



## The 16 CAREER CLUSTERS



A Career Cluster is a grouping of occupations and broad industries based on commonalities



The slides will give you an understanding of each Career Cluster.

### Agriculture, Food & Natural Resources

The production, processing, marketing, distribution, financing and development of agricultural products and resources including food, fiber, wood products, natural resources, farm and animal products.



#### **INTERESTS**

Enjoy working outdoors and be physically active Enjoy Nature, taking care of pets, identifying environmental hazards and caring deeply about protecting the environment

#### **CAREERS**

- Agricultural Science Teachers
- Veterinarians
- Forest Fire Fighter
- Biochemists and Biophysicists
- Food Inspectors and Scientists
- Cartographers
- Game Warden and Animal Breeders
- Farm workers and laborers, farms and animals
- Nursery and greenhouse workers

SUGGESTED HIGH SCHOOL COURSES Earth Science, Biology, Chemistry, Agricultural Courses, CAD, Natural Resources, Floral Design, Statistics, Discrete Math, Greenhouse Mgt.

Floral Design

# Architecture & Construction

Careers in designing, planning, managing, building and main-taining the construction industry.



#### **INTERESTS**

- Enjoy working with their hands, using tools
- Have an aptitude for math and science
- Like solving or analyzing problems
- Building homes or other structures
- Building bridges and roadways

#### **CAREERS**

**Architect** 

**Brickmason or Cement Mason** 

Electrician or Plumber

Carpenter

Structural Steel Workers

**Construction Inspector** 

Elevator Installer/Repairer

Roofer

#### SUGGESTED HIGH SCHOOL COURSES

Algebra, Geometry, Construction, Science, Construction Materials, CAD, Computer Courses, Mechanical Drawing, Electricity and Electronics, Blueprint reading, Business Management

# CommunicationsAr ts, A/V Tech &

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing art and journalism and entertainment services



Information Technology Academy – Support & Services Two-Year Program at Mahoning County Career & Technical Center

Interactive Multimedia Academy Two-Year Program at Mahoning County Career & Technical Center

#### **INTERESTS**

- Drawing pictures or cartoons to amuse people
- Performing music, drama and or dance
- Creating an original video or film
- Sketching or painting pictures
- Taking photographs
- Making jewelry, sculpture or ceramics
- Designing a newspaper layout

#### **CAREERS**

Graphic Artist
Art , Theatre or Music Teacher
Newspaper Reporter
Photojournalist
Author or Writer or Director
Musician

#### SUGGESTED HIGH SCHOOL COURSES

Art, Graphic Art, Humanities, Journalism English, Photography, Communications, Music, Political Science, Photography

# **Business, Management & Administration**

Planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. These opportunities are available in every sector of the economy.



#### **INTERESTS**

- Running your own business
- Developing web pages
- Preparing reports
- Analyzing data
- Being a club officer
- Organizing a school event or fund-raiser
- Managing tasks for a group

#### **CAREERS**

Accountant or CPA
Financial Manager
Company Executive (CEO, CFO)
Office Manager
Public Relations Specialist
Management Analyst
Billing Clerk

#### SUGGESTED HIGH SCHOOL COURSES

Economics, Business, Accounting, Math,
English, Keyboarding, Computers, Marketing,
Sports Management, International Relations, Desktop and
Multimedia

# EDUCATION & TRAINING

Planning, managing and providing education and training services, and related learning support services.



#### **INTERESTS**

- Tutoring or babysitting young children
- Creating lesson plans
- Attending a summer camp
- Help others draw, write or read
- Create crafts, art or bulletin boards
- Play games with spelling, reading or math
- Coaching sports

#### **CAREERS**

School Counselor or School Psychologist

Teacher or Teacher's Aide

College Advisor

Day Care Center Director

Librarian

Vice Principal or Principal

#### **SUGGESTED HIGH SCHOOL COURSES**

English, Math, Science, History, Teacher Cadet, Sociology,
Psychology, Human Development
Marriage and Family, Early Childhood Ed.
Education courses

**Early Childhood Education** 

## FINANCE \$\$\$\$\$\$\$

Planning, service for financial and investment planning, banking, insurance and business financial management.



#### **INTERESTS**

- Investing money
- Developing a budget
- Using spreadsheets and financial computer programs
- Balancing a checkbook
- Being a treasurer of a club
- Organizing a fund-raiser
- Planning a mock stock market game
- Studying investments and the stock market

#### **CAREERS**

Actuary

**Appraiser** 

Financial Institution Manager (Banker)

Loan Officer (Mortgage or others)

Securities Trader

Tax Preparer or Auditor

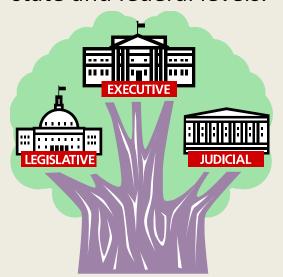
Claim Examiner or Adjuster

#### SUGGESTED HIGH SCHOOL COURSES

Business Math, Computers, Keyboarding, Statistics Economics, Business Law, Algebra, Accounting, English, Marketing, Record Keeping and Data Processing

# GOVERNMENT & PUBLIC ADM.

Executing governmental functions to include Governance; National Security, Foreign Service, Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state and federal levels.



#### **INTERESTS**

- Participating in a debate or on a debate team
- Researching and writing grants
- Learning and speaking a foreign language
- Making speeches
- Running for class or club office
- Volunteering as a legislative aide
- Volunteering for school board/town board position
- Campaigning for political candidates

#### **CAREERS**

Government Investigator (FBI, CIA, DIA)
Public Works Director
City or Town Manager
Congressional Aide
Legislative Assistant
State Department Official

#### **SUGGESTED HIGH SCHOOL COURSES**

Accounting, Business Law, Economics, Government
Business Management, History, Foreign
Languages, Humanities, Sociology,
Law, English, Statistics

Public Safety

## HEALTH SCIENCE

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services and biotechnology research and development.



Health Tech Prep Program at Mahoning County Career & Technical Center

**Exercise Science** 

Medical Occupation Two-Year Program at Mahoning County Career & Technical Center

#### INTERESTS

- Learn first aid or CPR
- Volunteer at a retirement home
- Learn how the body/mind work
- Watch medical shows on TV
- Be a team manager on a school athletic team
- Volunteer at a rescue squat

#### **CAREERS**

Dietician

**Athletic Trainer** 

**Pharmacist** 

Physician Assistant, Nurse, Radiologic Tech

Music or Art Therapist

Dentist or Physician or Surgeon

Recreational, Occupational Therapists

**Physical Therapist** 

Dental Lab Technician

#### SUGGESTED HIGH SCHOOL COURSES

Biology, Anatomy, English, Math, First Aid, Chemistry, Psychology, Health and PE, Music and Art

# Hospitality and Tourism

Management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related



#### **INTERESTS**

- Planning vacations or school trips
- Cooking and baking
- Participating in sports
- Exercising and working out
- Planning school functions
- Recreational activities
- Being a lifeguard
- Reading about other countries and cultures

#### **CAREERS**

Recreational Leader

**Camp Counselor** 

**Travel Agent** 

**Hospitality Manager** 

**Hotel Manager** 

Chef/Baker/Server/Cook

**Tour Director** 

#### SUGGESTED HIGH SCHOOL COURSES

English, Foreign Languages, Geography, History, Child Care Studies, Physical education, Health, Sociology and Psychology

**Culinary Arts** 

### HR-HUMAN SERVICES

Preparing individuals for employment in career pathways that relate to families and human needs.



#### **INTERESTS**

- Listening and helping friends with problems
- Working with the elderly
- shopping and comparing prices
- Volunteering
- Delivering food and clothes to people in need
- Serving home at a homeless shelter
- Working with the elderly
- making family menus

#### **CAREERS**

Child care worker

Recreational Worker

Rehabilitation or Substance Abuse Director

Deaf Interpreter Associate

Nutrition counselor

Funeral Director or Clergy

#### SUGGESTED HIGH SCHOOL COURSES

Child Care, Home Economics, Sociology, psychology,
Foreign Languages, English/Lit., History, Computer
Literacy, Nursing, Early Child Ed., Human Development,
Family Living

# IT Information Technology

Design, development, support and management of hardware, software, multimedia and systems integration



#### **INTERESTS**

- Play video games
- Assemble computer parts or repair systems
- Write software programs
- Develop web pages
- Surf the internet
- Analyzing data or information
- Documenting and recording information
- Learn or install software programs

#### **CAREERS**

Computer System Engineers, Analysts or Architects
Database Administrators
Network Systems Analysts
Web Administrators
Business Intelligence Analysts
Computer Security Specialists

#### SUGGESTED HIGH SCHOOL COURSES

Advanced Math courses, Keyboarding, Computers Information Systems, Computer New work Administrator, IT Engineering, Applied technology, Web Design, Law and Ethics

**Business IT** 

### LAW PUBLIC SAFETY, AND SECURITY

Planning, managing and providing legal, public safety, protective services and homeland security, including professional and technical support.



#### **INTERESTS**

- Reading mystery novels or watching mystery movies
- Following court cases in the news
- Listening to a policy scanner
- Volunteering to search for missing pets or children
- Participating in a search and/or rescue training
- Volunteering for the local fire department

#### **CAREERS**

Attorney or District Attorney

**Corrections Officer** 

Court Reporter or Clerk

Police Officer or Detective

Polygraph Examiner

Fire Fighter or Inspector

**Forensic Artist** 

Paralegal

Probation and Parole Officer

#### SUGGESTED HIGH SCHOOL COURSES

Law, Government, EMT, History, Psychology, Sociology,
Data Processing, Computer Literacy, Health & PE
First Aid, Math, Office Administration

#### **MANUFACTURING**

Planning, managing and performing the procession of materials in into intermediate or final products and related professional and technical support activities as production planning and the control, maintenance and engineering of products.



Engineering Tech Prep Program at Mahoning County Career & Technical Center

Welding and Fabrication
Program at Mahoning County
Career & Technical Center

#### **INTERESTS**

- Sewing, weaving, knitting or other projects
- Building things such as wood projects
- Taking machine shop classes
- Repairing machinery
- Stalling and repairing home stereo equipment
- Working with leather goods
- Operating a printing press

#### **CAREERS**

Machine Operator
Welder
Cabinetmaker or Furniture maker
Textile Inspector, Tester
Health and Safety Specialist
Industrial Psychologist
Operations Research Analyst
Laborer

#### **SUGGESTED HIGH SCHOOL COURSES**

Math, Industrial Arts, Shop Mechanics
Mechanical Drawing, Geometry, Chemistry Business
Management, Computer Concepts
Electricity and Electronics, Blueprint Reading,

### Marketing, Sales & Service

Planning, managing and performing marketing activities to reach organization objectives.



#### **INTERESTS**

- Give people advise on products they buy
- Sell products for fundraisers
- Take tours of houses for sale
- Design and model clothes
- Decorate homes or rearrange furniture
- Likes working with numbers
- Enjoys shopping
- Setting up a fashion show

#### **CAREERS**

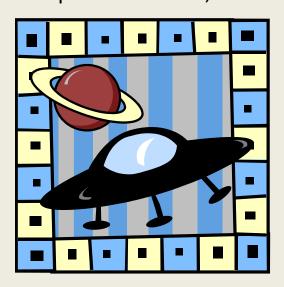
Real Estate Agent or manager
Real Estate Appraiser
Fashion or Floral Designer
Retail Store Manager or Clerk
Customer Service Representative
Sales manager
Fashion Model

#### SUGGESTED HIGH SCHOOL COURSES

Intro to Business, Marketing, Art, Retail Sales,
Business Math, Accounting, Keyboarding,
Computer Literacy, Art, Office Education, General
Merchandizing, English

### SCIENCE TECHNOLOGY, ENGINEERING & MATH

Planning, managing, and providing scientific research and professional and technical services including (e.g. physical science, social science, engineering) laboratory and testing services and research and development services,



#### **INTERESTS**

- Collecting rocks or fossils
- Identifying plants and animals
- Conducting science experiments
- Watching the weather
- Designing and test vehicles or planes
- Developing new products or machinery
- Stargazing
- Designing experiments

#### **CAREERS**

**Anthropologist** 

**Physicist** 

**Environmental Scientist** 

Engineer (nuclear, industrial, Chemical,

Civil, Petroleum)

**Aerospace Engineer** 

Computer Hardware Engineer

#### SUGGESTED HIGH SCHOOL COURSES

Earth Science, Biology, Chemistry, Physics, Anatomy Advanced math, Advanced Science, Computer Technology, English, Drafting, Statistics

Engineering

# Transportation, Distribution & Logistics

Planning, management and movement of people, materials and goods by road, pipeline, rail, air, and water and related services such as transportation, infrastructure planning and management, logistics services, mobile equipment and facility maintenance.



Collision Repair Technology Two-Year Program at Mahoning County Career & Technical Center

Truck & Diesel Mechanics Two-Year Program at Mahoning County Career & Technical Center

**Automotive Technology** 

#### **INTERESTS**

- Playing with automobiles or trains
- Loves flying
- Loves boating
- Interested in knowing how machines work
- Interested in fixing all types of machines
- Interested in the distribution of goods

#### **CAREERS**

**Commercial Pilots** 

**Traffic Technicians** 

**Transportation Specialist** 

Aerospace technicians

Air Cargo Handlers

**Bus and Auto Mechanics** 

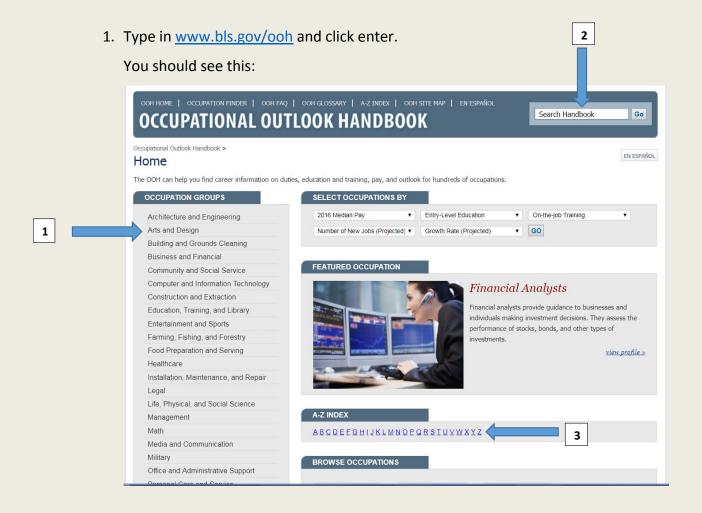
**Motorboat Mechanics** 

**Electrical Equipment Installers** 

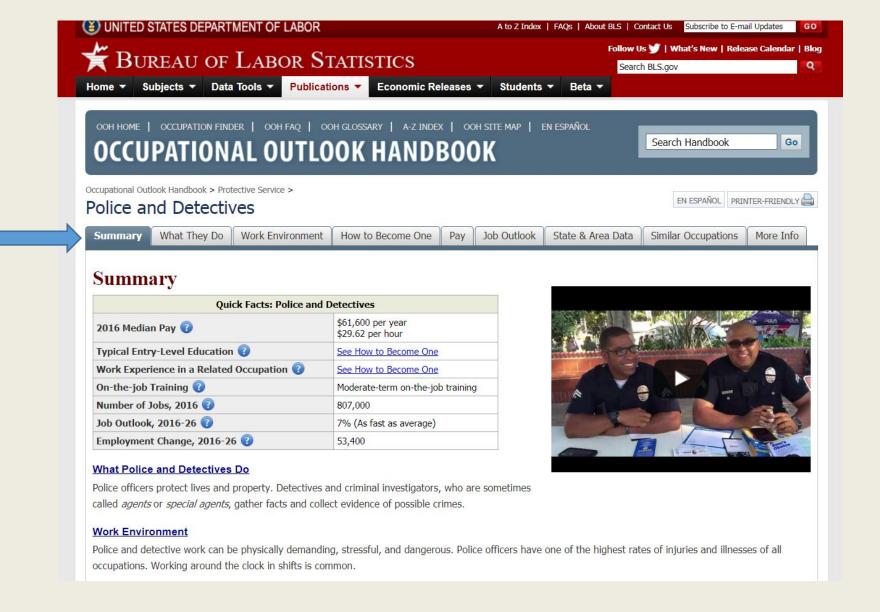
#### SUGGESTED HIGH SCHOOL COURSES

Math and Science Electricity and Electronics,
Transportation and Distribution Courses, Logistics,
Diesel Technology

#### Occupation Outlook Handbook



- 1. From here you have a couple of options. You can click on any of the occupations groups to the left.
- 2. You can type the name of the occupation in the "search handbook" box.
- 3. You can click on the first letter of the occupation and it will take you to a list of occupations that start with that letter.



Once you choose an occupation you can use the tabs to search for answers to your questions.

Name	Career Research
Name of Occupation	
Career Cluster the occupation is from	
What does a person in this occupation do?	
What kind of training does a person in this occupation need?	
How much money can a person in this occupation make?	
What is the Job Outlook for this occupation?	
Will there be a job out there when you graduate?	
Is this an occupation you would be interested in?	