

Assignment student EnTranCe Energy Transition Community

Project title: Designing an acoustic dead box
Suitable for students of: <i>Multiple choices are possible</i>
<input type="radio"/> MBO <input type="radio"/> BuitenWerkPlaats Built Environment (2 nd yr, 1 block, 2 nd yr, 4 block) <input type="radio"/> Vastgoedlab V&M (3 rd yr) <input type="radio"/> Bachelor graduation assignment (4 th yr) <input type="radio"/> Bachelor internship (limited possibility in daily guidance) <input checked="" type="radio"/> Research assignment in curriculum year..... <input type="radio"/> Honours research assignment <input type="radio"/> Master thesis
Study Program: Civil engineering
Period: Feb 2018 - Jun 2018 (depending on the assignment to design a frame for testing isolation properties; see Background)
Language: English / Dutch
Client: EnTranCe / BuildinG
Internal client: Ted Wildenberg

Background (facts, situation sketch and parent/organization goals)

The HEAT House (Heating Equipment & Appliance Testing House) will be modified to test isolation properties of building materials. These building materials can also be tested at BuildinG for their earthquake resistance. If these materials are tested at the HEAT House, they also should be tested for their acoustic properties such as isolation and absorption. Therefore a removable (?) acoustic dead box is necessary.

Problem (description of the undesirable situation)

Building materials, especially in an urban environment, should be tested on their acoustic properties to minimize acoustic transmission and/or reflection. In an existing wall at the HEAT House a frame will be placed to accommodate the testing for the isolation properties. The acoustic dead box should accommodate the building of the test wall. Also the acoustic box should fit perfectly on the frame. Dimensions are not yet known and to be determined.

Objective (description of the desired situation)

A removable (?) box should be designed, build and tested so acoustic measurements on building materials can be performed. Measuring properties such as acoustic isolation and acoustic absorption are the main objectives, possibly other properties could also be determined.

Result deliverable/product (what is ready if the project is finished) with list of part results

The result should be a test setup which accommodates acoustic measurements in the HEAT House.



Competence level

3

Connected to Change Agency ETC

Multiple choices are possible

- Sustainable Building
- Sustainable Mobility
- Local Communities

Further information

Student will be working in the context Energy Transition Community at EnTranCe. You will be working in a multidisciplinary team. For detailed information on this assignment contact Ted Wildenberg (EnTranCe) t.b.c.m.wildenberg@pl.hanze.nl 050-5952478

This assignment should be run in parallel with assignment 5 (design and installation of a frame of isolation tests)

How to respond to the vacancy

Send a motivation letter and CV to EnTranCe, Energy Transition Community, etc@org.hanze.nl
Attn. Mrs. Jacqueline Joose, Office Manager EnTranCe. Note: If the job does not fit directly with your specific interest, please contact via etc@org.hanze.nl or 050-5954708

Website: <http://en-tran-ce.org/for-students/assignments/assignments-per-study/>