

ADVANCED LCA CONSEQUENTIAL AND IO-BASED LIFE CYCLE ASSESSMENT

ABOUT The course strengthens skills in life cycle inventory analysis. It targets the development of advanced competences in LCA by applying the problem based-learning (PBL) teaching model that focuses on learning by doing and reflection and applying hybrid (online + onsite sessions) and flipped classroom approach where materials (readings, videos) are provided to the students in advance and the time spent in classroom/video-meeting is used for Q&A, hands-on exercises, discussions. Activities include intensive group work, problem defining and solving applied to real-world cases, practical exercises, and discussion sessions. The course content is organized in three modules.

MODULE 1. CONSEQUENTIAL LCA Students will learn the fundamentals of Consequential LCA. Topics covered: Introduction to attributional and consequential models. Algorithms for performing consequential LCA in the definition of functional unit, consumption mix, and identification of determining and dependent coproducts. Communicating consequential models. The module includes exercises.

MODULE 2. STOCHASTIC LCA In this hands-on module students will learn how to use the software Brightway2 for stochastic and other LCA simulations. Topics covered: Computational structure of LCA. Computer simulation and statistical approaches for uncertainty and sensitivity analysis in LCA. LCA reproducibility and data sharing. The module includes exercises.

MODULE 3. INPUT OUTPUT LCA Students will learn the fundamentals of Input-Output modelling. Topics covered: supply-use tables, multi-regional models and trade linking. Integrating process LCA and IO-analysis via hybrid LCA, tiered and embedded. The module includes exercises.

PREREQUISITES The target audience is academics (PhDs, postdoc, other) or professionals who already have basic experience with LCA and intend to bring their LCA competences to an advanced level. Basic experience means for example having carried out LCAs before or having prior knowledge of LCA theory.

LECTURERS Prof. Jannick Schmidt, Prof. Massimo Pizzol, Assoc. Prof. Søren Løkke, Assist. Prof. Agneta Ghose

NOTE: it is mandatory to attend both online and onsite sessions.

AALBORG
UNIVERSITY

DATES IN 2024

Online sessions CET

9 April 10:00-12:00

11 April 10:00-12:00

16 April 10:00-12:00

18 April 10:00-12:00

23 April 10:00-12:00

25 April 10:00-12:00

Onsite sessions in Aalborg, Denmark

13-14-15 May

ATTENDEE / PRICE

PhD students @Danish University / Free
@ other affiliation / 4.500 DKK (600 EUR)

Academics (postdoc, professor, etc.) /
9.000 DKK (1200 EUR)

Professionals (consultancy, industry, etc.) /
18.000 DKK (2400 EUR)

*Prices do not cover meals or
accommodation*

APPLY via google form 

<https://forms.gle/ySAMUvbYNkYsCvMi9>

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