



BBE Certificate in Ecological Building and Design

Course Prospectus









Building Biology and Ecology Institute of New Zealand

BBE Certificate in Ecological Building and Design

Do you dream about buildings that are sustainable, healthy and beautiful to live in? About buildings that encourage a meaningful relationship between people and nature, and allow our planet to flourish?

Now you can learn what it takes to use as the basis of your own home or your career.

The Building Biology and Ecology Institute of New Zealand (BBE)

Through education, advocacy and research, the BBE Institute aims to make people aware of the health and environmental hazards of modern buildings and construction methods. We show them how to push the current boundaries of sustainability towards a restorative architecture, allowing people's health and happiness, and that of the natural environment, to regenerate.

www.bbe.org.nz

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This course is suitable for anyone who has an interest in a healthier and more sustainable built environment.



It complements training in architecture, architectural technology, construction, engineering, landscape design, interior design, urban planning and natural health.

It also suits individuals interested in improving their own health or building their own home.

The course enables you to:

- Analyse an existing built environment in terms of occupant health and sustainability;
- Explore alternative design and construction processes;
- Make appropriate choices of natural building materials and construction techniques;
- Make appropriate choices for renewable and on site energy generation;
- Make appropriate choices for collecting and using water, as well as treating and regenerating wastewater.

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The course was originally accredited with an ITPQ qualification and run in partnership with Aoraki Polytechnic. It is now run solely by the BBE Institute, and although the course is not now accredited, the Institute has maintained and improved upon the originally approved standard. The knowledge and skills gained will also be recognised by overseas Institutes of Building Biology and Ecology.

No prior learning is required for this course, although proficiency in English and computer and internet skills are necessary.



Graphisoft Archicad Education License

If you have an interest in architecture or architectural technology, the course is approved for students to apply for an ArchiCad education license. Training to use the programme must be done online through Graphisoft or elsewhere. There are also simpler programmes available online for other students.

The course is 100% online. You will need access to a computer and broadband internet for viewing notes, watching videos, downloading content and submitting assessments.

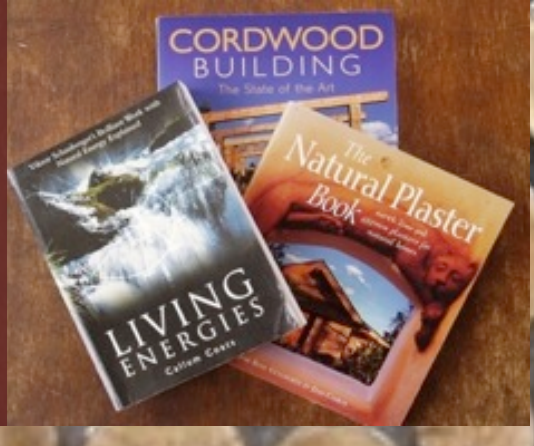
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The course consists of five 8 credit modules. This equates to 80 hours of self-directed study per module; a total of 400 hours for the whole Certificate and approximately 10 hours of study and assignment preparation per week. Each module has 5 topics and three assignments.

Module 1 must be enrolled in first, but the remaining four modules may be enrolled in any order.

The course is has five 8 week Intakes per year, with a one week break between:

Intake 1: starts 3 February
Intake 2: starts 7 April
Intake 3: starts 9 June
Intake 4: starts 11 August
Intake 5: starts 13 October



There are no required texts but extra reading and internet research is recommended to help your understanding of the topics. The following texts align closely with the course so are highly recommended:

- *The Healthy House* (Sydney Baggs)
- *A Deeper Shade of Green* (Johann Bernhardt ed)
- *The New Natural House Book* (David Pearson);
- *The Sustainable Home Guildelines* (Waitakere City Council)
- *A Pattern Language* (Christopher Alexander)
- *The Transition Handbook* (Rob Hopkins)

All assessment is internally assessed and based on competency rather than graded.

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Module 1 – Sustainable and healthy building

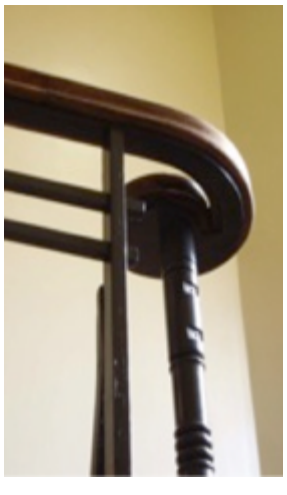
Topics include:

- Sustainable building
- Healthy building
- Unhealthy indoor air, temperature and moisture
- Unhealthy indoor electro-climate
- Assessing a building and site

Module 2 – Building and site design

Topics include:

- Holistic design
- Different ways of approaching design
- The psychological effects of buildings
- Eco-communities
- Land development and landscape



Module 3 – Materials and construction

Topics include:

- Assessing building building materials
- Traditional versus modern building materials
- Natural building materials
- Ecologically sound construction practice
- Traditional and alternative construction

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Module 4 – Energy



Topics include:

- Renewable power
- Using less power
- Natural heating and cooling
- Natural cooking and food storage
- Designing an energy system

Module 5 – Water



Topics include:

- The nature of water
- Healthy water supply
- Looking after water
- Restoring water to the environment
- Designing a water system

The Building Biology and Ecology Institute of New Zealand (BBE)

Unpaving the way to a restorative built environment