



IRRIGATION INDUSTRY ASSOCIATION OF B.C.

IIABC 205 – 2469 Montrose Avenue, Abbotsford BC V2S 3T2

P: 604-744-4274 E: iiabc@irrigationbc.com W: irrigationbc.com

Last date of review: July 10, 2024

Note: IIABC reserves the right to amend course outlines as needed without notice.

Electrical Troubleshooting Course

Course Description:

The Electrical Troubleshooting Course focuses on equipping participants with advanced skills in diagnosing and resolving electrical issues specific to irrigation systems. This course is essential for irrigation technicians looking to enhance their ability to troubleshoot and maintain electrical components effectively.

Learning Outcomes:

By the end of this course, participants will be able to:

1. Properly use volt-ohm meters to diagnose wiring problems.
2. Diagnose field wiring issues directly from the controller.
3. Apply effective steps to troubleshoot complex electrical problems and minimize the need for rewiring.
4. Utilize advanced methods for electrical troubleshooting.
5. Understand and troubleshoot battery-operated timers, DC solenoids, solar units, AC transformers, and phasing.
6. Discuss fault finding equipment, amp readings, and proper grounding techniques.

Course Content:

1. **Using Volt-Ohm Meters**
 - o Techniques for using volt-ohm meters to diagnose wiring problems.
2. **Diagnosing Field Wiring Issues**
 - o Methods to diagnose and troubleshoot field wiring problems directly from the controller.
3. **Effective Steps in Troubleshooting**
 - o Strategies to efficiently sort out confusing electrical issues and minimize rewiring.
4. **Advanced Electrical Troubleshooting Methods**
 - o Advanced techniques and methods for troubleshooting electrical components.
5. **Specific Components**
 - o Troubleshooting techniques for battery-operated timers, DC solenoids, solar units, AC transformers, and phasing.



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6. Fault Finding Equipment and Amp Readings

- Discussion on fault finding equipment, amp readings, and best practices for proper grounding.

Course Fees (Course fee is subject to change at any time):

- **Non-Members:** \$415 + GST
- **Members:** \$380 + GST
- **Course Retake Fee:** 70% of the respective fee you paid before when you took the course.
- **Subsidies:** The Okanagan Basin Water Board (OBWB) is generously offering \$100 course subsidies to Okanagan residents and companies working on irrigation systems in the Okanagan.

Prerequisite: No prerequisites are required to enroll in this course. However, familiarity with basic electrical concepts and irrigation systems is beneficial.

Course Schedule:

- **Spring Term:** Not offered (Online course is not offered)
- **Winter Term:** November or December, annually during the annual conference (In-person only)

Instructional Time:

The course includes 8 hours of instructional time, with breaks. Attendance is mandatory to be eligible for statement of completion.

Course Materials:

- **In-person Courses:** Materials are provided on the day of the course.
- **Online Courses:** Not available.

Exam Fee: Not applicable.

Exam Information: There is no exam directly tied to this course.

Upon attending the course's instructional time, a statement of completion (also known as completion letter) is awarded to you.

For more information, please contact us at iiabc@irrigationbc.com.

Approved by: IIABC Certification Board and Chair - Certification Board