



# Bringing Phius Passive Building Education to Your Institution

## Your Students Can Make a Difference

The built environment creates a staggering 40% of the world's carbon emissions, so for students in the field of architecture and engineering, working to get our built environment to net zero emissions is one of the most significant ways to fight the climate crisis. Our mission at Phius is to help the built environment mitigate and adapt to the climate crisis – and we have a successful framework in place to do just that.

What we need are more creative, forward-thinking minds to help us scale up and make a truly significant impact. That is where your students come in. We are offering the unique opportunity for your students to take our Phius Certified Consultant (CPHC®) training and become certified passive building professionals before graduation. This opportunity will not only allow your students to fight climate change through the built environment, but will equip them with cutting edge design and building strategies as well as a coveted professional certification that will give them a leg up in the job market. **Help set your students up to make a decisive impact on our built environment by including Phius in your curriculum.**

## Who We Are

Phius is a 501(c)(3) nonprofit organization that is the smartest path to zero-carbon for comfortable living and the wellbeing of the planet. This means driving down carbon emissions and working toward a net zero future. We work toward this goal by supporting the Phius passive building standard through project certifications, research, and – most importantly – **education**.

Phius' flagship professional certification, Phius Certified Consultant (CPHC), is the only professional certification that teaches students how to apply passive building principles in a cost-optimized, climate-specific manner. The course has been adopted by several universities in recent years with great success – Miami University (of Ohio), University of Oregon, Ball State University, Toronto Metropolitan University (formerly Ryerson University), Penn State University, the University of Arizona, Rensselaer Polytechnic Institute and University at Buffalo. We are looking to expand this opportunity further. The recently revamped CPHC course provides students with a valuable introduction to the world of passive building – in addition to a coveted professional certification should they pass the exams.



## What the Students Receive

All students engaged in the Phius training curriculum will receive a world-class immersion in practical building science and high-performance building design solutions. This curriculum provides the knowledge base necessary for design solutions that are ultra-low-energy, durable, comfortable, and resilient – at multiple scales and for various building typologies. These skills are exactly what professionals need to move the needle on carbon emissions and climate change.

Students who pass the Phius professional exam will be recognized as Phius Certified Consultants (CPHC). It is good for the resume and good for the planet!

**For more information, contact John Loercher at [jloercher@phius.org](mailto:jloercher@phius.org)**



Becoming a CPHC was an incredible opportunity for me as an architecture student because it provided a lot of information that I didn't learn in other classes.

– Miami University CPHC student

## What Phius Offers

Phius will provide students access to its CPHC training program – the cost of which is equivalent to that of a mid-range textbook. In return, students receive full access to an online series of training modules (the CPHC curriculum), supporting materials (including worked example problems), an online final exam, and access to a design-based take-home exam. Students also receive access to self-paced training modules to learn the basics of the WUFI® Passive energy modeling tool. Students who successfully pass the exam will be awarded the Phius Certified Consultant (CPHC) professional credential and one year of Phius Alliance membership at no extra cost.

## What is Expected of Your Institution

Your institution must establish an appropriate course through which the Phius curriculum will be offered; staff the course with a faculty member who is an active Phius CPHC, can guide students through the course (faculty member will be responsible for laying out the required curriculum, which is outlined by Phius, within their own course structure); host design exercises and group work; and coordinate with Phius as necessary for course enrollment and sharing curriculum. The professional CPHC exam will be graded by Phius.

## More About Phius CPHC Training

Phius CPHCs are the most important member of the project team for buildings pursuing Phius passive building certification. They are tasked with ensuring the building is designed and detailed utilizing passive building strategies and is compliant with Phius Certification requirements. **Below are some key competencies of CPHCs.**



### Building Energy Modeling

Understanding passive building physics and the driving factors for losses and gains in a building are essential to climate-appropriate passive building design.



### High-Performance Building Enclosure Design

From moisture control strategies to thermal-bridge-free design strategies, passive building places emphasis on getting the enclosure right.



### High-Performance Mechanical Systems

Balanced ventilation and high-performance heating, cooling, and domestic hot water systems are critical elements of passive building design.



### Building Science Fundamentals

Phius professionals learn how controlling moisture, heat, and airflow in buildings define best practices in building design for comfort, efficiency, durability, and air quality.



### Air-Tightness Detailing

An airtight enclosure is cornerstone to passive design and with applied building science leads to a long-lasting, durable enclosure, comfort, and minimized losses from air leakage.



### Cost Optimized, Climate-Specific Design

CPHCs take a deep dive into the Phius standards and passive building methodology to understand how to achieve climate-specific optimized designs.



### Assure Quality from Design through Construction

The CPHC on a project is responsible for understanding all certification requirements and oversight that the project is on the right path throughout design and construction.