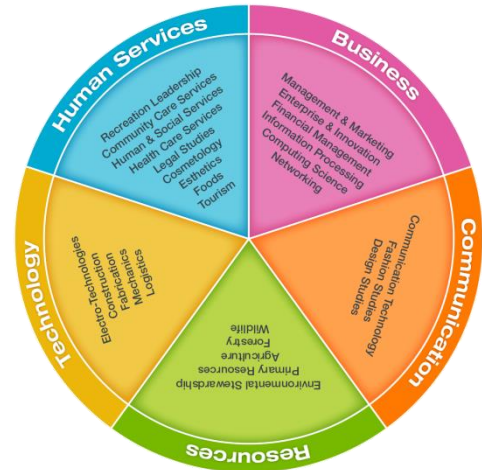




CTF Occupational Areas and Possible Occupations

An occupational area is a grouping of courses that focuses on attitudes, skills and knowledge related to specific work areas.

In CTF, the occupational areas are grouped into five clusters (Business, Communication, Human Services, Resources and Technology), which represent occupational groupings found within industry. The names of the CTF occupational clusters are simplified versions of the CTS occupational cluster names. The CTF occupational clusters are aligned with the CTS occupational clusters shown in the [CTS Compass](#) as well as the [National Occupational Classification \(NOC\)](#).



Cluster: Business

The focus is on management, marketing and the use of electronic technologies to access, use and manipulate information within personal, family, workplace, community and global contexts. This cluster challenges students to expand their confidence, experience and skills as innovators and leaders.



| Occupational Area | Possible Occupations |
|--|---|
| Computing Science (CSE) Explore hardware, software and processes to write or create structured algorithms and programs that input, process and output data. | computer engineer, computer network administrator, computer programmer, computer service technician, software engineer, systems engineer, software developer, web developer, webmaster, project manager |
| Enterprise & Innovation (ENT) Study the area of business that deals with the organization and management of a project, an undertaking or an innovation. | business owner, life skills coach or any person running his or her own business |
| Financial Management (FIN) Plan, organize, direct, control and evaluate the operation of an accountant, auditor or financial service. | financial analyst, personal financial advisor, accountant, buyer, treasurer, investment banking analyst, tax associate, financial auditor |
| Information Processing (INF) Gather information and process it from one form into another. | data miner, word processor, typist, data administrator, electronic data processor, information systems consultant, transcribers, information systems quality assurance analyst |
| Management & Marketing (MAM) Learn the processes associated with promotion for the sale of goods and services. | property manager, restaurant manager, sales representative, tour director, visual merchandiser, advertising account executive, management consultant, market research analyst, marketing manager |
| Networking (NET) Use a group of computers that are connected for the purpose of communication. | network administrator, network (systems) engineer, network (service) technician, network programmer/analyst, network/information systems manager |

Cluster: Communication

The focus is on providing students with the flexibility to adapt to various situations relating to design, communication and fashion. This cluster includes courses related to art and culture, such as the performing arts, film and video, broadcasting, journalism, writing, creative design, fashion, libraries and museums.



| Occupational Area | Possible Occupations |
|---|---|
| Communication Technology (COM) Discover and develop skills related to technologies used to design, construct and relay a message for the purpose of connecting, informing, entertaining or selling products. | technical writer, telecommunications technologist, television reporter, instrumentation engineering technologist, communication technologist, social media specialist, photographer, editor |
| Design Studies (DES) Learn about the creative process from conception through to development in architecture, industrial design, engineering, interior design and landscaping. | architect, civil engineer, interior designer, landscape architect, engineering |
| Fashion Studies (FAS) Design, manufacture and market clothing and other textile products as well as study the history, sociology and economics of clothing and textile arts. | fashion designer, fashion illustrator, fashion model, exhibit designer, visual merchandiser |

Cluster: Resources

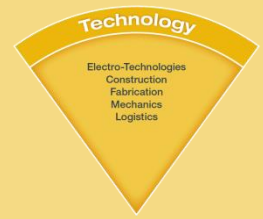
The focus is on conservation and the sustainable use of natural resources. Students develop the motivation and commitment to work individually and collectively as private citizens and members of the workforce toward the conservation and responsible use of air, energy, forests, land, water and wildlife.



| Occupational Area | Possible Occupations |
|---|--|
| Agriculture (AGR) Learn the how and why of producing agriculture/horticulture products, providing related services, and supporting sustainable development and efficient use of natural resources. | agricultural commodity inspector, agricultural products processing machine operator, livestock and poultry producer, farm worker or technician, dairy producer, beekeeper, nursery operator |
| Environmental Stewardship (ENS) Examine the management and conservation of the environment and propose actions that foster the sustainable development and use of resources. | ecologist, toxicologist, soil scientist, hydrologist, greenhouse operator |
| Forestry (FOR) Develop an understanding of the forest as a resource and how to maintain its sustainability. | forest technician, forest technologist, forester, logging/forestry equipment operator, timber scaler, arborist, park warden, landscape gardener, land surveyor |
| Primary Resources (PRS) Examine mineral industries and technologies that support sustainable development and efficient use of mineral resources. | blaster, mining engineer, surface mining equipment operator, underground miner, drilling and service rig manager, land agent, natural gas compression technician, rig technician, well testing services supervisor, petroleum engineering technologist |
| Wildlife (WLD) Examine the human relationship to the natural environment, and consider the impact of various human pursuits on species and ecosystems. | interpretive naturalist, heritage interpreter, conservation officer, trapper, hunter, hunting guide, hide and pelt processing worker |

Cluster: Technology

The focus is on skills and knowledge related to the design, construction, fabrication and maintenance of a product. This cluster includes courses that relate to manufacturing, processing, utilities, construction, mechanics, fabrication, trades supervision, trades contracting, logistics, transportation and heavy equipment.



| Occupational Area | Possible Occupations |
|--|--|
| <p>Construction (CON) Develop skills in the use of tools and materials used in construction processes, and safely transform common wood materials into useful products; learn the various skills of the respective trade.</p> | <p>bricklayer, carpenter, civil engineer, concrete finisher, gasfitter, floorcovering installer, insulator, roofer, scaffold erector, tile setter</p> |
| <p>Electro-Technologies (ELT) Provide technical support and services in the design, development, testing, production, service, repair and operation of electrical and electronic equipment and systems.</p> | <p>electrician, communication technician, safety codes officer, electrical engineering technologist, home inspector</p> |
| <p>Fabrication (FAB) Develop skills in the use of tools and materials used in fabrication processes, and safely transform common metals into useful products; learn the various skills of the welder trade.</p> | <p>welder, boilermaker, CTS teacher, heavy equipment technician, ironworker, machinist, millwright, non-destructive testing technician, structural steel and plate fitter</p> |
| <p>Logistics (LOG) Organize and coordinate the movement of people, materials and data.</p> | <p>city planner, sustainability specialist, hazardous waste management technologist, human resource professional, community planner, economist, advertising account executive, data administrator, market research analyst, operations manager</p> |
| <p>Mechanics (MEC) Inspect, diagnose, repair and service mechanical, electrical and electronic systems and components of cars and light and commercial transport trucks; learn the various skills of the auto service technician trade.</p> | <p>mechanic, instrument technician, avionics technician, aircraft maintenance technician, sheet metal worker, refrigeration and air conditioning mechanic</p> |

Cluster: Human Services

The focus is on a vast array of challenging and rewarding careers in health care, community supports, recreation, cosmetology, food services, tourism and law.



| Occupational Area | Possible Occupations |
|---|---|
| Community Care Services (CCS) Experience volunteering and developing skills for community-based services in a variety of settings. | manager of volunteer resources, fund development professional, human ecologist, public relations representative, special event coordinator, recreation and sport administrator |
| Cosmetology (COS) Experience the role of personal grooming and learn the various skills involved in the hairstyling trade, such as haircutting, texturizing, colouring and styling. | cosmetician, hairstylist |
| Esthetics (EST) Specialize in skin care and treatments, including facials, cosmetic make-up services, hair removal, massage and nail art. | esthetician, cosmetician, electrologist, make-up artist, nail technician |
| Foods (FOD) Examine the role of food, looking beyond consumption to production, visual appreciation, nutrition, meal planning, economics and preparation; learn the various skills in the cook trade. | baker, chef, cook, kitchen helper, food assembler, bartender, flight attendant, restaurant manager, caterer, dietitian |
| Health Care Services (HCS) Prepare for medical careers by examining the anatomy and function of the body systems, and develop First Aid, CPR and occupational safety skills necessary for careers in emergency response. | acupuncturist, addictions counsellor, cardiology technician, community health nurse, registered nurse, creative arts therapist, dietitian, dentist, massage therapist, medical laboratory technologist, herbalist |
| Human & Social Services (HSS) Learn about occupations related to wellness, human development, family support, and professional standards and ethics. | social worker, career development professional, correctional services worker, marriage and family counsellor, mediator, mental health worker, parole or probation officer, psychiatric nurse, psychologist |
| Legal Studies (LGS) Become familiar with the influence, impact and complexities of the law in daily life. | paralegal, captioner and court reporter, judicial clerk, land titles analyst, lawyer, legal assistant, library technician |
| Recreation Leadership (REC) Develop skills useful for coaching, fitness leadership, sport performance, athletic therapy and leading recreational activities. | personal trainer, recreation coordinator, sports instructor, recreation facility operator, group exercise leader |
| Tourism (TOU) Look at the impact of tourism in Alberta and around the world and develop knowledge and skills required for the tourism industry. | travel agent, tour guide, flight attendant, outdoor sport and recreation guide, travel counsellor, pilot, bus driver, air traffic controller, taxi driver, heritage interpreter, ticket agent |