

This document has been provided to help teachers and students prepare for Skills Canada Alberta regional and provincial competitions.

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

Skills Canada Alberta competitions take place annually 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, provincial, and/or national level.

This is a listing of specialized skill pathways that could 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://www.skillsalberta.com/ for additional information.

Pathway Menu

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

Business, Administration, Finance & Information Technology (BIT) Skills Canada Alberta Pathways

IT Network Systems Administration IT Software Solutions for Business (Level 1) IT Software Solutions for Business (Level 2) Robotics

Health, Recreation & Human Services (HRH) Skills Canada Alberta Pathways

Aesthetics Baking Culinary Arts Hairstyling – Intermediate Hairstyling – Junior Hairstyling – Senior Job Search Job Skill Demonstration Public Speaking Workplace Safety 1

Media, Design & Communication Arts (MDC) Skills Canada Alberta Pathways

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

Trades, Manufacturing & Transportation (TMT) Skills Canada Alberta Pathways

Auto Service Autobody Repair Cabinet Making Carpentry Electrical Installations Joinery Outdoor Power & Recreation Equipment Precision Machining Welding

Skills Canada Alberta Pathways Descriptions

Business, Administration, Finance, & Information Technology (BIT) Skills Canada Alberta Pathways

IT Network Systems Administration

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 Software Solutions for Business (Level 1)

CTS courses recommended

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

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IT Software Solutions for Business (Level 2)

CTS courses recommended

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

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Robotics

CSE1110: Structured Programming 1DES2055: CAD 2CSE1120: Structured Programming 2DES2075: Technical Drafting 2CSE1240: Robotics Programming 1DES3105: Engineering DesignCSE2110: Procedural Programming 1ELT1010: Electro-Assembly 1CSE2240: Robotics Programming 2ELT1130: Robotics 1CSE3240: Robotics Programming 3ELT1140: Robotics ApplicationsDES1020: The Design ProcessELT2140: Robotics 2DES1040: 3-D Design 1ELT2160: Robotics Sensor 1DES1050: CAD 1ELT2170: Robotics Sensor 2DES1060: Technical Design & Drafting 1ELT3140: MotorsDES2045: 3-D Design 2ELT3150: Robotics 3

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Health, Recreation, & Human Services (HRH) Skills Canada Alberta Pathways

Aesthetics

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

Baking

CTS courses recommended	
FOD1010: Food Basics	FOD3040: Yeast Products
FOD1020: Contemporary Baking	CKA3400: Kitchen Orientation
FOD2040: Cake & Pastry	CKA3410: Culinary Fundamentals
FOD2050: Bread Products	CKA3450: Bakeshop
FOD3030: Creative Baking	CKA3470: Yeast Products

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Culinary Arts

CTS courses recommended	
FOD1010: Food Basics FOD2040: Cake & Pastry FOD2060: Milk Products & Eggs FOD2070: Soups & Sauces FOD2100: Basic Meat Cookery FOD2180: Vegetables & Fruits	FOD2190: Grains, Legumes, Pulses, Nuts, & Seeds FOD3030: Creative Baking FOD3050: Advanced Soups & Sauces FOD3060: Food Presentation FOD3080: Advanced Meat Cookery

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Hairstyling - Intermediate

CTS courses recommended	
COS1020: Long Hair Design 1	HSA3625: Hair Goods & Extensions – Client Services*
COS2010: Long Hair Design 2	HSA3570: Hair Colouring 1*
HSA3400: Hair & Scalp Care 1	HSA3580: Hair Colouring 2 – Oxidative*
HSA3410: Hair & Scalp Care 2	HSA3590: Hair Colouring 4 – Decolourization*
HSA3450: Haircutting 1*	HSA3640: Creative Cosmetology*
HSA3505: Hair Care & Cutting 1 – Client Services*	HSA3650: Competition Cosmetology*

*These **optional** courses are used to enhance the final design but are not mandatory.

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Hairstyling – Junior

CTS courses recommended

COS1010: Personal & Professional Practices COS1020: Long Hair Design 1 COS2010: Long Hair Design 2 HSA3400: Hair & Scalp Care 1 HSA3410: Hair & Scalp Care 2

HSA3570: Hair Colouring 1* HSA3580: Hair Colouring 2 – Oxidative* HSA3590: Hair Colouring 4 – Decolourization* HSA3450: Haircutting 1*

*These **optional** courses are used to enhance the final design but are not mandatory.

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Hairstyling - Senior

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

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Job Search

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.

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Job Skill Demonstration

CTS courses recommended

HCS3000: Workplace Safety Systems HCS3010: Workplace Safety Practices HSS1090: Speaking & Presenting

Note: Additional courses are required based on the occupational area selected by each competitor.

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Public Speaking

CTS courses recommended

COM3005: Creative Writing

HSS1090: Speaking & Presenting

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Workplace Safety

CTS courses recommended	
HCS2020: First Aid/CPR with AED HCS3000: Workplace Safety Systems	HCS3010: Workplace Safety Practices HSS1090: Speaking and Presenting
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Media, Design, & Communication Arts (MDC) 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

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3D Computer Animation

CTS courses recommended

COM1005: Visual Composition
COM1035: Graphics Tools
COM1145: Animation 1
COM2035: Raster Graphics 1
COM2045: Vector Graphics 1
COM2145: Animation 2
COM3035: Raster Graphics 2
COM3045: Vector Graphics 2
COM3145: Animation 3

DES1010: Sketch, Draw & Model DES1020: The Design Process DES1040: 3-D Design 1 DES1050: CAD 1 DES2045: 3-D Design 2 DES2055: CAD 2 DES3045: 3-D Design 3 DES3055: CAD 3 DES3155: Modelling – Virtual

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Architectural Technology and Design

CTS courses recommended

DES1010: Sketch, Draw & Model
DES1020: The Design Process
DES1030: 2-D Design 1
DES1040: 3-D Design 1
DES1050: CAD 1
DES1060: Technical Design & Drafting 1
DES2035: 2-D Design 2
DES2045: 3-D Design 2

DES2065: Technical Design 2 DES2075: Technical Drafting 2 or DES2055: CAD 2 DES3035: 2-D Design 3 DES3045: 3-D Design 3 DES3065: Technical Design 3 DES3075: Technical Drafting 3 or DES3055: CAD 3 DES3095: Architectural Design

Fashion Technology

CTS courses recommended	
FAS1000: Fashion Illustration 1	FAS2090: Specialty Fabrics 1
FAS1010: Fashion Dynamics	FAS2130: Construction Fundamentals 2
FAS1030: Sewing Fundamentals	FAS3000: Fashion Illustration 3
FAS1050: Redesign, Recycle & Restore	FAS3020: Computer-aided Pattern Design 2
FAS1060: Creating Accessories 1	FAS3030: Pattern Drafting 2
FAS1130: Construction Fundamentals 1	FAS3040: Contemporary Tailoring
FAS1190: Textile Arts 1	FAS3050: Flat Pattern 2
FAS2000: Fashion Illustration 2	FAS3070: Creators of Fashion
FAS2030: Computer-aided Pattern Design 1	FAS3090: Specialty Fabrics 2
FAS2050: Flat Pattern 1	FAS3130: Construction Fundamentals 3
FAS2060: Pattern Drafting 1	

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Graphic Design

CTS courses recommended

COM1005: Visual Composition COM1025: Typography COM1035: Graphics Tools COM1165: Printing 1 COM2015: Media Impact COM2025: Electronic Layout & Publishing 1 COM2035: Raster Graphics 1 COM2045: Vector Graphics 1 COM2155: Design – Brand Identity COM2165: Printing 2 COM3025: Electronic Layout & Publishing 2 COM3035: Raster Graphics 2 COM3045: Vector Graphics 2

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Mechanical CADD

CTS courses recommended

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

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Photography

CTS courses recommended

COM1005: Visual Composition COM1205: Photography – Introduction COM1215: Photography – Exposure COM1275: Photography – Digital Processing 1 COM2205: Photography – Composition COM2215: Photography – Communication COM2235: Photography – Lenses COM3215: Photography – Photojournalism

TV/Video Production

CTS courses recommended

COM1005: Visual Composition COM1105: Audio/Video COM2105: AV Preproduction 1 COM2115: AV Production 1 COM2125: AV Postproduction 1 COM3005: Creative Writing

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Website Development

CTS courses recommended

COM1005: Visual Composition COM1055: Web Design 1 COM2035: Raster Graphics 1 COM2045: Vector Graphics 1 COM2055: Web Design 2 COM3035: Raster Graphics 2 COM3045: Vector Graphics 2 COM3055: Rich Media – Basics COM3065: Rich Media – Programming COM3075: Cascading Style Sheets CSE1110: Structured Programming 1 CSE1120: Structured Programming 2 CSE1210: Client-side Scripting 1 CSE1220: Client-side Scripting 2 CSE2110: Procedural Programming 1 CSE2120: Data Structures 1 CSE2210: Client-side Scripting 3 CSE3210: Server-side Scripting 1 INF1050: Database 1 INF1070: Digital Presentation

COM3105: AV Preproduction 2

COM3125: AV Postproduction 2

COM3135: Audio Techniques

COM3165: AV Broadcasting

COM3115: AV Production 2

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Trades, Manufacturing, & Transportation (TMT) Skills Canada Alberta Pathways

Auto Service

CTS courses recommended	
MEC1040: Engine Fundamentals MEC1090: Electrical Fundamentals MEC2030: Lubrication & Cooling MEC2040: Fuel & Exhaust Systems MEC2060: Ignition Systems MEC2070: Emission Controls MEC2090: Electrical Components MEC2110: Braking Systems MEC2130: Drive Line MEC2140: Transmissions/Transaxles	MEC2150: Suspension Systems MEC2160: Steering Systems MEC3030: Engine Diagnosis MEC3040: Engine Tune-up MEC3060: Engine Reconditioning – Head MEC3070: Engine Reconditioning – Block MEC3090: Computer Systems MEC3130: Automatic Transmissions MEC3150: Wheel Alignment

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Autobody Repair

CTS courses recommended

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

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Cabinet Making

CTS courses recommended

CON1010: Construction Tools & Materials CON1120: Product Management CON1130: Solid Stock Construction CON1160: Manufactured Materials CON2130: Furniture-Box Construction CON2160: Cabinetmaking – Web & Face Frame CON2170: Cabinetmaking – Door & Drawer

Carpentry

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CTS courses recommended CON1010: Construction Tools & Materials CON1070: Building Construction CON1120: Product Management CON1130: Solid Stock Construction

CON2045: Framing Systems – Wall CON2050: Roof Structures 1 CRA3400: Introduction to Work Site Safety CRA3405: Basic Hand, Power Tools & Safety CRA3435: Blueprint Interpretation

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Electrical Installations

CTS courses recommended

ELT1030: Conversion & Distribution ELT2030: Branch Circuit Wiring

CON2035: Framing Systems - Floor

ELT2130: Magnetic Control Devices ELT3030: Power Systems & Services

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Joinery

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CTS courses recommended

CON1010: Construction Tools & Materials CON1120: Product Management CON1130: Solid Stock Construction CON2130: Furniture – Box Construction CON2140: Furniture – Frame & Panel CON3130: Furniture – Leg & Rail CON3140: Furniture – Surface Enhancement

Outdoor Power and Recreation Equipment

CTS courses recommended

MEC1010: Modes & Mechanisms MEC1020: Vehicle Service & Care MEC1040: Engine Fundamentals MEC1090: Electrical Fundamentals MEC1130: Mechanical Systems MEC1150: Ride & Control Systems MEC1190: Surface Preparation 1

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Precision Machining

CTS courses recommended

FAB1130: Principles of Machining FAB2130: Precision Turning 1 FAB2140: Precision Milling 1 FAB3130: Precision Turning 2 FAB3140: Precision Milling 2

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Welding

CTS courses recommended

FAB1010: Fabrication Tools & Materials FAB1040: Oxyacetylene Welding FAB1048: Semi-automated/Automated Welding FAB1050: Basic Electric Welding FAB2020: Print Reading FAB2030: Oxyfuel Welding FAB2040: Thermal Cutting FAB2048: Flux Cored Arc Welding 1 FAB2050: Arc Welding 1 FAB2060: Arc Welding 2 FAB2070: Gas Metal Arc Welding 1 FAB3048: Flux Cored Arc Welding 2 FAB3050: Arc Welding 3 FAB3060: Arc Welding 4 FAB3170: Gas Metal Arc Welding 2