

## COURSE SYLLABUS

### Introduction to Life Cycle Assessment 3010155

#### COURSE DETAILS

**Campus:** Beer Sheva

Department: Chemical Engineering

Discipline: Process industry

Year of Study: Fourth

Prerequisites: .Environmental Engineering 3010341

Co-Requisites:

Language of English  
Instruction:

Work Placement(s):

Lecturer(s): Dorith Tavor  
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**Academic year:** 2023

Type of Course: Elective

Level of Course: Undergraduate

Semester: B

Credit: 3

ECTS Credit Points: 4.5

Mode of delivery: Digital, Project oriented.

Teaching Assistant(s):

#### AIM

To teach the students the fundamental principles of Life Cycle Assessment (LCA) methodology.

## LEARNING OUTCOMES

On successful completion of the course, the students will be able to:

1. Acknowledge the development over the years from preserving the environment to sustainability and LCA
2. Understand the concept of Life Cycle Thinking.
3. To know the environmental aspects of a life cycle.
4. Apply the principles of performing a life cycle assessment

## COURSE CONTENTS

Week	Subject	Relevant Reading
1	Life Cycle Assessment fundamentals	[1]-[3]
2	Life Cycle Assessment methodology	[1]-[3]
3	Working in groups	
4	Life Cycle Assessment methodology	[1]-[3]
5	Working in groups	
6	Working in groups	
7	Working in groups	
8	Quize/exam 17.5.23	
9	Working in groups	
10	Teams work	
11	Teams work	
12	Teams work	
13	Hackathon - 20-21/6/23	

## RECOMMENDED OR REQUIRED READING

Text book:

1. Curran, M. A., Life Cycle Assessment Handbook: A Guide for Environmentally Sustainable Products , John Wiley & Sons, Inc., 2012.
2. Hauschild, M. Z., Huijbregts, M. A. J., Life Cycle Impact Assessment, Springer, 2015
3. Guinee J, B., (ed.), Handbook on Life Cycle Assessment Operational Guide to the ISO Standards, Springer, 2002.

## PLANNED LEARNING ACTIVITIES AND TEACHING METHODS

Lecture hours: 3. Number of face-to-face sessions: 1-3.

There will be 2 or 3 joint lectures face to face or online. All exercises and project will be done in groups in English .

## ASSESSMENT METHODS AND CRITERIA

Criterion	Percentage	Comments
Quizzes:	25%	17/5/23
Assignments:	25%	Task #1 #2 #3
Project:	30%	Submission on 29/6/23
Hackathon:	20%	20-21/6/23