2026 Snowmakers Seminar Course Descriptions

Intro to Electrical Theory with Tim Smith @ Stockade Lodge
This hands-on program will cover the basics of electrical theories (AC/DC, Circuits, etc.), turning a meter on, reviewing functions, safety around a lift cabinet, and provide a demonstration of low-voltage componentry.

Snow Gun Safety & On-The-Hill Snowmaking Tour with Gunstock Staff
This session will include an on-the-hill tour of Gunstock Mountain to view some of their main snow guns, as well as engage in a discussion about safe operation practices and gun maintenance.

Pumphouse Controls and Communications, part 1 with Ken Mack @ Pumphouse
Participants will identify and create a Process and Instrumentation Diagram (P&ID) of key components and controls at the pumphouse, reviewing PLC and pumphouse components, control voltages, sensor types, and other relevant details.

Compressor Controls 1 with Mark Sellingham @ Pumphouse
This course provides snowmakers with a working knowledge of compressor components, basic operating principles, and the necessary maintenance to prepare the compressor for snowmaking operations. Topics include Introduction to Compressor, Inlet, Aero Components, Cooler, Moisture Separator, Downstream Stages, Discharge, Aftercoolers, Ancillary Equipment, and Maintenance.

Pumphouse Controls 2 with Ken Mack @ Pumphouse
This program will continue the conversation about pumphouse controls and communications, as well as delve into how to troubleshoot problems that can shut down a pump and explore ways to fix these and other potential problems.

Compressor Controls 2 with Mark Sellingham @ Pumphouse
This session will expand on the topics covered during the first session, discuss operations, and the control logic used to manage loading and unloading during snowmaking operations. Topics will include Power Up Controls, Navigation of Panels, Starting Ancillary Equipment (in order to start), Starting Compressor, Compressor Unloaded, Load Process, Pressure Control, Unloading, and Energy Management Systems. The program will also include time for open discussion.

Electrical Safety & Print Reading with Tim Smith @ Stockade Lodge
This program will build on electrical theory, delve deeper into electrical safety (low and high voltage, protective equipment, lockout / tagout, etc.), and cover schematics (from reading a circuit to following a schematic for troubleshooting).

Math for Snowmakers with John Kern & Dave Ulbrich
Snowmaking is fundamentally an applied mathematics problem. Every decision—from water pump sizing to nozzle configuration to operational scheduling—relies on precise calculations. This overview covers the core mathematical concepts that enable snowmakers to produce more snow efficiently, conserve water, and maximize operational running time, plus help prevent line breaks and downtime.