

# Commercial Building Energy Specialist in HVAC and Controls Hybrid Training Course

#### **Delivery details**

Mode: Hybrid with self-directed online modules and live tutorials

Course available from: 8 October to 3 December 2025 (Approximately 9 weeks)

CPD: 10 points (CEP Framework)

Trainer: Rob Bishop (Energy Solutions Ltd)

Trainer and course intro: Watch video (2 mins approx.)

#### **Overview**

An efficient HVAC system is essential for achieving a net-zero-energy commercial building. Net-zero design delivers the lowest life-cycle cost and should be the goal of all new commercial buildings. The key is configuring and operating HVAC systems for lower capital cost while consuming only a fraction of the energy of conventional systems.

Achieving this requires integrated design and a series of well-informed decisions throughout design, installation, operation and optimisation. HVAC is the most complex system and the one most likely to lock in inefficiencies, it is also where the biggest efficiency gains can be made.

This course provides a process for delivering an optimally energy-efficient HVAC system, covering sizing, design and operation. It demonstrates how to effectively achieve excellent indoor air/environmental quality (IAQ/IEQ), comfort, health and productivity, while minimising HVAC energy use and costs.

#### This hybrid course will cover the following topics:

- Overview of Energy Efficient HVAC Systems
- HVAC Systems Design
- Cooling Plant Systems
- Cooling Operations
- Efficient Boiler Plant and Operations
- Mechanical Systems Design

- Indoor Air Quality
- Data Centres and Server Rooms
- Motors and Drive Efficiency for HVAC Systems
- HVAC System Commissioning for Energy Efficiency
- Control Fundamentals
- Control Diagnostics

#### Recommended prior learning or experience

Participants should be familiar with the principles of basic HVAC design and operation. The course focuses specifically on energy efficiency rather than covering every sub-discipline in detail.



#### **Course structure**

The course is delivered through 12 self-directed online lessons, in four blocks with connecting exercises, short quizzes and live tutorials. You can preview the first three videos free, to get a sense of the course content before registering for the full programme.

View Block 1 Videos here.

Block 1: Lessons 1–3

Live tutorial: Wednesday, 22 October, 12:30-1:30pm

Block 2: Lessons 4–6

Live tutorial: Wednesday, 5 November, 12:30-1:30pm

Block 3: Lessons 7–9

Live tutorial: Wednesday, 19 November, 12:30-1:30pm

• **Block 4:** Lessons 10–12

Note: Videos will remain available for enrolled students for 12 months after the final tutorial.

Pricing (NZD, per person)

CEP Member: \$1,125+GST Non-Member: \$1,250+GST

## When should you register?

You can register at any time. Once you have paid, the online self-directed lessons will be available to you as indicated in the delivery details above.

## **FIND OUT MORE or REGISTER HERE**

### **Qualification pathway**

This course prepares participants wishing to apply to become a Certified Commercial Buildings Energy Specialist in HVAC and Controls.

To gain certification, applicants must pass on online exam (75% passmark), submit a report on a project relating to this course – preferably based on actual working experience and attend an interview with an assessor (30-60 minutes). These are assessed according to a documented process, administered by CEP.

NB: Separate fees apply for certification applications.

Please read the <u>Refund Policy</u> before confirming your registration.

If you require a letter of support to assist with funding approval, please contact the CEP Office.

Level 4, Hope Gibbons Building, 7-11 Dixon Street, Wellington 6011 | PO Box 11508, Manners Street, Wellington 6142 +64 4 385 2839 | info@cep.org.nz | www.cep.org.nz