



Asheville City Schools
Career and Technical Education Department



CTE CAREER CLUSTERS



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

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This document will help everyone understand each Career Cluster and Pathway that is offered in Asheville City Schools.

Sustainable Agriculture

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 being 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, Statistics, Discrete Math

Architecture & Construction

Careers in designing, planning, managing, building, and maintaining 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
- Brick Mason or Cement Mason
- Electrician or Plumber
- Carpenter
- Structural Steel Workers
- Construction Inspector
- Elevator Installer/Repairer
- Roofer

SUGGESTED HIGH SCHOOL COURSES

Algebra, Geometry, Core Construction, Science, Carpentry, Computer Courses, and Business Management

Arts, A/V Tech & Communications

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



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, Humanities, Journalism
English, Photography, Communications,
Music, 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 fundraiser**
- **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, Math, English, Computers,
Sports and Event Marketing, Business Essentials,
Financial Planning**

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, Psychology,
Childhood Development, Early Childhood
Education I & II Courses

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 fundraiser
- 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, Statistics
Economics, Business Law, Algebra, English, Marketing

HEALTH SCIENCE

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



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 squad

CAREERS

- Dietician
- Athletic Trainer
- Pharmacist
- Physician Assistant, Nurse, Radiologic Tech
- Music or Art Therapist
- Dentist, Physician or Surgeon
- Recreational, Occupational Therapists
- Physical Therapist
- Dental Lab Technician

SUGGESTED HIGH SCHOOL COURSES

Foundation of Health Science, Health Science, 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 services.



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

Culinary, Entrepreneurship, PLTW, English, Foreign Languages, Geography, History, Child Care Studies, Physical Education, Health, Psychology

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

- Childcare Worker
- Recreational Worker
- Rehabilitation or Substance Abuse Director
- Deaf Interpreter Associate
- Nutrition counselor
- Funeral Director or Clergy

SUGGESTED HIGH SCHOOL COURSES

Child Development, Early Childhood Education, Psychology, Foreign Languages, English/Lit., History, Computer, Nursing

IT Information Technology

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



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 Systems Engineer Analysts, or Architects
- Database Administrators
- Network Systems Analysts
- Web Administrators
- Business Intelligence Analysts
- Computer Security Specialists

SUGGESTED HIGH SCHOOL COURSES

Advanced Math courses, Computer Science, Gaming, Animation, PLTW, Adobe Design

Marketing, Sales & Service

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



INTERESTS

- Give people advice 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

Business Essentials, Sports Event and Marketing, Cosmetology, Art, Business Math, Financial Planning, Entrepreneurship, English

Public Safety, Corrections & 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 police 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
- Firefighter or Inspector
- Forensic Artist
- Paralegal
- Probation and Parole Officer

SUGGESTED HIGH SCHOOL COURSES

Government, Fire Academy, History, Psychology,
Computer Science, Health & PE, First Aid, Math

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 testing 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 Science,
Technology, English, Adobe, Statistics