



Pool & Hot Tub
Council of Canada

Industry Trade Certification Program

Education

Information

Promotion

Networking

Advocacy



About the Program

The design, construction, installation and service of a swimming pool or spa require a highly diversified skill set. Members of the Pool & Hot Tub Council of Canada recognize the importance of continual training to maintaining high quality workmanship and maintenance techniques. The PHTCC Industry Trade Certification Program offers a comprehensive two-tiered educational platform for those employed in the aquatic recreation industry.

-  Become qualified as an Aquatic Recreation Industry **SPECIALIST** (Level One - Fundamentals)
HOW? By the successful completion of 4 core courses and 3 elective courses.
 -  Achieve the designation of Aquatic Recreation Industry **EXPERT** (Level Two – Advanced)
HOW? By the successful completion of the SPECIALIST level, plus an additional 4 core courses and a total of 6 elective courses (i.e., 3 additional beyond Specialist level).
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-  Certain courses offered by sister organization are also recognized as electives. Please contact the PHTCC national office for details.
 -  **TIME LIMIT:** Complete the SPECIALIST program in a maximum of five years. Complete the EXPERT level in a maximum of five years. [Notable exception for companies servicing the City of Toronto: The Water Discharge Management course must be successfully renewed every three years in order to retain accreditation.]
 -  To qualify for certification, a student must be employed by a company that carries general liability insurance and also must be covered under their provincial workers' compensation program.
 -  Those who previously were successful in completing either the PHTCC ASPECT or Apprenticeship courses will be granted four (4) elective credits toward this program. All core courses must be completed to qualify under the new certification program.
 -  Unless otherwise specified, courses listed as part of the Industry Trade Certification Program are provided by the Pool & Hot Tub Council of Canada either in a class environment or via computer-based training from the website: www.poolcouncil.ca.
 -  Re-certification required every 5 Years. (1 Core Course and 3 Elective courses.)

Specialist Level

To achieve Certification as a **SPECIALIST** (LEVEL 1 - FUNDAMENTALS) the student must successfully complete the following core courses:

Pool Installation 101

Water Chemistry 101

Pool Operation

Safety in our Backyards

plus three (3) courses from the following list of electives:

Hot Tub/Spa Service and Maintenance

Pool/Spa Handover - Orientation for the New Owner

Water Discharge Best Management Practices

Hot Water Chemistry

Automation – Basic Operation and Programming

Spa Pack & Pump Troubleshooting

Tips, Techniques & Tricks of the Trade

Marketing and Merchandising for the Modern Pool and Spa Retailer

Certified Pool Operator® Course- a National Swimming Pool Foundation offering endorsed by the PHTCC

Transportation of Dangerous Goods (TDG) from a provincially authorized provider

A PHTCC Chapter course approved by the PHTCC Education Committee

An authorized course offered within the certification programs of the Association of Pool & Spa Professionals (APSP)

An authorized course offered within the training programs of the Foundation for Pool & Spa Industry Education (FPSIE)

Note: The equivalent of 1 elective course may be met by correctly answering the skill testing questions that accompany four (4) of the Continuing Education articles that appear in Pool & Spa Marketing magazine.

Specialist Level Core Courses

Pool Installation 101



The basics of inground swimming pool construction

Topics: Circulation Systems, Types of Swimming Pools, Filters, Heaters, Sanitization Systems, Introduction to Plumbing, Features and Options, Electrical & Gas Connections, Covers, Contracts, Dealing with Clients.

Water Chemistry 101



The basics of swimming pool water balance and water care

Topics: Water Maintenance (Physical, Chemical, Biological), Sanitizing, Oxidizing, Control of pH, Total Alkalinity, Calcium Hardness, Other Water Balance Parameters, Langelier Index, Saltwater Pools, Algae Control.

Pool Operation



The basics on how to responsibly service and maintain spas and swimming pools

Topics: Customer Relations, Safety, Circulation System, filter Types, Heater Types, Sanitizer systems, Chemical Parameters, Lighting, Cleaners (manual and automatic), Automation, Covers (summer, winter, safety), Leak Detection, PVC Cementing.

Specialist Level Core Courses

Safety in the Backyard



The basics on water safety and drowning prevention (Developed jointly by the Canadian Red Cross and the Pool & Hot Tub Council of Canada)

Topics: Drowning Statistics, Potential Hazards, Incident Prevention, Suction Entrapment, Best Practices, Layered Approach, Supervision, Enclosures, Safety Covers, Equipment, Training, Swimming Lessons, First Aid, Water Quality, Workplace Safety, Aquatic Safety Plan.

Expert Level

To achieve Certification as an **EXPERT** (LEVEL 2 - ADVANCED) the student must successfully complete the following core courses in addition to having already completed the core course requirements of SPECIALIST (Level One) Certification:

Pool Installation 201

Water Chemistry 201

Hydraulics

Business Concepts

plus a total of six (6) courses from the following list of electives:

Pool Inspection (Prerequisite: attainment of Level 1 Specialist Certification)

Hot Tub/Spa Service and Maintenance

Pool/Spa Handover - Orientation for the New Owner

Water Discharge Best Management Practices

Hot Water Chemistry

Automation – Basic Operation and Programming

Spa Pack & Pump Troubleshooting

Tips, Techniques & Tricks of the Trade

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Expert Level Core Courses

Pool Installation 201



Advanced concepts in inground swimming pool construction
(Building upon knowledge derived from Pool Installation 101)

Topics: Training and Safety, Layout, Excavation, Pool Structures (Vinyl, Concrete, Fibreglass), Plumbing, Levelling, Backfilling, Coping & Decking, Tile & Interior Finishes, Spas, Tanning Shelves, Entries, Handover, Follow Up.

Water Chemistry 201



Advanced concepts in solving water quality issues
(Building upon knowledge derived from Water Chemistry 101)

Topics: Water Balance, Metals and Scaling, Algae Killing and Prevention, Saltwater Pools, Water Care, Water Quality, Product Application and Dosing, Pool Maintenance, Chlorine Demand, Bromine Use, Stain Identification and Removal, Sanitizers.

Hydraulics



The fundamentals of fluid dynamics and water circulation

Topics: Surface Area Calculation, Water Circulation, Pump Right-sizing, Multi-speed Pumps, Variable Speed Pumps, Optimizing the Turnover Rate, Piping Diameters, Pressure Sources, Dual Main Drains/Safety, Flow Resistance, Friction Loss, Total Dynamic Head.

Expert Level Core Courses

Business Concepts

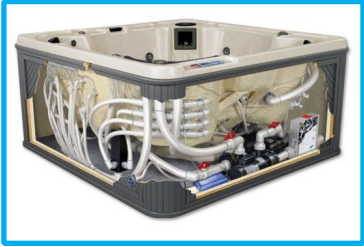


The fundamentals of operating a company from the perspective of supervisor or manager.

Topics: Logistics, Human Resources, Communications, Efficiency, Customer Service, Complaint Handling, Inventory Management, Financial Management, Operations, Sales Techniques, Purchasing, Marketing, Organizational Skills.

Elective Courses

Hot Tub/Spa Service and Maintenance



How to install, service and maintain hot tubs/spas

Topics: Site Selection and Preparation, Types, Delivery, Installation, Enclosures, Water Balance, Filtration and Circulation, Component Identification and Repair, Packs, Troubleshooting

Pool/Spa Handover



Orientation for the New Owner

Topics: System Explanation, Maintenance Manuals, Component Descriptions, Backyard Safety, Hands-on Learning, Service Relationship, Sign Ups & Sign Offs, Pool Warming Gift, Follow-up, Common Questions.

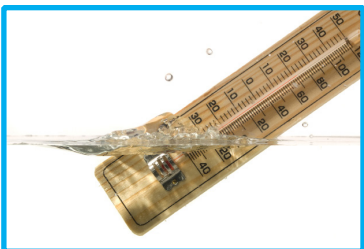
Best Management Practices for Water Discharge



Best Management Practices

Topics: Regulations, Environmental Impacts, Pollutants, Water Quality Criteria, Water Treatment Alternatives, Conservation Tips (Energy and Water Consumption), Responsibilities, Monitoring, Inspection, Enforcement.

Hot Water Chemistry



Testing, maintaining and controlling water temperature of spas/hot tubs/whirlpools.

Topics: Testing, Temperatures, Effects of Additives.

Elective Courses

Automation



Basic Operation and Programming

Topics: Equipment Location, Schedules, Smart Connections, Remote Connectivity, Installation, Components, Settings, Multiple Feature Control, Operation/Programming, Actuators, Operating Modes, Diagnostics.

Spa Pak & Pump Troubleshooting



Review preparation for service calls & basic troubleshooting for spa packs & pumps

Topics: Preparation, Tools, Parts, Symptoms, Field Service, Preliminary Survey, Information Required, Component Testing (Keypad, Board, Heater Manifold, Pressure Switch, Flow Switch, Sensors, Fuses, Pumps, Wiring).

Residential Pool Inspection

(Prerequisite: attainment of Level 1 Specialist Certification)



How to effectively conduct an inspection of a residential pool and report findings

Topics: Preparation, Pool Finish, Size and Shape, Pool Surround, Circulation and Filtration System, Deck Equipment, Pool Accessories, Assessment, Review, Report, Disclaimers, Sales Opportunities

Tips, Techniques & Tricks of the Trade



Improving efficiency, problem solving skills, time saving short-cuts

Topics: Cost Effective Solutions addressing lighting, leaks, pump programming, testing, liner installation, measurements.

Elective Courses

Marketing and Merchandising for the Modern Pool and Spa Retailer



Marketing and merchandising techniques to retail professionals.

Topics: Retail Environment (Lighting, Acoustics, Signage), Product Positioning, Advertising, Online Presence, Combatting Mass-Merchandisers & Online Retailers, Handling Customer Reviews.

Elective Courses

Certified Pool Operator (CPO®)

(Developed by the National Swimming Pool Foundation and taught by an NSPF® certified instructor)



Providing the knowledge, techniques and skills required to operate public pools and spas

Topics: Water Balance, Pool Water Contamination, Disinfection, Filtration, Water Circulation, Codes and Regulations, Pool Care and Management, Risk Reduction, Drowning Prevention, Recreational Water Illness, Suction Entrapment, Chemical Hazards, Control Technology, Chemical Feed

Transportation of Dangerous Goods (TDG)

(as authorized by Transport Canada)



Training on the handling, offering, and transporting of dangerous goods

Topics: Regulations, Emergency Response Assistance Plans, Containment, Reporting Requirements, Documentation, Emergency Measures, Safety Marks, Use of Equipment, Safe Practices

PHTCC Chapter course



Pool & Hot Tub
Council of Canada

To qualify for the PHTCC Certification program, courses taken at chapters events must be approved by the PHTCC Education Committee.

Elective Courses

Association of Pool & Spa Professionals Course



An authorized course offered within the certification programs of the Association of Pool & Spa Professionals (APSP).

Foundation for Pool & Spa Industry Education Course



An authorized course offered within the training programs of the Foundation for Pool & Spa Industry Education (FPSIE).

Continuing Education articles - Pool & Spa Marketing magazine



The equivalent of 1 elective course may be met by correctly answering the skill testing questions that accompany four (4) of the Continuing Education articles.