

ct-centre.ca



career &
technology
centre

course guide 2014-15

learning | as unique | as every student



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Introduction

The Career and Technology Centre (CTC) provides continuous access to academic, industry-standard programs, certificated journeyman instructors, facilities and equipment for students seeking industry-standard credentials in high demand, highly skilled occupations. In journeyman trades, students can simultaneously earn credits in Career and Technology Studies (CTS) while completing equivalent Alberta Industry and Training (AIT) courses for their journeyman technical training. Many other specializations are offered and described in the course overview section below.

Students may choose courses at *explore*, *specialize* or *credential* levels.

- *Explore level* programs are for student seeking an introduction to an occupational field they may be interested in as a career.
- *Specialized level* programs are for students seeking local certificates or detailed study of a particular occupational field in which they have previously explored.
- *Credential level* programs are for students wishing to complete the technical training of a journeyman trade.

The Centre's programs are organized by the following *Career Clusters*:

Trades, Manufacturing & Transportation

- **Auto Body** | Auto Body Apprentice and Pre-Apprentice
- **Fabrication** | Welder Apprentice and Pre-Apprentice
- **Pre-Engineering**
- **Supply Chain Management** | Logistics

Health, Recreation & Human Services

- **Cosmetology** | Hairstylist Apprentice and Pre-Apprentice
- **Culinary Arts** | Cook Apprentice and Pre-Apprentice
- **Health Sciences** | First Responder

Natural Resources

- **Environmental Stewardship**
- **Oil and Gas Exploration**

Business, Administration, Finance, Information & Technology

- **Enterprise and Innovation**

Media, Design & Communication Arts

- **Communication Technology** | Broadcasting
- **Design Studies**



Trades, Manufacturing & Transportation



ct-centre.ca/auto-body.asp

Auto Body | Auto Body Apprentice & Pre-Apprentice

Students practice and develop skills required to identify and demonstrate knowledge and competency for damage repair, restoration and enhancement of the exterior finishes of a vehicle. Students develop skills related to sheet metal forming/finishing, paint preparation, paint spray techniques, automotive knowledge, windshield/glass repair and replacement, detailing/graphics, tool usage and knowledge as it relates to the transportation industry. Students will be encouraged to engage in pre-apprenticeship courses that will prepare them to challenge the 1st year apprenticeship theory exams.

Classes and detailed information;

- Exploratory (5 credits available)
- Specialized (10 credits available)
- Credentialed (10 credits available)



ct-centre.ca/fabrication.asp

Welding | Welder Apprentice & Pre-Apprentice

Students in Fabrication (welding) will study metal technologies and learn the fine art of design and metal fabrication. Welder apprentices and pre-apprentices learn the knowledge and skills related to the unique techniques of oxy-fuel welding and cutting, gas metal arc welding, flux core arc welding, submerged arc welding, and shielded metal arc welding. Students will be encouraged to engage in pre-apprenticeship courses that will prepare them to challenge the 1st year apprenticeship theory and practical exams.

Classes and detailed information;

- Exploratory (10 credits available)
- Credentialed (17 credits available)



ct-centre.ca/pre-engineering.asp

Pre-Engineering

Students in pre-engineering will access a dynamic, state-of-the-art program that provides students with practical hands-on experiences in an interactive technical lab environment which is supported by a full spectrum of digital resources. Students will work with robotic, pneumatic, electrical, wind, solar, automation, and other technologies to apply their knowledge and skills to solve authentic engineering problems in many fields of engineering, such as electrical, mechanical, chemical, structural, computer, and environmental. The program is delivered by dual credentialed teacher/engineers. Students will have opportunities to connect with staff and students in the applied technologies program at SAIT to further their understanding of engineering in post-secondary settings.

Classes and detailed information;

- Exploratory (25 credits available)
- Specialized (25 credits available)



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ct-centre.ca/supply_chain.asp

Supply Chain Management | Logistics

Students participate in the exploration of distribution systems, inventory management and purchasing practices. They are encouraged to connect with our industry partners for off campus experiences that include the examination of supply chain systems with respect to specific industries in Canada. Students in technical training for journeyman trades at the CTC are encouraged to access courses at the specialized level for flexible and experiential learning directly related to the journeyman trade in which they are concurrently enrolled. Students at the explore level have the opportunity to support supply chain process related to customer service sectors of the Career and Technology Centre.

Classes and detailed information;

- Exploratory (5 credits available)
- Specialized (8 credits available)

Health, Recreation & Human Services

Cosmetology | Hairstylist Apprenticeship & Pre-Apprentice

Students will develop skills and theoretical knowledge in a dynamic, client based, full service salon. Cosmetology is an excellent introduction to many careers that include, hairstylist, esthetician, make-up artist, nail technician, massage therapist, tattoo or body piercing artist, sales representative, educator, teaching assistant, platform artist, salon/spa owner and entrepreneur. Students explore all aspects of the beauty industry, including budget, client relationships, inventory management and extensive full spectrum product knowledge.

Classes and detailed information:

- Exploratory/Specialized (10 credits available via first period apprenticeship)
- Credentialed (50 credits available via first and second period apprenticeship)

Culinary Arts | Cook Apprenticeship & Pre-Apprentice

Students will have access to an industry grade kitchen facility and multiple food service outlets, ranging from a modern Market Place Deli, Classic Dining Room for buffet and À la carte service, catering and hosting special events. Learning basic classical cuisine techniques as well as current food styles, students will build on core skills, knowledge and attitudes for long term success in the cooking industry.

Students will participate in all areas of the kitchen and food service outlets to help develop a comprehensive understanding of the hospitality industry. As cook apprentices, students will go beyond culinary skills to begin developing more business-focused skills.

Students are encouraged to connect with SAIT's Culinary Arts Program and the Hospitality Industry through networking opportunities..



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ct-centre.ca/culinary.asp



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Classes and detailed information:

- Exploratory (10 credits available)
- Specialized (leading to preferred seating in SAIT Professional Cooking Program) (9 credits available)
- Credentialed (24 credits available as first period apprentice)



ct-centre.ca/medical-sciences.asp

Health Sciences

Pharmacy Assistant | Health Care

Students will develop specialized skills and knowledge associated with a variety of health care occupations. These include anatomy, physiology and medical based practices. Students will investigate responsibilities of health care occupations and demonstrate communication and observation skills for working in health care related fields. Opportunities include Pharmacy Assistant, a specialization offered in coordination with SAIT.

Classes and detailed information;

- Exploratory (10 credits available)
- Specialized (10 credits available)
- Credentialed (8 credits available)

Natural Resources



ct-centre.ca/nat.asp

Natural Resources

Environmental Stewardship | Oil and Gas Exploration

Students will develop the knowledge and skills to be effective decision makers, project planners, participants, and leaders in school and community activities that promote the sustainable use of natural resources and a detailed understanding of Alberta's Oil and Gas Exploration.

Students will investigate topics in environmental stewardship, resource exploration, processing, natural resources, and resource management through experiential, inquiry based learning.

Students will be encouraged to work collaboratively with fellow students as well as field and industry experts. Projects developed by students involve investigating current uses of natural resources and exploration with analysis of the local environment, energy systems and occupational areas related to this industry. In addition to the block schedule, students will also be offered field experiences with industry that are provided via the open seminar schedule.

Classes and detailed information:

- Exploratory (Environmental Stewardship 8 credits available)
- Exploratory (Oil and Gas Exploration 5 credits available – *additional credits in development*)



Business, Administration, Finance, Information & Technology



ct-centre.ca/bit.asp

Business Information Technology

Enterprise and Innovation

Students will examine the organization and management of a project, undertaking or innovation. They will plan, organize, direct, control and evaluate the operation of an accountant, auditor or financial service. Students will learn how to process and transfer information across multiple platforms. They will be active participants in the promotion of goods and services associated with owning and operating a small business. Students may also connect their learning with industry partners such as Junior Achievement and the wide range of customer services available at the Career and Technology Centre.

Classes and detailed information;

- Exploratory (Financial Management, Enterprise and Innovation, Information Processing, Management and Marketing)
- Specialized (Junior Achievement Company Program (evenings))

Media, Design & Communications

Media Design & Communication | Broadcasting



ct-centre.ca/media-design.asp

Students will complete courses in four distinct pathways that include: Animation, Photojournalism, Videography and Broadcasting. They will plan, capture and produce photography, animation and/or video assets using advanced equipment, techniques, and software that are the current standard for post-secondary and commercial facilities.

Students may arrive in the program with different levels of experience and course completion from their high schools and are matched to an appropriate curriculum at the CTC to complete studies in the pathway(s) of their choice. Teamwork and collaboration on authentic, relevant projects for specific audiences is emphasized, and will culminate in the opportunity to experience a “real-time” broadcast of finished projects in the live-production broadcast facility.

Students are also strongly encouraged to explore a variety of specializations in “new media” software applications such as the Adobe Certified Associate, in alignment with media design content produced via the CTC Broadcast studio.

Classes and detailed information:

- Exploratory (5 credits available)
- Specialized (15 credits available)
- Credential (Adobe Certified Associate)

