

# ELECTIVE COURSE DURABILITY IN PROFESSION PART D

# COLOPHON

Publisher: Edu'Actief b.v.  
+31 522 235 235  
info@edu-actief.nl  
www.edu-actief.nl

Author(s): Klasien van der Werf, Cornelia de Ruiter

Title: Elective Course Durability in profession part D

ISBN number: 978 90 3724 487 8

Translation: Van de Groep Vertalingen

© Edu'Actief b.v. 2018

Save the exceptions in or by force of the Copyright Act, it is strictly prohibited to copy, record into an automated database, or make public, by whatever means or under whatever form, being it electronically, mechanically, by way of photocopying, recording or any other procedure, any part of this publication, without prior written authorisation to do so by the publisher.

Even though making reprographic multiplication is permitted under Article 16h Copyright Law, any compensation legally due should be paid to the Stichting (foundation) Reprorecht ([www.reprorecht.nl](http://www.reprorecht.nl)). Those wishing to incorporate parts of this publication in compilations, pursuant to article 16 of the Copyright Act, should contact the Stichting (foundation) PRO ([www.stichting-pro.nl](http://www.stichting-pro.nl)).

The publisher has endeavoured to fulfil all legal requirements related to copyright. Anyone who, despite this, is of the opinion that other copyright regulations could be applicable should contact the publisher.

By using this publication you declare to have taken knowledge from and to agree with the specific Product Conditions and the general conditions of Edu'Actief, which can be found at [www.edu-actief.nl](http://www.edu-actief.nl).

# TABLE OF CONTENTS

How to work with an elective course?	4
1. About this elective course	7
2. Your own sustainability	12
3. Sustainability in companies	23
4. Sustainability in your profession	34
Theory sources	52
5. Companies and waste production	53
6. Soil, air and water	56
7. Brainstorming	58
8. Cradle-to-cradle	63
9. The three P's	64
10. The three P's and sustainable entrepreneurship	68
11. Sustainability	70
12. Sustainability issues and sustainability topics	72
13. Renewable energy	75
14. Sustainable logistics	76
15. Elevator pitch	77
16. Interviewing	80
17. Preparing an interview	83
18. Costs, benefits and risks	88
19. Materials and waste	93
20. Plastic dump in the ocean	97
21. Four principles of sustainability	100
22. Five ingredients for a great idea	102
23. Examples of sustainable initiatives	104

# HOW TO WORK WITH AN ELECTIVE COURSE?

Every education contains several elective courses. These courses are meant to prepare you for the labour market and to improve your chances at a HBO education. Your school determine what you can choose from and when you can follow an elective course. The time you spend on an elective course varies: 240, 480 or 720 of study hours. This information can be found in the introduction *About this elective course* at the start of every elective course.

Your school determines where and when you work on an elective course. This might be at school, at your internship company or at home. Most of the time, it will be a mix of these three locations.

## *Introduction*

An elective course Edu'Actief starts with an introduction. Apart from a short introductive text, this might be a video about someone working in the professional sector the elective course focuses on. Subsequently, you will find a list of the different parts and learning units the elective course consists of.

## *Challenge*

Then, you will find a description of the challenge you are going to work on. Every elective course gradually builds up to a final assignment: your challenge. For this, you will use everything you have learned from the elective course. This might be the organisation of a wine tasting with matching appetizers, a complete business plan for a start-up or a care file about the treatment you offered a client and the results of this. Step by step, you work towards your final assignment. Every step you take will bring you to at least one professional product per leaning unit, meaning: a document, a (video) report of a conversation or a physical product, as the ones you make in professional practice. This might be a wine list or the financial chapter of a business plan.

## *Results*

Subsequently, you will find the description of the goals you are going to work on: a list of the results at the end of the elective course.

## *Assessment*

You will work on your assignments individually as well as together with your fellow students. The assessment of your work will be done in different ways and at different times. Your teacher will decide how and when the assessment is done. You might have to make several tests for the final review, but the professional products you hand in for every elective course will be part of the final review as

well. Of course, your final assignment will be assessed too. This is explained in the introductions of every elective course and every learning unit. Your teacher will determine the weight of each assignment.

### *Orientation assignments*

Before you start with the first learning unit of an elective course, you will make several assignments, so you can orientate on the information. This way, you can prepare yourself, which is a very important part of every learning process.

### *Sources and references*

In this elective course, you find references to sources. You can recognize these by the icon. It can be a theory source, a link to a website or a video. The icons look as follows:



Website



Theory source



Video

The theory sources can be found in alphabetical order after the assignments. You can use the table of content to quickly find the sources you need.

---

#### NOTE!

Sources are indicated in different ways:

1. source **before** an assignment  
In this case, the theory source applies to the assignments that follow.
  2. source **in** an assignment.  
In this case, the theory source only applies to one specific assignment.  
If there is no indication of a source **in** the assignment, but if you do not specific information, you can find this information in one of the earlier mentioned sources in this learning unit.
- 

The websites and the videos can be found on 24boost, the learning platform where you can find the digital version of this elective course. The elective course is divided into learning units. The title of each learning unit can be found on top of the page in your book. Find the right assignment number and/or the source you need on 24boost.

To get access to 24boost, you first need to create an account and activate your license.

### *Log in*

You find a license code in front of the book. With this code, you are able to watch videos and to look at the role plays, forms, weblinks and sources you need.

### *Description log in process*

If you want to log in for the first time, you need to activate your license. The license can be found in the front of the book.

### *How to activate the license?*

Open your browser and navigate to [www.edu-actief.nl/licentie](http://www.edu-actief.nl/licentie)

Here, you find a video concerning the activation of your license. Watch this video.

Follow the steps to activate your license.

You can log in by entering your username and password. Now, you can log in.

# 1. ABOUT THIS ELECTIVE COURSE

## INTRODUCTION

It is difficult for our planet:

- The planet might run out of natural resources.
- Too many people have too little to eat.
- Too many people are unemployed or make too little money to live a good life.
- Plants and animals – as well as people – are poisoned by (the waste of) products made by man.

These are all things you can worry about. What does the future of our planet look like? What does our future look like? And how about the future of our children? What can we do and how can we behave in such a way that we do not endanger ourselves as well as the future of our planet? That is what sustainability is all about. Luckily, more and more people, companies and governments are aware of the danger. They adjust their behaviour, create sustainable ideas or try to change the behaviour of their citizens.



How do you work with an elective course?

Watch the video GEEF café. In the video GEEF café, you can see how two entrepreneurs started a sustainable initiative. In the GEEF café, the customer decides what he or she wants to pay. This is one of the sustainable initiatives in Rotterdam where good food and social connections and social entrepreneurship are combined.



Video GEEF café

### The challenge

The Geef café is an example of a sustainable initiative. For this elective course, you will create a sustainable idea too. You will do this for the sector you are educated for or you want to work in. This might be one of the following:

- An innovative solution for a sustainable problem;
- A sustainable improvement at your work place;
- An environment-saving solution;
- A sustainable product;
- A new service;
- An improvement of an existing product or service;
- A new way of working.

Your sustainable idea will contribute to the (future) life on earth.

In this elective course, you will learn more about sustainability. You will investigate what sustainable working and living means in your life and you will investigate how this works in your work and the professional sector you work in. The challenge of this elective course is thinking of a sustainable solution or a sustainable idea. You will make a good proposal for the sector within your education domain. Who are you going to convince with your idea? You will do this by means of a pitch and a final presentation.

---

Results of the elective course:

- You know the meaning of sustainability.
  - You know the goal and the method of a sustainable method.
  - You know the sustainability themes in your own living and working environment.
  - You know the four principles of sustainability and you know everything about the balance between the "three P's."
  - You have knowledge of the following topics:
    - Biodiversity;
    - Climate change;
    - Circular economy;
    - Bio based economy;
    - Renewable energy;
    - Mobility and logistics;
    - Dealing with raw materials and other materials;
    - Evacuation of waste;
    - Re-use;
    - Water, air and soil.
  - You are able to explain which sustainability themes play a role in your living and working environment.
  - You can recognize themes with regard to sustainability in your own behaviour and you can analyse your own strengths and weaknesses.
  - You can research the consequences of your behaviour in the future and you can draw conclusions about improvement possibilities.
  - You are able to explain how you want/can contribute to sustainability.
  - You are able to research and describe whether the (internship) company you work could be more sustainable.
  - You can recognize chances or create chances with regard to sustainable innovation.
  - You are able to think of new products, using sustainability as your point of view.
  - You are able to map chances and risks.
  - You are able to compare costs and benefits of a sustainability change.
  - You know how to report in a structured way.
  - You know you to give a convincing presentation.
- 

### **Assessment**

There is only moment of testing your knowledge.

Your teacher assesses the professional products you hand in. In case of assignment 9c, someone from your (internship) company might play a role in the assessment and in case of assignment 13, a possible investor might play a role.

The final assessment is added as an appendix to your certificate. You can use this for your resume.



**NOTE!**

- All theory sources (text, websites and video's) are important when your knowledge is tested.
  - The professional products are approved if they meet the requirements.
- Good luck and have fun!

## 1.1 ORIENTATION

Before you start with this elective course about sustainability, it is important to orientate on sustainability. Make sure you know what the key terms mean. It is important that you really finish these assignments with care.

### ASSIGNMENT 1: WHAT IS SUSTAINABILITY?



#### Duurzaamheid Clip

Watch the movie about sustainability and answer the following questions.

- Explain, in your own words, what you think about when you talk about sustainability.
- In the movie, four threats are mentioned. What is threatening the earth?
  - Air pollution because of emissions (CO<sub>2</sub> emission);
  - Waste of drinking water;
  - Exhaustion of materials and raw materials;
  - Waste and harmful substances ending up in the environment.
- Can you mention more sustainability issues? Which ones?
- Which four things could you pay more attention to in order to live a more sustainable live? Give an example.

### ASSIGNMENT 2: TERMS

Sustainable, eco-friendly, organic and ecological. These terms are used a lot and nowadays, you find them everywhere on packagings of products. Do you know what these words mean?

- Give the meaning of the following terms in the table.

Term	Meaning
Environment	

Eco-friendly	
Biology	
Organic	
Ecology	
Ecological	
Sustainable	

The word 'sustainable' means nothing more than a long lifespan. Still, the term 'sustainable' is used in other words and in other contexts and this way, it gets another meaning. For the following sustainability combinations, explain what you think this means.

- b. Sustainable with regard to the environment
- c. Sustainable with regard to a product
- d. Sustainable with regard to development

### ASSIGNMENT 3: THE BIGGEST WIND PARK OF THE NETHERLANDS



Video Het grootste windmolenpark van Nederland  
Website WANT

Gemini, the wind park at the sea, is the biggest wind park in the Netherlands. Gemini belongs to one of the biggest sustainable energy objectives in the Netherlands.

Watch the movie The biggest wind park in the Netherlands.

- a. How many windmills were placed in the sea? Where are they?
- b. How many households use the sustainable energy provided by the Gemini windmills?
- c. Why did we choose to place these windmills in the sea?
- d. Why did the Netherlands choose to place these windmills?
- e. Why is a wind park such as Gemini a sustainable idea?
- f. Do you know more examples of clean energy? Which one(s)?

- g. There are more wind parks to come in the Netherlands. Not everybody agrees. What would you think if a windmill would be placed in your backyard? Would you be against it or not? Explain your answer.

## 2. YOUR OWN SUSTAINABILITY

### INTRODUCTION

If we want future generations to live on our planet, we will have to live a more sustainable life. We can make sure that:

- People in less prosperous countries live better lives
- Animals and plants live better lives
- Our children will live good lives at this planet.

How can we achieve this? By living a sustainable life. We can be more sustainable in many ways. Are you living a sustainable life? Maybe you do more than you think. In this learning unit, you investigate how sustainable you are and you think of more ways to improve sustainability. The theory sources and the assignments within these learning units will guide you through.



*'Sustainable world'*

---

The results of this learning unit:

- You know about the four principles of sustainability and you recognize these principles in your own living environment and work.
  - You are able to process collected data in an interactive map
  - To are able to make an interactive image.
  - You can recognize and mention sustainability themes and issues in your own living and working environment.
  - You can name examples of sustainable actions.
  - You can make a vlog.
  - You can analyse your own behaviour with regard to sustainability.
  - You are able to research the consequences of your own behaviour for the future and you are able to draw conclusions with regard to improvement possibilities.
  - You can present your own motivation with regard to sustainability.
- 

### Assessment

In this learning unit, you take a look at your own behaviour with regard to sustainability. You can do this by making assignments about your own life. What exactly is sustainability? Are you sustainable? Are you more sustainable than you think? You will analyze your strong and weak points with regard to sustainability and you will think of improvement possibilities and the way you can implement these improvements. You will present your findings and results to your fellow students.

#### Professional products you need to hand in:

- Interactive map of the Maas;
- Pixton comic Schone Maas;
- Ilinocollage sustainable solutions;
- Analysis of strengths and weaknesses own behaviour;
- Interactive image four principles of sustainability;
- Vlog four principles of sustainability;
- Newsletter sustainability;
- Infographic sustainable lifestyle;
- Evaluation report own sustainability;
- Presentation of improvement possibilities.

Approval of the professional products you handed in means a 'go' for the next step: Sustainability in the profession.

## 2.1 YOUR OWN SUSTAINABILITY



Theory source Sustainability

## ASSIGNMENT 1: SUSTAINABLE PROJECT 'SCHONE MAAS LIMBURG'



Theory source Soil, air and water



Theory source Plastic waste in the ocean



Video Schone Maas Limburg



Website Project Schone Maas

To know more about sustainability, you will first read about a sustainable project: Project Schone Maas Limburg. During this project, litter found close to the Maas is cleaned up by volunteers.

Watch the movie Project Schone Maas.

- a. Where does this so-called plastic soup come from?
- b. What kind of waste can you find here?
- c. What kind of pollution is this? Explain why.
- d. Why is this kind of pollution harmful for both people and animals? Mention a few examples.

## ASSIGNMENT 2: INTERACTIVE MAP CLEAN MAAS



Website Google Fusion Tables

Manual Google Fusion Tables

Website Project Schone Maas

With Google Fusion Tables, you can show all kinds of data on a world map. How does Google Fusion Tables exactly work? Google Fusion is a tool of Google to collect datasets and to analyze, visualize and share these. You are going to do this yourself for the Schone Maas project.

Make an interactive map of the Maas with Google Fusion Tables. In this map, you indicate where cleaning actions take place. You can find this information on the website of the Schone Maas project, as well as through other sources. Use this information in your interactive card.

## ASSIGNMENT 3: SCHONE MAAS IN COMICS



Theory source Principles of sustainability



### Website Project Schone Maas

Nowadays, sustainability is a keyword and every individual, company and organisation wants to do something to contribute to more sustainability. Everybody has an opinion on it, which is helpful. On the other hand: you need to be careful that sustainability does not become an umbrella term. To define a sustainable initiative in a better way, you can compare it to the four principles of sustainability. This is what you are going to do for the Schone Maas project. Subsequently, you are writing a story for a comic book about the project.

- a. Study the four principles of sustainability from the theory source. Explain to which principle of sustainability the problem of the Schone Maas belongs and explain why.



### Website Pixton Manual working with Pixton

- b. Make a comic about the Schone Maas project with Pixton. Include the following in your comic:
  - The goal;
  - One or more methods used in the project.

## ASSIGNMENT 4: ECOLOGICAL FOOTPRINT; HOW BIG IS YOUR PIECE OF THE EARTH?



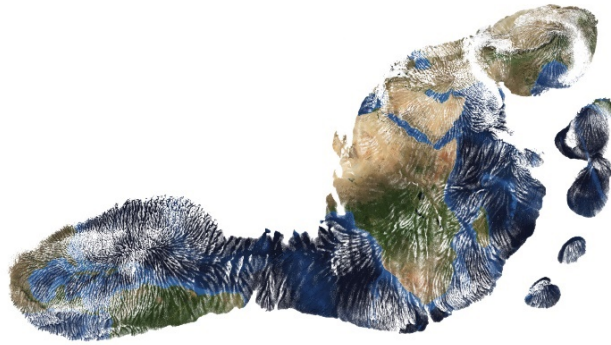
### Video Ecologische voetafdruk

Everybody needs a piece of the earth to live.

For instance, we need this piece to:

- Grow food;
- Heat your home;
- Have your waste processed;
- Produce clothes;
- Travel to work.

The average Dutchman needs twelve football fields to live. That is a lot. You call this the ecological footprint.



### *'Ecological footprint'*

- a. Watch the movie about the ecological footprint. What does the ecological footprint mean?  
The ecological footprint is expressed in GHA (global hectare). When you calculate the ecological footprint of a product, we check the amount of agricultural ground, grassland, forest, land built on and water surface needed for the production as well as the CO<sub>2</sub> emission. On average, man has an ecological footprint of 2.6 hectare each year, which is more than the 1,7 GHA the world has to offer. We use more fertile soil than the earth has to offer. If we do not change that, we will deplete the earth.
- b. Name as many factors as possible that have an influence on the size of your ecological footprint.
- c. Why should we eat more local products, such as meat from a local farmer?

Now, you are going to calculate your own ecological footprint. You will do this by making a test on the website of the WWF.

- d. Calculate your ecological footprint by making the test 'Voetafdruk'.



### Test Footprint

- e. What was the outcome of your test? How many planets do we need if everybody would live just like you do?
- f. Is this more or less than the average? Why is this the case?
- g. What could we do, all together, to reduce the ecological footprint?