#### BUILDING BIOLOGY NEW-BUILD PROSPECTUS



# **BBNC** CERTIFICATION

The Science & Design Of Healthy Buildings



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### CONTINUING EDUCATION CREDITS



We are registered continuing education providers for the American Institute Of Architects, the Indoor Air Quality Association, and the International Association Of Certified Home Inspectors.



### OVERVIEW

### What is Building Biology?

Building Biology is an interdisciplinary science that brings together dynamic and visionary individuals to work for a better, more sustainable, and truly green world.

No other profession so seamlessly integrates the holistic study of the man-made built environment, human health, and ecology. From the German term "Baubiologie," meaning "building for life," Building Biology is founded on the principle of balance, using nature as the ultimate guide.

As extraordinary as our modern advances in science and technology may appear, they nonetheless disregard not just our natural environment, but also our human health. Synthetic materials, biological contaminants, and man-made pollutants break down the balance of nature that is essential and sustaining for all life. Building Biology strives to correct imbalance by implementing materials, methods, and protocols that support a built environment intrinsically aligned with nature.

#### **Making A Difference**

By understanding and applying the laws of nature to the built environment, Building Biologists are uniquely trained to become solution-oriented leaders and environmental advocates.

At the Building Biology Institute (BBI), we train our graduates to use the knowledge, tools, and skills they acquire during their course of study to actively assess and find solutions to the problems created from the misuse of chemistry and technology.

We teach our students to approach the built environment from a holistic standpoint, toward the overarching goal of greater harmony and planetary health for current and future generations.



Share your newly gained Building Biology knowledge with groups and individuals throughout your community.

#### **Mission**

As Building Biologists, we strive to make the built environment healthier for all. Building Biology's guidelines serve to assure the life-enhancing nature of each dwelling space, with as little disruption to the environment as possible. By setting practical, real-world examples, and sharing solid recommendations based on the fundamental principles of Building Biology, we are making positive change on both an individual and global scale.

The Building Biology Institute's mission is to help create healthy homes, schools, and workplaces free of toxic indoor air, tap-water pollutants, and hazards posed by electromagnetic radiation. BBI was founded in Clearwater, Florida, 1987, based on the Principles of "Baubiologie," brought from Germany by the renowned international architect Helmut Ziehe.



Helmut Ziehe, Founder

Achieve order and harmony with our surroundings.

Forge a balance between nature, buildings & ourselves.

Foster connections for an ecologically oriented world.

Provide a holistic approach to building with occupant wellbeing as the primary focus.

#### Who Should Enroll?

Open to all, from working professionals to the general public, the BBNC program at the Building Biology Institute welcomes students from diverse careers, geographical locations, and educational backgrounds.

Our impressive list of alumni includes architects, builders, real estate developers, interior designers, indoor air quality consultants, home inspectors, healthcare practitioners, building science professionals, and laypersons with an interest in living healthier. We invite all who are interested in creating healthier dwellings and a healthier world to join us.

Building Biology Institute does not and shall not discriminate on the basis of race, color, religion (creed), gender, age, gender expression, national origin (ancestry), disability, marital status, sexual orientation, or military status, in any of its activities, events, or operations. We have been and remain committed to providing an inclusive and welcoming environment for all.



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# REQUIREMENTS

The foundation for certification.

**Building Biology New-Build Consultant™ (BBNC)** 200 CONTINUING EDUCATION UNITS

The BBNC professional certification provides training in the art and science of creating built environments that nurture human health and contribute to ecological balance. We instruct via a holistic approach how to design, build, remodel, and furnish healthy homes and workplaces, wherein the health of all building occupants is the central and guiding principle.

#### What You Can Expect

Through our series of online courses, in-person intensive seminars, and a mentored final project, the BBNC program thoroughly equips graduates with the comprehensive knowledge, skills and resources necessary to become a leader in healthy building. Participants learn how to design, build, renovate, furnish, and finish dwelling spaces that comprehensively support human health and wellness.

BBNC CERTIFICATION WILL TEACH YOU HOW TO:

- Implement proper protocols for vetting toxic building materials.
- Identify unhealthy manufacturing methods that adversely impact the health and environmental impact of building products.
- Specify construction processes that do not contribute to, nor exacerbate, harmful health effects on the building's occupants.
- Create indoor environments compatible with, and respectful of, the laws of nature.
- Evaluate the health of our communities with Building Biology principles as they apply to community design and urban planning.

**IBE 101: Natural Healthy Buildings** EQUIREMENTS **Signed BBI Code of Ethics** (5) 200-Level Online Courses + Corresponding Exams (3) Intensive Seminars (IBE 213, IBE 214, IBE 215) The Final Project (IBE 221)

#### Alumni

Many of BBI's alumni now own and manage successful environmental businesses based on their carefully honed Building Biology expertise. Our alumni include architects, green builders, engineers, building inspectors, medical practitioners, interior designers, and city planners who have used their BBNC certifications to expand their careers and credentials.

#### **Tuition**

IBE 101, our 3 intensive seminars, and our online courses are designed to be taken in any order. We recommend (although do not require) that you take IBE 101: Natural Healthy Buildings before attending your first seminar. All required curricula must be completed successfully before a candidate may undertake their BBNC Final Project.

You have up to two years to complete the entire program. *Requests for* extensions are considered on an individual basis.

Pay In Advance & Save: \$5,475\*

Pay as You Go: \$6,270\*

\* Tuition includes all online courses, seminars, and final project.

### **Multiple Certifications**

Should you wish to further your learning to professional certification, during or after you complete BBA Certification, 100% of your course credits and BBA tuition will be credited toward one or more of our professional certification programs:





We look forward to welcoming you into our international community!



Consider proportion, harmonic measure, order and shape in design. BUILDING BIOLOGY PRINCIPLE #21



### CURRICULA

#### Introducing our courses.

#### **IBE 101: Natural Healthy Buildings**

This foundational course addresses the vital interconnections among the built environment, human health, and planetary ecology. It lays a solid groundwork that prepares you to Go Beyond Green<sup>™</sup>, meeting the urgent call for sustainable dwellings and spaces designed and built with nature as the gold standard.

IBE 101: Natural Healthy Buildings is a mentored, self-study, introductory course to the principles of Building Biology. It is intended to be completed entirely in your home or office, at your convenience. Your mentor will be available to you daily throughout your studies, via phone and e-mail, to assist you in learning how to detect and mitigate, and/ or prevent the many environmental hazards found in homes, offices, schools, and commercial buildings.

Students will learn what kinds of hazards can be introduced into the built environment via the conventional building process, and how to avoid them during the design/remodeling phase. This course benefits home dwellers, as well as architects, interior designers and other building professionals.



### When you enroll, you will receive the following materials:

- Course Manual
- Study Progress Sheet
- IBE Code Of Ethics (Signature Required)
- Standard Of Building Biology Testing Methods
- Introductory Gaussmeter
- Radon Test Kit
- Water Test Kit
- Prescriptions For A Healthy House
- 7 Steps To Improving Air Quality
- Creating A Sleeping Sanctuary

#### **Intensive Seminars**

Learn from some of the top indoor environmental professionals, with lively classroom sessions, interactive onsite training, and real-world applications. BBI's seminar instructors and guest lecturers are some of the leading experts in their respective fields. Our two 4-day and one 5-day immersive seminars offer students the unique opportunity for hands-on learning and networking with colleagues, thought leaders, and skilled environmental experts.

#### **Field Trips**

Field trips aren't just for kids. Take your knowledge outside of the classroom and into the real world. During IBE 213 Building Physics/Building Biology, you will take a field trip with your class to onsite locations for experiential learning by visiting homes built according to Building Biology principles. Trips are guided by certified class instructors.



"We shape our dwellings, and afterwards, our dwellings shape us." WINSTON CHURCHILL



"The home is the center and circumference, the start and the finish, of most of our lives."

CHARLOTTE P. GILMAN

#### Venue

Our venue and lodging selections for BBNC seminars vary from year to year, and are published six to eight months in advance, so please refer to our website's seminars page < https://buildingbiologyinstitute.org/seminars > for venue site and logistical information well before making your travel plans.

Ask questions. Get answers. Each seminar brings together participants with a wealth of knowledge from many related disciplines. Ample time is set aside for questions and discussion providing a holistic exploration of the concepts being presented during each day of the seminar. Instructors provide many hands-on exercises so that complex new ideas are grasped by all and each student leaves with an expanded understanding of the built environment and how it can work optimally to enhance health. Each seminar concludes with a proctored written exam.

#### **Required seminars for BBNC certification:**

IBE 213: Building Physics/Building BiologyIBE 214: Indoor Environmental Quality for New ConstructionIBE 215: Healthy Design & Community Planning

\*Note: Each intensive seminar is staged once per calendar year. You may attend these seminars in any order.

Students enrolled in the BBNC professional certification track will present a final project tailored to their professional expertise or area of greatest interest, and designed to demonstrate their mastery of BBNC concepts.



Building Biology Principle #12:

All building materials shall be non-toxic with neutral or pleasant natural scents using natural and unadulterated building systems and materials.

### IBE 213: Building Physics/Building Biology

This 5-day seminar explores the layered connections between human health, the built environment, and planetary ecology. Students will gain vital insights into the dynamic interaction between the climate, the built environment, and the impact of that built environment upon the occupant and the ecosystem. "The Buildings in which we live, work, and play are designed to protect us from Nature's extremes, yet they also affect our health and environment in countless ways."

JÖRN SCHRÖDER, BBEC

**Best practices to create optimal health conditions** during construction and/or remodeling and throughout the life cycle of a building.

**Combine aesthetics, good design, and healthy materials** to support an ecologically-sound lifestyle.

Building Physics with human health as the primary focus.

Key facets of Building Physics, including the building envelope, building materials and furnishings, building technologies, and the building system.

Daily schedule includes lectures and group activities, along with practical experience in building science principles, research assignments, demonstrations, and interactive discussions.

# IBE 214: Indoor Environmental Quality for New Construction

This seminar focuses on Building Biology principles and their relevance and practical applications to the electromagnetic and indoor air quality of our buildings in North America today.

Through an in-depth understanding of these factors, we can create healthy indoor environments for our clients. The information is also relevant for anyone interested in creating their own healthy spaces with a solid understanding of both air quality and electromagnetics.



Building Biology Principle #14: Assure best possible water quality by applying purification technologies if required."

Gain a solid understanding of indoor environmental quality concerns, including biologicals, chemicals and particulates.

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Acoustics and color choices to consider when building or renovating homes and workplaces.

Daily schedule includes lectures and group activities, along with practical experience in building science principles, research assignments, demonstrations, and interactive discussions.

#### IBE 215: Healthy Design & Community Planning

This provocative and practical seminar provides the inspiration and the know-how for creating healthier and more ecologically sound built environments.

From family residence to community design we will explore the Building Biology principles and criteria and their application to modern-day North American built environments.



"A room is not a room without natural light." LOUIS KAHN

Learn about the considerations for **analyzing and choosing a healthy building site**.

Examine the historical context for the formulation of the **Building Biology** recommendations for community design.

**Explore passive design strategies** for each of the climate zones that maximize comfort while minimizing fossil fuel dependence

Gain practical knowledge using the available tools to screen for healthy building products.

Daily schedule includes lectures and group activities, along with practical experience in building science principles, research assignments, demonstrations, and interactive discussions.



#### **IBE 200-Level Online Courses**

Centered around the 25 founding principles of Building Biology, our self-directed home-study courses round off your BBNC education.

Elective online courses are separated into 3 categories:

- 1) Electromagnetic Radiation
- 2) Indoor Environmental Quality
- 3) Natural Healthy Building & Design

You may select any five courses from these three categories according to your individual interests and professional goals. While the BBNC certification requires only five online courses, you may enroll in as many online courses as you wish, with 10% off the listed tuition fees.



Building Biology Principle #21:

Consider proportion, harmonic measure, order and shape in design

#### ONLINE COURSE OFFERINGS FOR BBNC CERTIFICATION

(5) ELECTIVES ARE REQUIRED. MORE ARE ENCOURAGED

#### **BBNC Electives: Electromagnetic Radiation**

- IBE 221.1 Dirty Electricity
- IBE 221.2 Smart Meters
- IBE 221.3 5G Cellular Phone Systems
- IBE 221.4 Photovoltaic (PV) Systems
- IBE 221.5 EMR: Science
- IBE 221.6 EMR: Health
- IBE 221.7 EMR: Solutions
- IBE 221.7 EMR: Research

#### **BBNC Electives: Indoor Environmental Quality**

- **IBE 222.1** Chemical, Biological & Particulate Hazards
- IBE 222.2 Moisture in Buildings: Humidity to Flooding
- **IBE 222.3** Vetting Building Materials: Is It Toxic?
- **IBE 222.4** Water Quality & Treatment Options

#### **BBNC Electives: Natural Healthy Building & Design**

- **IBE 223.1** Light-frame Construction & Health
- IBE 223.2 Community Planning: Cities in Crisis
- IBE 223.3 Community Planning: Exemplary Case Studies
- **IBE 223.4** Community Planning: Incorporating Building Biology
- **IBE 223.5** Community Planning: Roadmap for Sustainability
- IBE 223.6 Designing A Kitchen for Wellness
- **IBE 223.7** Equipping A Kitchen for Wellness



"Good buildings come from good people, and all problems are solved by good design." STEPHEN GARDINER

#### Building Biology Principle #25:

Consider the embodied energy and environmental life cycle costs when choosing all materials used in construction.



# FINAL PROJECT BBNC Professional Certification

The Final Project is an opportunity for you to apply the principles of Building Biology to your area of expertise or interest within building and design. You will have 1 year from inception to complete and submit your project.

#### **Building Biology Principle #6**:

Minimize building material interference with vital cosmic and terrestrial radiation.

#### **How it Works**

**Project Approval:** As a BBNC candidate, you will first submit an abstract outlining your intended thesis project to one of the course instructors (Paula Baker-Laporte, Stephen Collette). The project can be an active endeavor in your professional business, or it may be a completely theoretical design.

**Your Mentor:** The Final Project is a mentored process. Upon approval of your thesis, Paula and/or Stephen's role is to advise on the overall direction of your project, while guiding you toward integrating the principles of Building Biology into your work, and ensuring that your project reflects a thorough understanding of all coursework accomplished throughout your studies.

**Content:** Your final project must contain a detailed explanation of all materials, methods, and strategies employed. You may include accompanying drawings or photos to support your work. All source materials used in the final project must be properly referenced.

**Time to Complete:** You can set your own timetable and pace for the project, not to exceed one year from date of acceptance. While the average time invested in a final project is approximately 40 hours, individual projects can entail significantly more time depending on the scope.

**Evaluation:** Once your project is complete, you will present it to your mentor for evaluation. When your mentor determines that you have demonstrated a high level of competency in the application of Building Biology principles to your chosen topic, you will then receive your Building Biology New-Build Consultant (BBNC) certification.



Building Biology Principle #3: Place dwellings in well-planned communities that provide ample access to fresh air, sunshine and nature.



**Building Biology Principle #3:** Provide for ample ventilation.

Contact Us To Enroll Or For More Information

### (866) 960 0333

### outreach@buildingbiologyinstitute.org



The Building Biology Institute (BBI) is a 501(c)(3) nonprofit organization dedicated to educating both professionals and the general public about how to create healthy homes, schools, and workplaces.