

MODULE 8 “LIFE CYCLE ASSESSMENT AND LIFE CYCLE COSTING”

COURSE 1 “INTRODUCTION TO LCA BASED ON ISO 14040 SERIES” (3 ECTS)

Tyumen State University

Presenting the course

Main topics: The principles and structure of LCA. Goal and scope definition. Life cycle inventory. Life cycle impact assessment. Life cycle interpretation, reporting and critical analysis. Experience in practical application of LCA.

Learning outcomes:

After this course students:

- can recognize the importance of life cycle assessment for the implementation of the sustainable development concept;
- can demonstrate knowledge of definitions;
- can use regulatory documents in the field of life cycle assessment (LCA);
- can implement methodology of LCA in accordance with international standards ISO 14040, 14070 series;
- can understand the mechanisms of environmental impact categories in details;
- can calculate the level of environmental impact related to product or service;
- can identify key problems related to life cycle of product or service.

Results of the piloting

Details: Time frame: November, 2019 – December, 2019 (Platform Eliademy). Participants: students. Time frame: Since March, 2020 (Platform Stepik). Participants: students.

Feedback received:

The material that contains this course (a large number of examples). Creative tasks. The technical side needs improvement.

What was learned?

Implementation of problem-based learning in partnership with industrial enterprises. Creating learning videos. Modern pedagogical approaches to e-learning.



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