

# SCHOOL OF CONSTRUCTION AND THE ENVIRONMENT

## ESSENTIALS OF NET-ZERO & PASSIVE HOUSE CONSTRUCTION



The **Essentials Net-Zero and Passive House Construction** microcredential is for individuals who want to gain the skills and knowledge to construct high-performance buildings to meet the BC Energy Step Code and Net-Zero Energy and Passive House standards.

Every construction industry practitioner will benefit from understanding the fundamentals of Zero Energy/Emissions and Passive House buildings. This microcredential will support this industry shift by offering a knowledge base for a wide variety of roles (builders, tradespersons, building officials, architects, engineers, etc.) and recognizing a formal set of skills for Net-Zero Energy, Passive House, and zero carbon construction.

The microcredential consists of four courses that build upon each other in knowledge and skills for wood-frame buildings. Upon completion, you will have:

- Knowledge of the performance requirements, design considerations, and best practices to achieve airtightness and enclosure (low-TEDI) performance of the BC Energy Step Code and Net-Zero Energy and Passive House standards
- Confidence to apply best practices for high-performance heating, ventilation, and cooling (passive and active) when working on Net-Zero Energy or Passive House projects
- Knowledge of the unique considerations for electrical and mechanical systems when building high performance
- Awareness of strategies to evaluate costs and make design decisions for Net Zero Energy and Passive House buildings, including both operational and embodied carbon

## 50% TUITION DISCOUNT FROM LOCAL GOVERNMENTS

We have partnered with several municipalities in BC who are supporting Net Zero and Passive House construction with tuition subsidies. Contact [Mary McWilliam](#) to find out if you qualify for these offers.

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EDUCATION  
FOR A COMPLEX WORLD.



# COURSES AND COMPLETION SCHEDULE

The **Essentials of Net-Zero and Passive House Construction** microcredential can be earned over two terms, completing the required five courses as follows:

**Starting April 2022, September 2022, and January 2023 evenings and online**

**4 courses, 6 credits, 72 hours of learning time**

**delivered evenings and 100% online**

- [XZEB 1001](#) Fundamentals of Zero Energy/Emissions and Passive House Buildings
- [XZEB 1120](#) Airtightness and Low-TEDI Enclosures of Zero Energy/Emissions and Passive House Buildings
- [XZEB 1140](#) Intro. to Residential Mechanical Systems for Zero Energy/Emissions and Passive House Buildings
- [XZEB 1150](#) Introduction to Solar Photovoltaic & Electrical Systems for Zero Energy & Passive House Homes

**COMPLEMENTARY COURSES: offered 3 times annually**

*Optional 2.0 credit, 24 learning hours, hands-on lab:*

- [XZEB 1130](#) Airtightness and Low-TEDI Enclosures Lab for Zero Energy/Emissions and Passive House Buildings

More information: [mmcwilliam3@bcit.ca](mailto:mmcwilliam3@bcit.ca) | 604.202.9256 | [bcit.ca/zero-energy-buildings](https://bcit.ca/zero-energy-buildings)



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