Course "PHPP Expert"

Familiarise yourself with additional functions of the PHPP! This course enables you to enter more complex residential and non-residential buildings, as well as buildings with mixed-use buildings - both for the building envelope and building services.

The input of typical components for larger projects will be explained in detail and practised. The possibilities of evaluating efficiency options with the variant calculation are presented, as well as the concept of economic comparisons in the PHPP, the pre-certification for step-by-step modernisations and the use of the EnerPHit refurbishment tool (ESP).

This course assumes knowledge from the Passive House Designer course (modules 1-3) and initial experience with the PHPP. The course prepares for the examination to become a certified PHPP expert (a valid certificate "Passive House Designer/Consultant) is required to hold this additional certificate).

Homework:

Course participants who wish to take the PHPP Expert Examination receive a homework in the "PHPP Advanced" module a homework as an additional practical exercise. This exercise and the feedback from the instructors ensures practical learning success. Use the 3 months to enter your own projects into the PHPP at the same time and thus anchor what you have learned in your everyday professional life.

Modul 4: 3D data entry with BIM / designPH Here you will learn how building properties generated with Building Information Modelling software (BIM) are exported to PHPP via the bim2PH tool.

You will also learn about the SketchUP plug-in "designPH", which can be used to model buildings directly in 3D, optimise them, update them and export them to PHPP with component properties.

Modul 5: PHPP Advanced Familiarise yourself with additional functions of the PHPP! This module allows you to enter more complex residential and non-residential buildings, as well as mixed-use buildings - for both the building envelope and building services. The input of typical components for larger projects is explained in detail and practiced practically. The possibilities of evaluating efficiency options with the variant calculation are presented, as well as the concept of economic comparisons in the PHPP, pre-certification for step-by-step modernisations and the use of the Energy Retrofit Plan (ESP).

Modul 6: Thermal Bridges and PHPP Acquire in-depth knowledge on the topic of thermal bridges - indispensable for the energy-efficient planning of complex buildings. You will also learn how to calculate thermal bridges using the free THERM programme. In addition to determining the appropriate boundary conditions for thermal bridge calculations, you will learn how to read and use the results of two-dimensional heat flow calculations. In addition, various examples are used

to provide an understanding of the range of typical thermal bridges and how to reduce thermal bridges in typical connection details in a way that is suitable for passive houses.

Exam for becoming an PHPP Expert

The PHPP Expert certificate is only awarded after prior certification as a Passive House Designer/Consultant. Initial practical experience with the PHPP is recommended. A prerequisite for participation in the PHPP expert examination is the successful completion of a term paper.