

Economics and Policies in a Biobased Economy

Course Syllabus

<https://www.edx.org/course/economics-and-policies-in-a-biobased-economy>

Topic

In this course you will discover the whole value chain from Research & Development, over application, processing, retailing and final demand. Learn how the value chain and the rents and their distribution along the chain are affected by policies. Know how to measure adoption and environmental benefits, learn about the benefits and costs and the distribution of sustainable products, market power, approval processes, supply chain, guiding policies and the current social debate.

Learning Outcomes

After successful completion of this course, you will be able to:

- explain the economic issues and policies affecting the biobased economy at the EU and international level;
- identify the important factors driving the development of the circular bioeconomy;
- assess the development of the circular bioeconomy from an economic perspective.

Level & Prerequisites

The level of the course is advanced. To optimally learn in and complete the MicroMasters Program we expect you to have a bachelor degree in social sciences (preferably business or economics).

Time Commitment

The total effort for this course is estimated at about 80 hours for an average learner. So, if you have 20 hours per week to spend, it will take you about 4 weeks. However, since the course is run in a self-paced mode, you can progress through the modules at your own speed.

MicroMasters® Programme Credential

Economics and Policies in a Biobased Economy is one of the courses of our MicroMasters programme Business and Economics for a Circular Economy. The programme consists of three courses and a capstone. If you successfully complete all of these with a Verified Certificate, you earn the MicroMasters Credential. With this credential you may apply to the Master of Science programme Biobased Sciences at Wageningen University & Research (120 ECTS, 2 year full time on campus programme). If you are admitted and would like to be exempted from courses in the MSc programme, you can send a waiver request for equivalent campus courses (up to 18 credits). Details about the admission requirements of the on-campus master: www.wur.eu/mbs.

Course Structure

Module 1: The Circular Bioeconomy and Policies

In this module, you will be introduced to the economic importance of the circular bioeconomy and learn how to recognize the important driving factors.

Module 2: From Precautionary Approach to CBA

How can we measure these driving factors? Let's learn about cost-benefit analysis (CBA), the precautionary approach, and the irreversibility effect.

Module 3: Macro Modelling

In module 3, you will learn about the key elements of an integrated assessment framework so that you can visualize the impact of a circular bioeconomy on policy aims. We will focus on macroeconomic modelling tools applied to biobased chemicals.

Module 4: Biofuel's Economics and Policies

To conclude the course, we will look at the economic and policy theories in the specific case of biofuels: what are the key differences of a biofuel mandates and price links? Also, you will be asked to integrate the theory seen in this and in the previous modules by applying it to your own case about bioplastics.

Course Calendar

EVENT	DATE	TIME*
Opening course (all modules)	3 December 2019	0:00 UTC
Due date submitting final assignment (Module 4)	19 March 2020	23:00 UTC
Due date peer-reviewing final assignment (Module 4)	2 April 2020	23:00 UTC
Due date module exams		
Closing course		

* Please be aware that these are UTC times; check what time this is for your time zone.

The course is run in a self-paced mode, allowing learners to progress through the modules at their own speed. The course remains open for 17 weeks, giving all learners enough time to complete it. Please note that only verified learners have access to the course for the entire duration of the course (and to the archived version after the closing date). Audit learners have 4 weeks access to the course.

Grading Policy

For those of you who are taking the course to obtain a Verified Certificate, a minimum grade of 60% is required. The module exams and final assignment in Module 4 contribute to your overall grade as follows:

MODULE	EXAMINATION TYPE	WEIGHT EXAMINATION
Module 1	Module Exam	20%
Module 2	Module Exam	20%
Module 3	Module Exam	20%
Module 4	Module Exam	10%
Module 4	Final Assignment	30%

Academic Policy

We expect each student to complete the module exams and the final assignment on their own, not in collaboration with other students.

Discussion Forum Participation

As a learner of this course you are part of a diverse learning community that is at the heart of a meaningful learning experience. The discussion forum is an essential part of this online course. In many assignments you are asked to discuss your findings on the forum with other learners. Moderators and/or instructors are participating in the forum to help facilitate an effective dialogue and support the discussion forum guidelines. If you are new to our online courses, please take a moment to read the [Discussion Guidelines](#).

What's the difference between audit and verified?

The course offers two possibilities: an audit track and a verified learner track. The audit track comprises most of the course but also lacks important information, particular on the assignments where you handle the life cycle assessment results and the written advice to the municipality and receiving staff feedback on your final assignments All graded assignments are only available to learners in the verified track. The verified track provides the complete course and the full experience. Below you see the differences, per module for audit and verified learners.

Topic / activity	Module	Available in audit track (free)	Available in verified track (paid)
The Circular Bioeconomy and Policies	1	✓	✓
From Precautionary Approach to CBA	2	✓	✓
Macro Modelling	3	✓	✓
Biofuel's Economics and Policies	4	✓	✓
Module Exam (graded)	1 to 4	✗	✓
Final Part Ongoing Assignment (graded)	4	✗	✓
Certificate (if you receive a passing grade)	N/A	✗	✓

If you are looking for some basics about economics and policies, we welcome you in the audit track. However we encourage everyone who want to use this course for a career enhancement and who's looking for more in-depth knowledge about the bioeconomy from an economics and policies perspective, to upgrade to the verified track to get access to all course materials.