

# LEAN YELLOW BELT CERTIFICATE ENHANCEMENT: BUILDING SCIENCE INTRODUCTION

## COURSE DESCRIPTION

Understand the science behind buildings and its importance in the construction industry. Learn about how heat, air and water vapour travels through the envelope system and how insulation and air tightness can affect the indoor environment and HVAC system sizing. Understand how the concept of Building as a System can increase durability, comfort and energy efficiency of building while keeping costs down.

Prerequisite: This training is an enhancement to the Lean Yellow Belt Certificate Training Program.

## PROGRAM OBJECTIVES

- ✓ **Understand why building science is important for the construction industry**
- ✓ **What to consider when talking about building science**

## PROGRAM STRUCTURE

MODULE	LEARNING OUTCOMES	HOURS
Building Science Introduction		
Understand how a building is more than just a structure, it is a system of interconnected components	<ul style="list-style-type: none"><li>• Building as a system</li><li>• Basics of energy efficiency</li><li>• Gain knowledge on heat transfers, air movements and vapour controls</li></ul>	4

## EVALUATION

Attendance	60%
Participation in group discussion	40%
<b>TOTAL</b>	<b>100%</b>

## PROGRAM DELIVERY

This course is delivered through an instructor-led session, group discussion, and audio/visual presentations.

## PRICE

\$250 per student

## INSTRUCTOR



Amelie is a Building Scientist and has been in the residential industry since 2001 with extensive experience in building energy consulting and simulation. She provides technical direction and has participated in several Net-Zero Energy home energy modeling and consultations across the country.

Amelie is certified LEED for Homes Green Rater and Energuide Energy Advisor (2001). She obtained a Masters Degree in Building Science and Sustainable at the Danube University Krems in Austria. Her master thesis was a comparison of the NZEH and the Passivhaus in regards to life cycle cost, carbon emissions, construction feasibility and primary energy requirements.