



# Full Syllabus



<b>Course Title</b>	
Industrial Ecology and Its Business Context	
<b>Lecturer</b>	
Dr. Meiron Zollmann	
<b>Semester</b>	
B, 2024-2025	
<b>Course requirements</b>	
Frontal / hybrid instruction in zoom, discussions, assignment (class presentation and written report) and final exam. The course will include 13 sessions of 2 academic hours each. Participation via zoom is only with pre-approval of the lecturer.	
<b>Final grade components</b>	
Attendance according to the university rules (80%) is compulsory. Grade components: final exam (50%), written report in couples (40%) and class presentation in couples (10%)	
<b>Course schedule</b>	
Class no. / Date	Subject
1	Introduction, class structure and requirements; intro to industrial ecology
2	History of industrial ecology and analogies between biological and industrial ecology
3	A brief history of business and the environment, Eco-efficiency, Life Cycle thinking and Introduction to Life Cycle Assessment (LCA)
4	LCA history and future, ISO14040 standard for conducting LCA, and LCA methodology: Goal and scope definition and Inventory and impact analysis
5	LCA allocation problems and LCA communication
6	Normalization of LCA results, LCA software and LCA alternatives
7	Guest lecturer
8	Materials Flow Analysis (MFA)
9	Design for the environment and Cradle to cradle
10	Industrial symbiosis
11	Use phase and sustainable consumption
12	Product End of life management and circular economy
13	Guest lecturer
*order of topics subject to change	
<b>Course book</b>	
Industrial Ecology and Sustainable Engineering, T.E Graedel and B.R. Allenby	