

IBE 101: MENTORED CORRESPONDENCE COURSE



Natural Healthy Buildings

NATURE IS THE GOLD STANDARD



Building Biology Institute
The science of healthy buildingsSM

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The compilation of information for this Natural Healthy Buildings (NHB) course began in February 1995. It combines data from Germany, other areas of Europe, the United States, Canada, and several other countries around the world.

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Welcome to the study of Building Biology!

As Executive Director, I am very excited to welcome you to the Building Biology Institute™. By embarking on this self-study course, you have demonstrated a desire to take an active and individual role in improving the holistic health of our planet. We salute you for joining the ranks of esteemed and dedicated Building Biologists around the world.

We at BBI are here to assist you as you move forward through this course, and we look forward to having you join us in raising awareness about the intrinsic connections between the built environment and human health and wellness. The efforts of one can become the efforts of many. There is no better way to bring about such positive, meaningful change in our world.

Finally, please know that this course includes links to third party information. These outside sources might not reflect nor support the Building Biology viewpoint, and they can change without our knowledge. Nonetheless, it can be beneficial to learn how other people, groups, institutions, and organizations discuss and present the same subject.

We believe you will not just further your knowledge with this course, you will also enjoy the learning process we designed for you and have some fun.

Best wishes for exciting learning,

Michael Conn

A handwritten signature in black ink that reads "Michael Conn". The signature is written in a cursive, flowing style.

Executive Director
Building Biology Institute

Our Founder



Helmut Ziehe's Building Biology calling began with an “a-ha” experience in North Africa in 1980 that changed the course of his life and career. As resident engineer for a city of 90,000 inhabitants, he noted that a majority of people had abandoned their government-provided homes in favour of living in tents. Their government homes were constructed of concrete, a poor material health-wise, that heated the interior rooms such that even air conditioning could not bring adequate relief. As a seasoned architect with a Dipl. Ing. degree from the Technical University of Berlin, and a Master's in Tropical Studies from the London School of Architecture, Helmut discovered a solution by examining local historic homes, some of which dated back 4,000 years. He found that those homes used clay as their primary building material and utilized covered walkways for shading and ventilation.

This eye-opening experience led Helmut beyond his career as a modernist architect to embrace the precepts of **Baubiologie**. He began his studies under Dr. Anton Schneider at the **Institut für Baubiologie + Oekologie** (IBN), in Germany, and never returned to his “conventional” architecture practice. Once he completed his engineering assignment in North Africa, Helmut moved to Great Britain. There he established the English Institute of Baubiologie, personally translating from German into English the twenty-three IBN course packs that became the BBI Correspondence Course for training new Building Biologists. He relocated to Clearwater, Florida in 1987, founding **The International Institute for Baubiologie & Ecology** (IBE), now the **Building Biology Institute** (BBI), which serves all of North America, as well as English-speaking students worldwide.

In 1989, a reporter asked Helmut, “How many students does the Institute have?” Helmut answered, “Only eight.” To which the reporter replied, “Everyone has to start small.” Since that day, the institute Helmut founded has enrolled over 2,000 students.

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1. Program Outline

1.1 Purpose and Goal of the Natural Healthy Building Program

As an introduction to the Principles of Building Biology, Natural Healthy Buildings (NHB) is self-study course, conducted with support from an assigned BBI mentor. Students will learn about the variety of indoor environmental toxins, how to detect them, what to do about them, and (best of all) how not to cause them. This course benefits home dwellers, as well as architects, interior designers, and other building professionals.

Topics include:

- A brief overview of building science and environmental health
- Biological exposures in the home
- Particulate exposures in the home
- Chemical exposures in the home
- Electromagnetic exposures in the home

Resources:

- *Prescriptions for a Healthy House*, 3rd edition (2008), Paula Baker Laporte, et al.
- IBE 101 digital course materials (provided online via your Learning Dashboard)

Time requirement to complete: 2 to 3 months

Prerequisites: None

It is not possible within a short 2-to-3-month timeframe to cover all details, materials, and information required for building a natural, healthy home. IBE 101 is solely intended as an introduction to Building Biology research and techniques. Completion of this course alone does not imply that the attendee is qualified nor certified for consultancy, building, architectural design, teaching, or any other practice associated with Building Biology principles.

This course is part of the requirements for many BBI professional certification tracks. For more information, please contact the Building Biology Institute.

2. A Brief Introduction to the Building Biology Institute (BBI)

2.1 Building Biology Institute – Who Are We?

Building Biology Institute is a 501(c) 3 non-profit educational institution. The structure of the Building Biology Institute consists of a Board of Directors who set the direction and goals for the Institute. The Executive Director reports to the Board of Directors and runs the day-to-day operations of the Institute. The Director of Programs reports to the Executive Director and works toward delivering the best quality courses and programs. Volunteers also report to the Executive Director and carry out many vital tasks for the outreach and growth of the Institute.

2.1.1 Building Biology Institute Educational Premise

BBI leads a mission to create a global village of understanding about the vital relationship between the natural and built environments and planetary health to bring all three into greater harmony.

Given that:

1. There is a plethora of building-related issues that are causing human health problems.
2. There is a large amount of disjointed information and misinformation concerning these issues and their appropriate remedies.

Building Biology Institute's response is to take on the roles of:

- Facilitator of the combined efforts of many to gain a comprehensive, detailed understanding of the issues.
- Organizer of the knowledge into a useful, meaningful format.
- Developer of an information and knowledge dissemination system.
- Presenter of the information and knowledge in an organized way to the general public and professionals.

The mechanisms for accomplishing these are:

- Correspondence courses
- Online courses
- Seminars and conferences
- Publications

2.2 Structure of the Building Biology Institute

“BBI brings together the educational and technical resources to inform people about how to create natural, healthy homes and workplaces. Bringing awareness to the benefits of a natural living space not only improves health and provides a sense of well-being, it also has an impact on the survival of this planet.”

2.3 Building Biology Institute: Mission Statement



Figure 1 – Organizational Flow Chart for Building Biology Institute

BBI brings together educational and technical resources to inform people about how to create natural, healthy homes and workplaces. The BBI mission brings together design methods and technology to provide the information needed to create healthy homes and workplaces. This knowledge raises awareness, provides tools for solutions, and promotes effective ecological practices for future generations.

BBI accomplishes these objectives by providing public education programs, professional training programs, professional certification tracks, professional membership, testing protocols, building standards, advocacy, networking, and information sharing.

2.3.1 The Goals of Building Biology Institute are to:

- Nurture an interdisciplinary arena to continually refine our understanding of the relationship between human health and the built environment.
- Organize the information into a systematic and useful format.
- Present the information and knowledge in an organized way to the general public and professionals with a desire to help others and themselves.

2.4 Who Should Study?

Of course, we believe everybody should study Building Biology. This interdisciplinary approach identifies potential problems in the living environment and gives solutions to improve quality of life. It is far better to live in healthy houses and work in healthy offices than the alternative.

Academic institutions should offer this course as part of their environmental studies curriculum. Physicians, alternative medical practitioners, and all healthcare providers would significantly benefit from understanding how building materials can impact their patients' health. Architects, interior designers, home inspectors, building inspectors, and public health inspectors, and other building professionals should know how to create healthy homes and incorporate this knowledge into their work. Corporate executives should understand how to prevent or fix "Sick Building Syndrome" and thereby increase employees' productivity. And individuals who intend to pursue careers in environmental consulting absolutely need to acquire this knowledge.

2.5 Building Biology Institute: Vision Statement

Nature is the gold standard from which we deliver solutions to our most pressing environmental crises and lead people to their most authentic paths: preserving and supporting human and planetary health. We bring together thought leaders, decision-makers, educators, and the myriad of narrowly specialized concepts that are otherwise taught in isolation, with the common crucial goal of creating a healthy, just, sustainable, and peaceful world. We believe our vision can make a meaningful contribution to the ever more fertile global hub of ingenuity, innovation, and fact-based transformations.

2.6 Building Biology Institute: Certification Tracks

2.6.1 Building Biology Advocate (BBA)

The Building Biology Advocate is the first step for those new to Building Biology. This certification track is delivered via distance learning and is for those who want to improve their homes and start educating others. It includes a mentored correspondence course (IBE 101), combined with 70 credit hours of online self-study courses. For further information, visit: <https://buildingbiologyinstitute.org/certifications/building-biology-advocate-bba/>

2.6.2 Building Biology Environmental Consultant (BBEC)

This certification track is for those who wish to expand their outreach to include home/office consultation for clients who are building, remodeling, or for those who want assessments. This track is a combination of distance learning and hands-on instructor-led seminars. It includes several 200 level online courses (200 total contact hours), as well as three separate, in-person 5-day seminars (BBI 211, BBI 212, BBI 213) to learn investigation and mitigation techniques. Each seminar ends with a final exam. There is also a final project (BBI 221) requirement in which you demonstrate your thorough understanding of the BBI principles. For further information, go to <https://buildingbiologyinstitute.org/certifications/building-biology-environmental-consultant-bbec/>

2.6.3 Electromagnetic Radiation Specialist (EMRS)

This program equips graduates with practical, hands-on experience and proven real-world solutions for identifying, assessing, and mitigating or eliminating electromagnetic emissions (electromagnetic radiation, electromagnetic fields) in homes, schools, offices, and commercial buildings.

Graduates also become experts in prevention, certified to advise homeowners, home buyers, architects, builders, inspectors, and engineers in the methods and practices that create and maintain a minimized presence of electromagnetic fields in homes and commercial buildings. Throughout the program, we concentrate on teaching you the skills needed to make a genuinely positive impact in your community and the world at large. For a complete prospectus go to <https://buildingbiologyinstitute.org/certifications/electromagnetic-radiation-specialist-emrs/>

2.6.4 Building Biology New Building Consultant (BBNC)

Prerequisite: IBE 101

This certification is for those who wish to apply the knowledge of Building Biology within the building industry. It is of particular interest to professional architects, engineers, planners, and general contractors. This track includes a 5-day, in-person seminar (BBI 213) and two 4-day, in-person seminars (BBI 214, BBI 215). Each seminar ends with a final exam. There is also a required final project in which you demonstrate an understanding of BBI principles. For further information, go to <https://buildingbiologyinstitute.org/certifications/building-biology-new-build-consultant-bbnc/>