



INFORMATION TECHNOLOGY

Gives you the opportunity to design, develop and manage different types of software programs and hardware. This field requires a solid foundation in math and science as well as high technical skills. Information technology workers can be found in virtually every sector of the economy, providing assistance at a multitude of levels.

Network Systems
Information Support & Services
Web & Digital Communications
Programming & Software Development

sample careers:

- Software Engineer
- Network Administrator
- Web/Designer Developer
- Database Manager
- Multimedia Producer



LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

Prepares you for service in public safety and security. Responsibilities include prevention of and protection from harm such as crime or natural disasters. Career opportunities range from public safety officers to legal services to homeland security.

Correction Services
Emergency & Fire Management Services
Law Enforcement Services
Legal Services
Security & Protective Services

sample careers:

- Attorney
- Paramedic
- Fire Fighter
- Judge
- Police Officer
- Paralegal
- Corrections Officer



MANUFACTURING

Prepares you for careers in planning, managing and performing the processing of materials into intermediate or final products. Careers also include related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

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

sample careers:

- Machinist
- Manufacturing Engineer
- Automated Press Technician
- Production Engineer
- Welding Technician
- Quality Technician



MARKETING, SALES & SERVICES

Prepares you for careers in advertising, public relations, sales and planning. This Career Cluster allows you to demonstrate your creativity through promotional campaigns, event planning and new sales techniques.

Marketing Management
Professional Sales
Merchandising
Marketing Communications
Marketing Research

sample careers:

- Sales Associate
- Marketing Director
- Buyer
- Real Estate Broker
- Customer Service Representative



SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

Prepares you for careers using science, technology, engineering and mathematics skills. Jobs within this Career Cluster conduct in-depth research to provide solutions to a variety of technical problems within many different fields. A postsecondary degree and relevant work experience are necessary to succeed in this field.

Engineering & Technology
Science & Mathematics

sample careers:

- Chemical Engineer
- Mathematician
- Biotechnologist
- Electrical Engineer
- Biologist
- Oceanographer



TRANSPORTATION, DISTRIBUTION & LOGISTICS

Prepares you for careers in which you plan, manage and move everything from people to company products through a range of transportation services. Individuals in this field are involved in the logistics of all types of transportation from road to rail and air to water.

Transportation Operations
Logistics Planning & Management Services
Warehousing & Distribution Center Operations
Facility & Mobile Equipment Maintenance
Transportation Systems/Infrastructure
Planning, Management & Regulation
Health, Safety & Environmental Management
Sales & Services

sample careers:

- Pilot
- Automotive Technician
- Logistics Manager
- Flight Attendant
- Warehouse Manager
- Truck Driver



Alabama State Department of Education
Career and Technical Education/
Workforce Development

ALABAMA STATE DEPARTMENT OF EDUCATION OCTOBER 2012
THOMAS R. BICE, STATE SUPERINTENDENT OF EDUCATION
CAREER AND TECHNICAL EDUCATION/WORKFORCE DEVELOPMENT
PHILIP CLEVELAND, DIRECTOR

No person shall be denied employment, be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any program or activity on the basis of disability, gender, race, religion, national origin, color, age or genetics. Ref: Sec. 1983, Civil Rights Act, 42 U.S.C.; Title VI and VII, Civil Rights Act of 1964; Rehabilitation Act of 1973, Sec. 504; Age Discrimination in Employment Act; The Americans with Disabilities Act of 1990 and The Americans with Disabilities Act Amendments Act of 2008; Equal Pay Act of 1963; Title IX of the Education Amendment of 1972; Title II of the Genetic Information Nondiscrimination Act of 2008: Title IX Coordinator, P.O. Box 302101, Montgomery, Alabama 36130-2101 or call (334) 242-8165.



Career Clusters & Career Pathways

With descriptions and sample careers



AGRICULTURE, FOOD & NATURAL RESOURCES

Prepares you for careers that involve the science and mechanics of improving the quality and safety of food, cultivating and preserving our natural resources and caring for livestock and other animals. Further, you can learn about the business aspects involved in this broad field.

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

sample careers:

- Food Scientist
- Environmental Engineer
- Agriculture Teacher
- Animal Scientist
- Biochemist
- Agricultural Sales Director



ARCHITECTURE & CONSTRUCTION

Prepares you for careers that allow you to design, plan, manage, build and maintain structures such as buildings, homes and bridges or machinery. People employed in this cluster work on new structures, restorations, additions, alterations and repairs.

Design/Pre-Construction
Construction
Maintenance/Operation

sample careers:

- Contractor
- Carpenter
- Architect
- Plumber
- Electrician
- Heavy Equipment Operator



ARTS, A/V TECHNOLOGY & COMMUNICATIONS

Allows you to apply your creativity in a variety of different areas. This industry allows you to learn about advanced technologies used in venues ranging from corporate boardrooms, hotels, and convention centers, to classrooms, theme parks, stadiums and museums.

Audio & Video Technology & Film
Printing Technology
Visual Arts
Performing Arts
Journalism & Broadcasting
Telecommunications

sample careers:

- Actor-Actress
- Video Producer
- Journalist
- Audio Engineer
- Tele-Communications Technologist
- Printing/Graphics Technologist



BUSINESS MANAGEMENT & ADMINISTRATION

Prepares you for careers in which you plan, organize, direct and evaluate operations in order to run a successful business. There are a variety of career opportunities available that require skills in organization, time management, customer service and communications.

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

sample careers:

- Human Resources Administrator
- Administrative Specialist
- Entrepreneur
- Accountant
- Operations Manager
- Facilities Manager



EDUCATION & TRAINING

Prepares you for careers that provide education and training services that serve individuals of all ages and across a range of industries. Career choices include teaching in a classroom, leading as a college president and serving as a social worker.

Administration & Administrative Support
Professional Support Services
Teaching/Training

sample careers:

- Teacher
- Principal
- School Counselor
- College Professor
- Corporate Trainer
- Coach



FINANCE

Prepares you for careers in financial and investment planning, banking, insurance and business financial management. Every sector of the economy offers a job in this career. Many career opportunities require specialized skills in organization, time management, customer service and communication.

Securities & Investments
Business Finance
Accounting
Insurance
Banking Services

sample careers:

- Stock Broker
- Banker
- Insurance Agent
- Financial Planner
- Loan Officer
- Tax Examiner



GOVERNMENT & PUBLIC ADMINISTRATION

Prepares you for the diverse jobs found in our government. Virtually every occupation can be found within this field. You may help our nation defend against foreign aggression, represent our interest abroad, or pass and enforce local laws.

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

sample careers:

- Legislator
- City Manager
- Policy/Budget Analyst
- Recreation/Parks Director
- State/Federal Agency Director
- Urban/Regional Planner



HEALTH SCIENCES

Prepares you to help keep people healthy and treat those who are not. Work directly with people, by conducting research on diseases and other important health information. This field allows you to work in diverse environments such as hospitals, medical and dental offices or cruise ships.

Therapeutic Services
Diagnostic Services
Health Informatics
Support Services
Biotechnology Research & Development

sample careers:

- Pediatrician
- Physical Therapist
- Radiologic-Technologist
- Occupational Therapist
- Hospital Administrator
- Health Information Technologist



HOSPITALITY & TOURISM

Prepares you for careers that allow you to travel and work with a variety of people. Careers can be found all over the world and range anywhere from hotel and restaurant operations to working in amusement parks and other tourist destinations. Excellent customer service skills are essential for everyone in this field.

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

sample careers:

- Lodging Manager
- Chef
- Travel and Tourism Manager
- Food Service Manager
- Restaurant Manager
- Leisure and Entertainment Manager



HUMAN SERVICES

Prepares you for jobs in which you help families and individuals with life services. You can assist people through early childhood care, mental health services or personal care services. This Career Cluster requires individuals to have superior communication and problem-solving skills to provide various levels of support.

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

sample careers:

- Social Worker
- Psychologist
- Child Care Worker
- Substance Abuse Specialist
- Employment Specialist
- Psychotherapist



Preparing students to reach their full potential: College and Career Ready!