

Career Clusters

The United States Department of Education identifies 16 career clusters by classifying specific jobs and industries into similar categories. You can use the information on career clusters to learn about careers while you are in school or any time you are doing career research.

The 16 career clusters can best be described as themes that group specific occupations together. One example of a career cluster is Agriculture, Food, & Natural Resources. Another is Architecture & Construction.

Within each career cluster are job, industry, and occupation types known as pathways. For example, the Architecture & Construction cluster has three pathways: Construction, Design/Pre-Construction, and Maintenance/Operations. The pathways are the building blocks of the 16 career clusters. Each pathway offers a variety of careers you might choose. For example, in the Construction pathway, occupations include architect, carpenter, civil engineer, and interior designer.

The clusters and their pathways help job seekers and individuals interested in specific careers to identify professions that best suit their interests and abilities. Through the clusters and pathways, you can learn about the education and skills you will need to be effective in a specific job and career. The clusters and pathways provide you with clear-cut choices and options as you begin your career exploration.

On the following pages you will find a list of the career clusters, their pathways, and specific jobs within each pathway. You can learn more about career clusters at www.careerclusters.org.



The Agriculture, Food & Natural Resources career cluster is for people interested in the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources. Their interests in the field might include food, fuel, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Pathways

- Agribusiness Systems
- Animal Systems
- Environmental Service Systems
- Food Products and Processing Systems
- Natural Resources Systems
- Plant Systems
- Power, Structural and Technical Systems

Sample Occupations

- Agricultural Communications Specialist
- Animal Scientist
- Embryo Technologist
- Feed Sales Representative
- Fish and Game Warden
- Food Scientist
- Livestock Buyer
- Logging Equipment Operator
- Tree Trimmer and Pruner



People in the Architecture & Construction cluster careers design, plan, manage, build, and maintain the built environment. Take a look around you. The houses across the street, the roads that cars drive on, and the parks that you walk through every day were created or maintained by the people performing jobs in this cluster and its pathways.

Pathways

- Construction
- Design/Pre-Construction
- Maintenance/Operations

Sample Occupations

- Architect
- Architectural and Civil Drafter
- Carpenter
- Civil Engineer
- Civil Engineering Technician
- Code Official
- Computer Aided Drafter (CAD)
- Concrete Finisher
- Construction Laborer
- Cost Estimator
- Drywall and Ceiling Tile Installers
- Pipe Layer

Have you ever wanted to design, produce, exhibit, perform, write, and publish anything by making music or creating multimedia visual content? Do you love the performing arts? You could be dreaming of becoming an actress on the stage or television. Or perhaps you would rather be a world-renowned painter. Then again, your interest might be in journalism as the next star anchor of the evening news or a respected blogger, or in communications as a public relations specialist working behind the scenes to guide the careers of the rich and famous. If so, this cluster field is for you.



Pathways

- Audio and Video Technology and Film
- Journalism and Broadcasting
- Performing Arts
- Printing Technology
- Telecommunications
- Visual Arts

Sample Occupations

- Broadcast Technician
- Cinematographer
- Graphics and Printing Equipment Operator
- Publisher, Editor, Journalist or Reporter
- Video Graphics, Special Effects, and Animation Technician
- Video Systems Technician



Every business hires individuals to manage its operations. Businesses need office managers and accountants to ensure that the phones get answered and that the books are in order. These businesses can range in size from small convenience stores to large hospitals. They all need employees who ensure that operations run smoothly within the organization. The employees in the jobs and industries of the Business, Management & Administration cluster play this role.

Pathways

- Administrative Support
- Business Information Management
- General Management
- Human Resources Management
- Operations Management

Sample Occupations

- Accounting Manager
- Accounts Payable Manager
- Assistant Credit Manager
- Billing Manager
- Business and Development Manager
- Chief Executive Officer
- Compensation and Benefits Manager
- Credit and Collections Manager
- Entrepreneur
- General Manager
- Payroll Manager
- Risk Manager



Much thought and care go into planning, managing, and providing education as well as training and related learning support services. People employed in this field serve children and adults. Workers in this cluster need patience and good customer service skills to be effective in their jobs.

Pathways

- Administration and Administrative Support
- Professional Support Services
- Teaching/Training

Sample Occupations

- College President, Dean, Department Chair, Program Coordinator
- Corporate Trainer
- Curriculum Specialist
- Education Researcher, Test Measurement Specialist/ Assessment Specialist
- Elementary and Secondary Superintendent, Principal, Administrator
- Post-Secondary Administrator
- Supervisor and Instructional Coordinator
- Teacher
- Textbook Author

Finance is often linked to banking alone, but there are many facets of the industry because there are so many different types of financial institutions. Employees in this field provide services for financial and investment banking, insurance products, business/financial management, and more.



Pathways

- Accounting
- Banking Services
- Business Finance
- Insurance
- Securities and Investments

Sample Occupations

- Brokerage Representative
- Development Officer
- Investment Advisor
- Personal Financial Advisor
- Sales Agent, Securities and Commodities
- Securities/Investments Analyst
- Stock Broker
- Tax Preparation Specialist



Local, state, and federal governments need employees to perform functions that include governance, national security, foreign service, planning, revenue flows and taxation, regulation, and management and administration.

Pathways

- Foreign Service
- Governance
- National Security
- Planning
- Public Management and Administration
- Regulation
- Revenue and Taxation

Sample Occupations

- Air Crew Member
- Aircraft Launch and Recovery Officer
- Assessor
- Congressional Aide
- Detective
- Equal Opportunity Representative
- Legislative Aide
- Postal Service Clerk
- President
- Radar and Sonar Technician
- Special Forces Officer
- Transportation Inspector
- Urban and Regional Planner
- Vice President



Health Science cluster employees plan, manage, and deliver therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development to individuals throughout the United States. They work in cities, suburbs, rural areas, and other communities to provide crucial services to a diverse client base.

Pathways

- Biotechnology Research and Development
- Diagnostic Services
- Health Informatics
- Support Services
- Therapeutic Services

Sample Occupations

- Acupuncturist
- Anesthesia Technologist/Technician
- Anesthesiologist/Assistant
- Art/Music/Dance Therapist
- Athletic Trainer
- Audiologist
- Certified Nursing Assistant
- Chiropractic Assistant
- Chiropractor
- Dental Assistant/Hygienist
- Dental Lab Technician
- Dietitian/Nutritionist

Hospitality and tourism careers comprise the world's largest industry. Its workers manage, market, and operate restaurants and other food services, lodging, attractions, recreation events, and travel-related services. They are very busy people who cater to the needs of individuals that visit your town, city, state, and other countries of the world as tourists.



Pathways

- Lodging
- Recreation, Amusements and Attractions
- Restaurants and Food/Beverage Services
- Travel and Tourism

Sample Occupations

- Baggage Porter and Bellhop
- Concierge
- Kitchen Manager
- Catering and Banquet Manager
- Service Manager
- Switchboard Operator
- Restaurant Owner
- Animal Trainer
- Museum Curator
- Gaming Dealer
- Convention Planner



Human services careers prepare individuals for employment in pathways that relate to families and human needs. They work in daycare centers, drive the elderly and disabled to their appointments, provide massages in spas, and counsel those in need of emotional support.

Pathways

- Consumer Services
- Counseling and Mental Health Services
- Early Childhood Development and Services
- Family and Community Services
- Personal Care Services

Sample Occupations

- Barber
- Clergy
- Elementary School Counselor
- Embalmer
- Hairdresser/Cosmetologist
- Loan Counselor
- Manicurist and Pedicurist
- Sociologist
- Tailor



Individuals employed in this cluster build the bridges between people and technology. They design, develop, support, and manage hardware, software, multimedia, and systems integration services that allow you to have access to the Internet, operate your remote control device, and use your iPod.

Pathways

- Information Support and Services
- Network Systems
- Programming and Software Development
- Web and Digital Communications

Sample Occupations

- Computer Programmer
- Network Designer
- Web Administrator
- Administration Associate
- Web Administrator
- Analyst
- Developer
- Computer Security Specialist
- Modeler
- Network Developer

There are individuals who plan, manage, and provide legal, public safety, protective services, and homeland security, including professional and technical support services, in your community. They are police officers, lawyers, security guards, and firefighters, and they deliver the services that make you feel a little safer in times of crisis.



Pathways

- Correction Services
- Emergency and Fire Management Services
- Law Enforcement Services
- Legal Services
- Security and Protective Services

Sample Occupations

- Arbitrator, Mediator and Conciliator
- Correctional Officer and Jailer
- Crossing Guard
- Detective and Investigator
- Dispatchers
- Fire Fighter
- Immigration and Custom Inspector
- Judge
- Lawyer
- Paramedic
- Police Officer
- Social Worker



Products ranging from plastic bottles to cars are built in factories and developed in manufacturing plants all over the world through specific processes. Those employed in the manufacturing cluster perform the steps that go into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

Pathways

- Health, Safety and Environmental Assurance
- Logistics and Inventory Control
- Maintenance, Installation and Repair
- Manufacturing Production Process Development
- Production
- Quality Assurance

Sample Occupations

- Assembler
- Automated Manufacturing Technician
- Bookbinder
- Calibration Technician
- Electrical Installer and Repairer
- Electromechanical Equipment Assembler
- Extruding and Drawing Machine Setter/Set-Up Operator



Marketing professionals plan, manage, and perform activities to reach organizational objectives. Their work can range from handing out flyers to publicizing an event or working in an office to research consumers' spending habits.

Pathways

- Marketing Communications
- Marketing Management
- Market Research
- Merchandising
- Professional Sales

Sample Occupations

- Market Research Analyst
- Fashion Designer
- Merchandise Displayer and Window Trimmer
- Real Estate Agent
- Sales Representative
- Telemarketer
- Key Account Manager
- Wholesale and Retail Buyer
- Account Executive

Can you see yourself planning, managing, and providing scientific research as a career? Are you interested in laboratory and testing services or in research and development? If so, are you also willing to earn the certification or advanced education necessary to work in this career cluster? If your answer is a “yes” to any of these questions, then take a closer look at these pathways and occupations.



Pathways

- Engineering and Technology
- Science and Math

Sample Occupations

- Anthropologist
- Biological Scientist
- Food Science Technologist
- Mathematician
- Microbiologist
- Park Naturalist
- Physicist
- Statistician
- Technical Writer