**Agriculture, Food and Natural Resources**

The Agriculture, Food, & Natural Resources Career Cluster includes the production, processing, marketing, financing, distribution, and development of agricultural commodities and resources. These commodities include food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources. As long as human beings inhabit the planet, we will have a need for scientists and technicians to ensure that we are responsibly managing our food production and our natural resources consumption.

**This career cluster is organized into eight career pathways:**

* Animal systems
* Agribusiness systems
* Biotechnology systems
* Environmental service systems
* Food products and processing systems
* Natural resources systems
* Plant systems
* Power, structural and technical systems

**Interesting Careers including:**

|  |  |
| --- | --- |
| * Agriculture bankers * Commodity traders * Plant pathologists * Agronomists * Agriculture mechanics * Ranchers * Farmers * Production supervisors * Natural resource * Biochemists * Meat processors * Wholesale food purchasers * Irrigation * Horticulture * Landscapers * Turf managers * Forest geneticists * Veterinarians |  |

**Arts and Entertainment**

Creative students who see themselves designing, producing, exhibiting, performing, writing or publishing multimedia. You will apply artistic talent to practical problems and learn visual arts principles that prepare you with skills and techniques to work in any number of creative design and entertainment fields.

**This career cluster is organized into six career pathways:**

* Audio and video technology and film
* Broadcasting and journalism
* Performing arts
* Printing technology
* Telecommunications
* Visual Arts

**Interesting careers include:**

* Video or web producer
* Film maker
* Graphic designer
* Television studio producer
* Stage designer
* Publisher
* Radio broadcaster
* Fashion/apparel designer or illustrator
* Interior designer
* Textile designer
* Curator or gallery manager
* Costume designer

**Business, Management and Administration**

If you want to run your own business or be the person that makes a business successful, be sure to look at the opportunities in the Business, Management and Administration career cluster. Students learn business skills essential to efficient, productive operations for any company, including planning, organizing, directing, and evaluating.

**This career cluster is organized into five career pathways:**

* Administrative and information support
* Business analysis
* Business, financial management and accounting
* Human resources
* Management

**Interesting Careers include:**

* Chief executive officer
* Entrepreneur
* Controller
* Adjuster
* Budget, cost or systems analyst
* Marketing manager
* Human resources manager
* Executive assistant
* Wholesale or retail buyer
* Retail salesperson
* Bookkeeper
* Office manager
* Office Receptionist

**Education**

Practical experiences develops the art of teaching, planning and administration in schools, post-secondary institutions and businesses. Also includes planning, managing, and providing education and training services as well as related learning support services

**This career cluster is organized into three career pathways:**

* Administration and administrative support
* Professional support services
* Teaching and training

**Interesting careers include:**

* Superintendent, principal or administrator
* Teacher or instructor
* Preschool or kindergarten teacher
* Clinical, developmental or social psychologist
* Social worker
* Counselor
* Teacher assistant
* Parent educator
* Child care worker
* Coach
* Recreation worker
* Sign language interpreter

**Energy Sector**

The energy sector in Canada is made up of companies and agencies involved in a number of areas, including exploring new sources of energy; producing or generating energy; and refining, storing and distributing energy. Energy includes hydro-electricity, nuclear power and renewable energy and fuels (such as wind and solar energy or biofuels), as well as oil and gas.

**This career cluster is organized into three career pathways**

* The oil and gas industry, including oil companies and petroleum refiners, distribution (fuel transporters) and end-user sales at gas stations, as well as liquid natural gas (LNG) extraction, distribution and sales.
* The electrical power industry, including hydroelectric generation, distribution and sales.
* The sustainable energy industry, including renewable energy generation (solar, wind, biomass), distribution and sales, as well as energy efficiency and energy conservation.

**Interesting careers include:**

* Renewable Project Manager
* Energy Engineer
* Energy Manager
* Green Building Project Manager
* Green Building Designer
* Energy Efficiency Program Manager/Project Manager
* Energy Policy Analyst

**Finance**

The Finance Career Cluster prepares students for careers in financial and investment planning, banking, insurance and business financial management. Finance career opportunities are available in every sector of the economy and require skill in organization, time management, customer service and communication.

**This career cluster is organized into four career pathways:**

* Banking and related services
* Business financial management
* Financial and investment planning
* Insurance services

**Interesting careers include:**

|  |  |
| --- | --- |
| * Accountant * Auditor * Development officer * Financial analyst * Treasurer * Controller * Economist * Budget analyst * Personal financial advisor * Tax preparer * Investment advisor * Debt counselor * Actuary * Underwriter * Insurance appraiser * Bank teller |  |
| **Government and Public Administration**  The Government & Public Administration Career Cluster includes the planning and performing of government management and administrative functions in shaping or protecting the future of your City, Province and Canada.  **This career cluster is organized into seven career pathways:**   * Government * Military service * Foreign service * Planning * Revenue and taxation * Regulation * Public management and administration     **Interesting careers include:**   |  |  | | --- | --- | | * Elected official (city council, mayor, premier, etc.) * City manager * Lobbyist * Legislative assistant * Military member (Army, Navy, Air Force, Coast Guard) * Foreign service, diplomatic or consular officer * Urban planner * Census clerk * Tax examiner * Internal revenue agent or investigator |  | |  |

* Auditor
* Bank examiner
* Election supervisor
* Border inspector
* City clerk

**Health Science**

A career that promotes health, wellness and diagnosis, and treats injuries and diseases.

Some careers involve working directly with people, while others involve research into diseases or collecting and formatting data and information. You could work in hospitals, medical or dental offices, laboratories, communities, or sports arenas.

**This career cluster is organized into five career pathways:**

* Biotechnology research and development
* Diagnostic services
* Health informatics
* Support services
* Therapeutic services

**Interesting careers include:**

|  |  |
| --- | --- |
| * Physician * Surgeon * Nurse – LPN and RN * Dentist * Dental assistant * Scientist * Hospital administrator * Health unit coordinator * Nutritionist or dietician * Medical or public health researcher * Medical lab technician * Transcriptionist * Optometrist * Pharmacist * Physical therapist * Massage therapist * Occupational therapist * Respiratory therapist * Chiropractor * Naturopath * Osteopath * Orthotists and Prosthetists * Exercise physiologist * Speech and language pathologist * Dance, drama or music therapist * Diagnostic Medical Sonographers – Ultrasound   **Hospitality and Tourism** |  |

If you like travel and are intrigued by the idea of helping others explore the beauty, culture and cuisine of the world around them, you will want to check out the Hospitality and Tourism Career. Students are introduces to management, marketing and operation of restaurants and other food services, lodging, attractions, recreation and travel services.

**This career cluster is organized into four career pathways:**

* Lodging
* Recreation, amusement and attractions
* Restaurants and food and beverage services
* Travel and tourism

**Interesting careers include:**

* Owner, operator or manager for the following:
  + Restaurant, food service, lounge, casino, coffee shop, or catering
  + Hotel, motel, resort, or bed and breakfast
  + Tour company
* Meeting and convention planner
* Interpreter or translator
* Tourism and travel services

**Human Services**

A career in Human Services, prepares you for jobs that relate to families and human needs. Whether you want to be a social worker, a childcare provider, you will be addressing human needs.

**This career cluster is organized into five career pathways:**

* Consumer services
* Counseling and mental health services
* Early childhood development and services
* Family and community services
* Personal care services

**Interesting careers including:**

|  |  |  |  |
| --- | --- | --- | --- |
| * Child care worker * Social worker for child, family or school * Director of childcare facility * School counselor * Sociologist * Personal or home care aide * Leisure activities coordinator * Recreation worker/assistant   **Information Technology**  The rapidly changing digital world of the Information Technology Career Cluster engages students in hands-on learning to prepare for careers that create, use, modify, and engage technology skills. Graphics, multimedia animation, web design, game and application development, networking, and computer repair are all possibilities.  **This career cluster is organized into four career pathways:**   * Information support and services * Interactive media * Network systems * Programming and software development     **Interesting careers including:**   |  |  | | --- | --- | | * Web designer or webmaster * Network administrator or technician * Telecommunications technician * Data communications analyst * Security or database administrator * Application integrator |  | |  |

* Computer or game programmer
* Software applications architect
* 3D animator
* Virtual reality specialist
* Graphic artist
* IT Help desk specialist
* Technical writer

**Law, Public Safety, Corrections, & Security**

The Law, Public Safety, Corrections, & Security Career Cluster prepare individuals for employment relating to emergency and fire services, legal services, and protective services.

**This career cluster is organized into five career pathways:**

* Emergency and fire management
* Security and protective services
* Law enforcement services
* Legal services
* Correction services

**Interesting careers including:**

|  |  |
| --- | --- |
| * Judge * Attorney * Paralegal * Court reporter * Police officer * Correctional officer * Probation/parole officer * Fire fighter |  |

* Rescue worker (EMT, paramedic)
* Emergency dispatcher
* Loss prevention specialist
* Canadian Security Intelligence Service
* Boarder control service officer
* Immigration and customs inspector

**Manufacturing**

The Manufacturing career cluster, covers how industry and technology work together to make or package the things that we use or consume every day like cars, computers and food. Careers in advanced manufacturing offer exciting opportunities in designing and improving products, operating high-tech tools and machinery, analyzing problems and coming up with creative solutions, and working with both your hands and your mind.

**This career cluster is organized into eight career pathways:**

* Production
* Manufacturing production process development
* Maintenance
* Installation and repair
* Quality assurance
* Logistics and inventory control
* Health
* Safety and environmental assurance

**Interesting careers including:**

|  |  |
| --- | --- |
| * Engineer * Microchip manufacturer * Precision inspector, tester or grader * Technician in automated manufacturing, laser, biomedical equipment, lab, quality control, safety coordination |  |

* Inspector
* Machine operator
* Communication system, computer or meter installer or repairer
* Industrial truck and tractor operator

**Marketing**

Marketing is the process of anticipating, managing, and satisfying consumers' demand for products, services, and ideas. The Marketing Career Cluster generates the strategy that underlies advertising and promotional techniques, business communication, and business development.

**This career cluster is organized into six career pathways:**

* Buying and merchandising
* Distribution and logistics
* E-Marketing
* Management and entrepreneurship
* Marketing communications and promotion
* Marketing information management and research
* Professional sales and marketing

**Interesting careers including:**

|  |  |
| --- | --- |
| * Manager of sales or information * Sales specialist * Demonstrator or product promoter * Wholesale or retail buyer * Distributor * Public relations manager or specialist |  |

* Marketing communications or promotions manager or specialist
* Community relations manager or specialist
* E-marketer
* Marketing consultant
* Fashion or interior designer
* Merchandise displayer and window trimmer

**Science, Technology, Engineering, Mathematics (STEM)**

The Science, Technology, Engineering, Mathematics Career Cluster means planning, managing, and providing scientific research and professional and technical services

**This career cluster is organized into two career pathways:**

* Engineering and technology
* Science and math

**Interesting careers including:**

|  |  |
| --- | --- |
| * Biologist or microbiologist * Chemist * Biochemist or biophysicist * Mathematician * Statistician * Engineer: (Aerospace, industrial, biotechnology, chemical) * Engineering manager * Atmospheric or space scientist * Geoscientist or materials scientist * Surveying and mapping technician |  |

* Hydrologist
* Architect
* Materials lab and supply technician
* Quality technician

**Transportation, Distribution & Logistics**

The Transportation, Distribution & Logistics Career Cluster encompasses planning, managing, and moving people, materials, and goods by road, pipeline, air, rail, and water, and also includes other related professional and technical support services.

It also includes related professional and technical services such as infrastructure planning and management, logistics, and maintenance of equipment and facilities.

**This career cluster is organized into seven career pathways:**

* Facility and mobile equipment maintenance
* Health, safety and environmental management
* Logistics planning and management services
* Transportation operations
* Transportation systems and infrastructure
* Planning, management and regulation
* Warehousing and distribution center operations

**Interesting careers including:**

|  |  |
| --- | --- |
| * Transportation manager * Air traffic controller * Airline pilot * Urban or regional planner * Logistician * Shipping and receiving supervisor * Storage and distribution managers * Operations technician * Fleet manager * Vehicle and system inspector * Railroad safety inspector * Longshore worker * Ship, tugboat or ferry pilot * Cargo and freight agent * Health and safety manager * Flight attendant |  |