

Course analysis report – FAF3413 - 2023-03-25

Application of exergy analyses in buildings

The analysis is performed as a reflection after the most recent occasions for giving the course.

Course analysis carried out by (name, e-mail):

Folke Björk; folkeb@kth.se

DESCRIPTION OF THE COURSE EVALUATION PROCESS Describe the course evaluation process.

Describe how all students have been given the possibility to give their opinions on the course. Describe how aspects regarding gender, and disabled students are investigated.

The course is given to two students recent years, both have done exergy analysis as part of their PhD-project.

The course is ended with an oral exam and discussion about the course, which is also included in the evaluation.

DESCRIPTION OF MEETINGS WITH STUDENTS Describe which meetings that has been arranged with students during the course and after its completion. (The outcomes of these meetings should be reported under 7, below.)

See above.

COURSE DESIGN Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

The intended learning outcome (ILO) is to insure that the students:

- have obtained knowledge and understanding regarding exergy as a concept
- have an understanding about how it can be applied for analyses of aspects within the building sector.
- be able to show how this can be applied making buildings developing in a sustainable way.

THE STUDENTS' WORKLOAD Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?

The students have to read a quite extensive written material and also show how this can be applied in the context of their own research work. This has responded to the work load of 7,5 högskolepoäng..

THE STUDENTS' RESULTS How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

All students have Passed so far.

STUDENTS' ANSWERS TO OPEN QUESTIONS What does students say in response to the open questions?

The students experience that the course open new perspectives to them and offer them new tools for the understanding also of their research work.

SUMMARY OF STUDENTS' OPINIONS Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.

Summary made in previous question. (The interview only had open questions).

OVERALL IMPRESSION Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.

The course is given when we have PhD-students with relevant needs, which happens sometimes every third year, or sometimes more often. The students have been happy to get this opportunity to learn about exergy analysis related to buildings.

ANALYSIS Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason for these be? Are there significant difference in experience between:- students identifying as female and male?- international and national students?- students with or without disabilities?

Too few students and too small course to make this detailed analysis.

PRIORITIZED COURSE DEVELOPMENT What aspects of the course should be developed primarily? How can these aspects be developed in short and long term?

It is always a good idea to rethink the course material and to identify the most recent developments within this area.

OTHER INFORMATIONIs there anything else you would like to add?

N/A.