



CTS - Skills Canada Pathways

A pathway is a selection of courses to give students the opportunity to explore and acquire the attitudes, skills and knowledge for future careers that are relevant to their interests. Pathways can work toward goals that may include university, college, apprentice training, or moving directly into the workforce.

Skills Canada Alberta competitions take place yearly and provide opportunities for students to participate in competitions related to trade and technology-based careers. Schools may encourage and support student participation at the school, city, province and/or national level. This is a listing of specialized skill pathways that would help facilitate student success at Skills Canada Alberta competitions. For content that is dependent on the level of competition and the yearly content for each competition, visit <http://skillsalberta.com> for additional information.

This document has been provided to assist teachers and students in the preparation for Skills Canada Alberta regional and provincial competitions by suggesting courses that would be beneficial for students to have completed as they cover outcomes demonstrated in the competitions.

Pathway Menu

Select a pathway listed below to see all the courses suggested to complete that particular pathway. Pathways are listed in alphabetical order.

BIT Skills Canada Alberta Pathway

- IT and Network Support
- IT Office Software Applications Level 1
- IT Office Software Applications Level 2
- Robotics

HRH Skills Canada Alberta Pathways

- Aesthetics
- Baking
- Culinary Arts
- Hairstyling – Intermediate
- Hairstyling – Junior
- Hairstyling – Senior
- Job Interview
- Prepared Speech

Workplace Safety

Skills Canada Alberta Pathways

2D Computer Animation
3D Computer Animation
Architectural Technology and Design
Fashion Technology
Graphic Design
Mechanical CADD
TV and Video Production
Website Development

NAT Skills Canada Alberta Pathways

Auto Body Repair
Auto Service
Cabinet Making
Carpentry
Electrical Wiring
Outdoor Power and Recreation Equipment
Precision Machining
Welding



Skills Canada Alberta Pathways

2D Computer Animation

CTS courses recommended

COM1005: Visual Composition	COM2055: Web Design 2
COM1035: Graphics Tools	COM2145: Animation 2
COM1055: Web Design 1	COM3035: Raster Graphics 2
COM1145: Animation 1	COM3045: Vector Graphics 2
COM2035: Raster Graphics 1	COM3055: Rich Media – Basics
COM2045: Vector Graphics 1	COM3145: Animation 3

3D Computer Animation

CTS courses recommended

DES1010: Sketch, Draw & Model	COM1005: Visual Composition
DES1020: The Design Process	COM1035: Graphics Tools
DES1040: 3D Design 1	COM1145: Animation 1
DES1050: CAD 1	COM2035: Raster Graphics 1
DES2045: 3D Design 2	COM2045: Vector Graphics 1
DES2055: CAD 2	COM2145: Animation 2
DES3045: 3D Design 3	COM3035: Raster Graphics 2
DES3055: CAD 3	COM3045: Vector Graphics 2
DES3155: Modeling – Virtual	COM3145: Animation 3

Aesthetics

CTS courses recommended

COS1010: Personal & Professional Practices	EST2055: Make-up – Client Services
EST1020: Skin Care Practices	EST2070: Manicuring 2
EST1025: Skin Care – Client Services	EST2075: Manicuring 3 – Client Services
EST1070: Manicuring 1	EST2090: Nail Art
EST2030: Facials	EST3070: Pedicuring
EST2035: Facials – Client Services	EST3075: Manicuring & Pedicuring – Client Services
EST2050: Make-up	

Architectural Technology and Design

CTS courses recommended

DES1010: Sketch, Draw & Model	DES2075: Technical Drafting 2 or DES2055: CAD 2
DES1020: The Design Process	DES3035: 2D Design 3
DES1030: 2D Design 1	DES3045: 3D Design 3
DES1040: 3D Design 1	DES3065: Technical Design 3
DES1050: CAD 1	DES3075: Technical Drafting 3 or DES3055: CAD 3
DES1060: Technical Design & Drafting 1	DES3095: Architectural Design
DES2035: 2D Design 2	
DES2045: 3D Design 2	
DES2065: Technical Design 2	

Auto Body Repair

CTS courses recommended

MEC1160: Structures & Materials	MEC3160: Body Repair Estimation
MEC1170: Metal Forming & Finishing	MEC3170: Damage Analysis
MEC1190: Surface Preparation 1	MEC3180: Damage Repair 1
MEC2170: Metal Repair & Finishing	MEC3190: Damage Repair 2
MEC2190: Surface Preparation 2	MEC3200: Refinishing 2
MEC2200: Refinishing 1	MEC3210: Plastic & Fibreglass
MEC2210: Touch-up & Finishing	MEC3230: Refinishing 3
MEC2220: Interior Repairs	

Auto Service – Pathway A

CTS courses recommended

MEC1020: Vehicle Service & Care	MEC2050: Alternative Fuel Engines
MEC1040: Engine Fundamentals	MEC2060: Ignition Systems
MEC1090: Electrical Fundamentals	MEC2070: Emission Controls
MEC1110: Pneumatics & Hydraulics	MEC3100: Safety Systems
MEC2030: Lubrication & Cooling	MEC3110: Climate Control
MEC2040: Fuel & Exhaust Systems	

Auto Service – Pathway B

CTS courses recommended

MEC1015: Mechanics Tools & Materials	MEC3090: Computer Systems
MEC1040: Engine Fundamentals	MEC3030: Engine Diagnosis
MEC1090: Electrical Fundamentals	MEC3040: Engine Tune-up
MEC2030: Lubrication & Cooling	MEC3050: Engine Replacement
MEC2040: Fuel & Exhaust Systems	MEC3060: Engine Reconditioning 1
MEC2060: Ignition Systems	MEC3070: Engine Reconditioning 2
MEC2070: Emission Controls	MEC3110: Climate Control

Baking – Pathway A

CTS courses recommended

FOD1010: Food Basics	FOD2050: Bread Products
FOD1020: Contemporary Baking	FOD3030: Creative Baking
FOD2040: Cake & Pastry	FOD3040: Yeast Products

Baking – Pathway B

CTS courses recommended

CKA3400: Kitchen Orientation	CKA3460: Bakeshop 2
CKA3410: Culinary Fundamentals	CKA3470: Yeast Products
CKA3450: Bakeshop 1	

Cabinet Making

CTS courses recommended

CON1010: Construction Tools & Materials	CON2200: Product Development
CON1120: Product Management	CON3190: Production Planning
CON1130: Solid Stock Construction	CON3200: Production Management
CON1140: Turning Operations	CON3160: Cabinetmaking – Cabinets & Countertops
CON2160: Cabinetmaking – Web & Face Frame	CON3170: Cabinetmaking – Layout & Installation
CON2170: Cabinetmaking – Door & Drawer	
CON2190: Manufacturing Systems	

Carpentry

CTS courses recommended

CON1010: Construction Tools & Materials	CON2050: Roof Structures 1
CON1070: Building Construction	CON2060: Door, Window & Siding
CON1120: Product Management	CON3040: Stair Construction
CON1160: Manufactured Materials	CON3050: Roof Structures 2
CON2035: Framing Systems – Floor	CON3110: Site Management
CON2045: Framing Systems – Wall	CON3210: Framing Systems – Advanced

Culinary Arts

CTS courses recommended

CKA3400: Kitchen Orientation	CKA3460: Bakeshop 2
CKA3410: Culinary Fundamentals	CKA3470: Yeast Products
CKA3430: Entremetier	CKA3480: Saucier 1
CKA3440: Pantry – Salads & Sandwiches	CKA3500: Meat Cookery 1
CKA3450: Bakeshop 1	CKA3520: Poultry, Fish & Seafood

Electrical Wiring

CTS courses recommended

CON2070: Electrical Systems	ELT2030: Branch Circuit Wiring
ELT1030: Conversion & Distribution	ELT3030: Power Systems & Services

Fashion Technology

CTS courses recommended

FAS1000: Fashion Illustration 1	FAS2050: Flat Pattern 1
FAS1010: Fashion Dynamics	FAS2060: Pattern Drafting 1
FAS1030: Sewing Fundamentals	FAS2090: Specialty Fabrics 1
FAS1050: Redesign, Recycle & Restore	FAS2130: Construction Fundamentals 2
FAS1060: Creating Accessories 1	FAS3000: Fashion Illustration 3
FAS1130: Construction Fundamentals 1	FAS3020: Computer-aided Pattern Design 2
FAS1190: Textile Arts 1	FAS3030: Pattern Drafting 2
FAS2000: Fashion Illustration 2	FAS3040: Contemporary Tailoring
FAS2030: Computer-aided Pattern Design 1	FAS3070: Creators of Fashion

Graphic Design

CTS courses recommended

COM1005: Visual Composition	COM2045: Vector Graphics 1
COM1025: Typography	COM2155: Design – Brand Identity
COM1035: Graphics Tools	COM3025: Electronic Layout & Publishing 2
COM2025: Electronic Layout & Publishing 1	COM3035: Raster Graphics 2
COM2035: Raster Graphics 1	COM3045: Vector Graphics 2

Hairstyling – Intermediate

CTS courses recommended

COS2010: Long Hair Design 2	HSA3515: Hair Care & Cutting 2 – Client Services
HSA3410: Hair & Scalp Care 2	HSA3570: Haircolouring 1
HSA3430: Hair Styling 1	HSA3580: Haircolouring 2 – Oxidative
HSA3440: Hair Styling 2	HSA3590: Haircolouring 4 – Decolourization
HSA3450: Haircutting 1	HSA3640: Creative Cosmetology
HSA3455: Haircutting 2 – Client Services	HSA3650: Competition Cosmetology
HSA3460: Haircutting 3 – Advanced Techniques	
HSA3505: Hair Care & Cutting 1 – Client Services	

Hairstyling – Junior

CTS courses recommended

COS1010: Personal & Professional Practices	HSA3400: Hair & Scalp Care 1
COS1020: Long Hair Design 1	

Hairstyling – Senior

CTS courses recommended

COS3020: Long Hair Design 3	HSA3515: Hair Care & Cutting 2 – Client Services
HSA3410: Hair & Scalp Care 2	HSA3570: Haircolouring 1
HSA3425: Hair & Scalp Care 4 – Client Services	HSA3580: Haircolouring 2 – Oxidative
HSA3445: Hair Styling 3 – Client Services	HSA3590: Haircolouring 4 – Decolourization
HSA3455: Haircutting 2 – Client Services	HSA3605: Haircolouring 7 – Advanced Client Services 1
HSA3460: Haircutting 3 – Advanced Techniques	HSA3620: Hair Goods & Extensions
HSA3465: Haircutting 4 – Advanced Techniques – Client Services	HSA3640: Creative Cosmetology
HSA3470: Haircutting 5 – Creative Services	HSA3650: Competition Cosmetology
HSA3485: Haircutting 7 – Current Trends Client Services	
HSA3495: Haircutting 8 – Male Client Services	

IT and Network Support

CTS courses recommended

NET2020: Workstation Technology & Operations	NET3050: Network Operating Systems
NET2030: Network Structures	NET3060: Wide Area Networks
NET2040: Network Media & Devices	NET3070: Routing Fundamentals
NET2050: Open System Interconnection	NET3080: Internet Processes
NET2060: Network Protocols	NET3090: Network Management
NET2070: Local Area Networks	NET3100: Network Media & Devices, Security

IT Office Software Applications Level 1

CTS courses recommended

INF1030: Word Processing 1	INF1070: Digital Presentation
INF1060: Spreadsheet 1	

IT Office Software Applications Level 2

CTS courses recommended

INF1030: Word Processing 1	INF2080: Spreadsheet 2
INF1050: Database 1	INF2090: Correspondence
INF1060: Spreadsheet 1	INF2100: Reports
INF1070: Digital Presentation	INF3060: Word Processing 3
INF2050: Word Processing 2	INF3095: Productivity Software Integration
INF2070: Database 2	

Job Interview

CTS courses recommended

CTR1010: Job Preparation	CTR2010: Job Maintenance
HSS3050: Becoming a Mentee	

Note: Additional courses are required based on the occupational area selected by Skills Canada Alberta each year.

Mechanical CADD

CTS courses recommended

DES1010: Sketch, Draw & Model	DES2055: CAD 2
DES1020: The Design Process	DES2065: Technical Design 2
DES1030: 2D Design 1 <i>or</i> DES1040: 3D Design 1	DES3035: 2D Design 3 <i>or</i> DES3045: 3D Design 3
DES1050: CAD 1	DES3055: CAD 3
DES1060: Technical Design & Drafting 1	DES3065: Technical Design 3
DES2035: 2D Design 2 <i>or</i> DES2045: 3D Design 2	

Outdoor Power and Recreation Equipment

CTS courses recommended

MEC1015: Mechanics Tools & Materials	MEC2070: Emission Controls
MEC1040: Engine Fundamentals	MEC2100: Power Assist Accessories
MEC1090: Electrical Fundamentals	MEC2110: Braking Systems
MEC1110: Pneumatics & Hydraulics	MEC2120: Hydraulic Accessories
MEC2030: Lubrication & Cooling	MEC3100: Safety Systems
MEC2040: Fuel & Exhaust Systems	MEC3120: Power Assisting
MEC2060: Ignition Systems	

Precision Machining

CTS courses recommended

FAB1160: Production Systems	FAB3130: Precision Turning 2
FAB2140: Precision Milling 1	FAB3140: Precision Milling 2
FAB2150: CNC Turning	FAB3150: CNC Milling
FAB2160: Custom Fabrication	FAB3160: Prefabrication Principles

Prepared Speech

CTS courses recommended

HSS1090: Speaking & Presenting	COM3005: Creative Writing
--------------------------------	---------------------------

Robotics

CTS courses recommended

ELT1010: Electro-Assembly 1	CSE2110: Procedural Programming 1
ELT1130: Robotics 1	CSE2240: Robotics Programming 2
ELT1140: Robotics Applications 1	CSE3240: Robotics Programming 3
ELT2140: Robotics 2	DES1020: The Design Process
ELT2160: Robotics Sensor 1	DES1040: 3D Design 1
ELT2170: Robotics Sensor 2	DES1050: CAD 1
ELT3140: Motors	DES1060: Technical Design & Drafting 1
ELT3150: Robotics 3	DES2045: 3D Design 2
CSE1110: Structured Programming 1	DES2055: CAD 2
CSE1120: Structured Programming 2	DES2075: Technical Drafting 2
CSE1240: Robotics Programming 1	DES3105: Engineering Design

TV and Video Production

CTS courses recommended

COM1005: Visual Composition	COM3105: AV Preproduction 2
COM1105: Audio/Video	COM3115: AV Production 2
COM2105: AV Preproduction 1	COM3125: AV Postproduction 2
COM2115: AV Production 1	COM3165: Broadcasting
COM2125: AV Postproduction 1	

Website Development

CTS courses recommended

COM1005: Visual Composition	CSE1110: Structured Programming 1
COM1055: Web Design 1	CSE1120: Structured Programming 2
COM2035: Raster Graphics 1	CSE1210: Client-side Scripting 1
COM2045: Vector Graphics 1	CSE1220: Client-side Scripting 2
COM2055: Web Design 2	CSE2110: Procedural Programming 1
COM3035: Raster Graphics 2	CSE2120: Data Structures 1
COM3045: Vector Graphics 2	CSE2210: Client-side Scripting 3
COM3055: Rich Media – Basics	CSE3210: Server-side Scripting 1
COM3065: Rich Media – Programming	INF1050: Database 1
COM3075: Cascading Style Sheets	

Welding

CTS courses recommended

FAB1010: Fabrication Tools & Materials	FAB2070: Gas Metal Arc Welding 1
FAB1040: Oxyacetylene Welding	FAB3030: Gas Tungsten Arc Welding
FAB1048: Semi-automated/Automated Welding	FAB3048: Flux Cored Arc Welding 2
FAB1050: Basic Electric Welding	FAB3050: Arc Welding 3
FAB2048: Flux Cored Arc Welding 1	FAB3060: Arc Welding 4
FAB2050: Arc Welding 1	FAB3170: Gas Metal Arc Welding 2
FAB2060: Arc Welding 2	

Workplace Safety

CTS courses recommended

HCS3000: Workplace Safety Systems	HCS2020: First Aid/CPR and AED
HCS3010: Workplace Safety Practices	