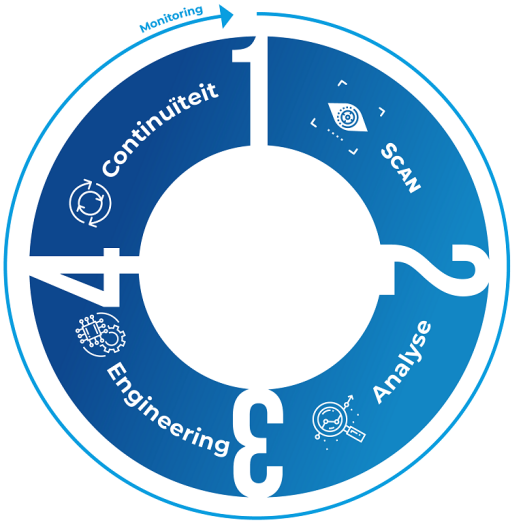
TRAINING BROCHURE

Design for sustainability training



BLUE ENGINEERING

Provisional reservation

Book now

high tech institute

systems & software academy

Design for sustainability

Price: € 1,220 excl. VAT *

Duration: 2 days in 2 weeks

Contact: training@hightechinstitute.nl, +31 85 401 3600

Intro

How to become a sustainable engineer? How to make a difference while sitting behind your desk and do more than just recycle your coffee cup? Learn from our experienced lecturers: what works and what doesn't?

Objective

After attending this training, you will have:

- An overview of sustainable developments and thought leadership. From 'Limits to growth' to Cradle to Cradle and 'An inconvenient truth';
- An overview of renewable energy sources and techniques;
- The basics of Life Cycle Analysis (LCA). You will learn how to apply the knowledge quickly and effectively within your project;
- Sustainable selection of materials. You will learn how to quickly and effectively make choices for sustainable materials and surface treatments.

You will receive:

- An introduction to sustainable developments by Jeroen Rondeel;
- Useful LCA tools (for example Idemat application);
- Useful tools for selection of materials (for example a copy of Alwood J. Cullen "Sustainable Materials").

Intended for

Engineers who are involved in the technical design of a process or a product and wants to do this in a sustainable manner.

Methods

Lectures combined with hands-on (group) assignments.

Certification

Participants will receive a High Tech Institute certificate for attending this training.

Course leader

Jeroen Rondeel BSc

Trainers

Jeroen Rondeel BSc
Koen Goorman MSc
Bram Gottgens MSc

** Prices are subject to change. Price correction will be applied at the end of the year.*

Keep me posted

Program

Day 1:

On the first day we focus on the theoretical part of the course. We dive into different sustainable developements from C2C and the Donut Economy to Blue Economy and Biomimicry 3.8. What can we learn from these theories? And what tools for sustainability do they provide? You'll get a great overview of the different views on sustainability.

After that we dive into the world of renewable energy. We look at different energy sources and techniques. For example solar, wind and biomass. How these techniques work and how to compare them. You will learn the trias energetica principle, and get familiar with the concepts LCoE (Levelized cost of energy) and ERoEI (Energy return on energy invested).

Day 2:

On the second day we get more practical. We start by performing a Life Cycle Analysis (LCA). We show you what components are important, how you can execute the LCA and what lessons you can learn from it. We end up with a measurement of the environmental footprint of a product or a process.

The next step in design for sustainability is transfering your insights regarding the environmental footprint into a new design, a different process or by selecting different materials. We show you various tools to calculate the optimal choice of material. You will perform this calculation yourself during the course. We use tools like: Ashby charts and the ABC-X method in a number of practical assignments.

Read the interview: