Logistics Manager
Warehousing and Distribution Center Operations	Warehouse Manager • Storage & Distribution Manager • Industrial & Packaging Engineer • Traffic, Shipping, & Receiving Clerk • Production, Planning, & Expediting Clerk • First-Line Supervisor & Manager • Laborer & Material Mover • Machine & Vehicle Operator • Laborer & Freight Stock Material Mover • Car, Truck, & Ship Loader • Packer & Packager
Facility and Mobile Equipment Maintenance	Facility Maintenance Manager & Engineer • Industrial Equipment Repair Technician • Industrial Electrician • Electrical & Electronic Technician • Mobile Heavy Equipment Repair Technician • Aerospace Engineering & Operations Technician • Aircraft Repair & Service Technician • Power Plant Technician • Aircraft Engine Specialist • Aircraft Body & Bonded Structure Repairer
Transportation System Infrastructure	Urban & Regional Planner • Civil Engineer • Engineering Technician • Surveying & Mapping Technician • Government Service Executive • Environmental Compliance Inspector • Air Traffic Controller • Aviation Inspector • Traffic Engineer • Traffic Technician • Motor Vehicle Inspector • Freight Inspector • Railroad Inspector • Marine Cargo Inspector • Vessel Traffic Control Specialists
Health, Safety, and Environmental Management	Health & Safety Manager • Industrial Health & Safety Engineer • Environmental Scientist & Specialist • Environmental Science & Protection Technician • Environmental Manager & Engineer • Environmental Compliance Inspector • Safety Analyst
Sales and Service	Marketing Manager • Sales Manager • Sales Representative (Transportation & Logistics Services) • Reservation, Travel & Transportation Agent or Clerk • Cargo & Freight Agent • Customer Service Manager • Customer Service Representative • Customer Order & Billing Clerk • Cashier, Counter, or Rental Clerk



Chapter 5

Summary

Learning about different types of careers is interesting. It is also important. The career you eventually choose will be a major factor in your life. You should do all you can to prepare to make a wise choice.

Sixteen career clusters are described in this chapter. Each includes a wide variety of jobs from entry-level to professional positions.

Watch and listen to other people as they work in different careers. Think about how you would feel as a worker in various jobs. The more you do to prepare yourself, the more likely you are to make a satisfying career choice.

Reviewing Key Concepts

1. True or false. Some jobs can belong in more than one cluster.
2. Give an example of how transferable skills can be used successfully in many different careers.
3. In general, employment between 2006 and 2016 is expected to increase by _____ jobs.
4. Careers in the _____, Food, and Natural Resources cluster involve working with plants, animals, and food processing.
5. People in the _____ and Construction career cluster design and build roads, bridges, and buildings.
6. An increase in leisure time and personal income means more business in the _____ and Tourism career cluster.
7. True or false. Renewed national interest in public safety and security has expanded opportunities in the Law, Public Safety, Corrections, and Security career cluster.
8. True or false. To qualify for a skilled labor position, no training beyond high school is required.
9. Which of the following people would need to pass a written exam as well as tests of strength, physical stamina, coordination, and agility?
 - A. Engineer.
 - B. Firefighter.
 - C. Broker.
 - D. Hairstylist.
10. Many public service jobs are also called _____ _____ jobs, which are government jobs obtained by taking a competitive exam.

Building Academic Skills

Writing. Make a career ladder to illustrate your personal career plans, to the extent you currently envision them. (The career ladders should contain information ranging from the current year to 10 years from now.) Write a report identifying the transferable skills that relate to the occupations you have listed.

Building Technology Skills

Use a software program to create a chart of your key interests and aptitudes for use in examining potential career paths. List your interests and aptitudes on the left side of the chart. Across the top, identify five jobs that appeal to you.

Building Career Knowledge and Skills

1. Find a news story about a change in technology. What jobs or career cluster will be affected? Discuss the story in class.
2. Visit your guidance office and obtain three pamphlets describing jobs you think you would like.
3. Interview someone in a career that interests you. Ask questions about the pros and cons of the career. Find out what a typical day at work involves. Prepare an oral report on your findings.

Building Workplace Skills

Work with a team of three or four classmates to create individual posters for six career options within a career cluster. Determine who will do which tasks. Prepare a brief fact sheet for each career that covers the basic job factors discussed in Chapter 4. Use Department of Labor references for your research. Use the computer to conduct your research and create the posters. Determine which facts to display on each poster. Identify the career field and career cluster on each. Present your posters to the class and summarize the key points about each. Attach the appropriate fact sheet to each poster to allow classmates to learn more details later, if they so desire.