



BIO-ERKO – Bioeconomy Specialisation Education

**Best practices & success cases to support
development of education models**

BIObec partners have identified innovative bioeconomy education models/pedagogies and/or best practice examples from industry/education that can inform and enhance the future Bio-Based Education Centres (BBECs) educational design and framework for delivery. These case studies draw on best practice examples from both bioeconomy education providers and outside organisations related to other sectors and industries.



PROJECT PARTNERS



UNIVERSITY OF HOHENHEIM



UNIVERSITY OF EASTERN FINLAND



MTU

Ollscoil Teicneolaíochta na Mumhan
Munster Technological University

CTA



Consiglio Nazionale delle Ricerche



Food & Bio Cluster
Denmark

AgroParisTech
Talents for a sustainable planet

UAB
Universitat Autònoma de Barcelona

Pro Civis
Fundacja Edukacji i Dialogu Społecznego



Sustainable INNOVATIONS



IHE DELFT

WAGENINGEN
UNIVERSITY & RESEARCH



IFA



IBE



INSTYTUT
BADAŃ
EDUKACYJNYCH



ZVT

Agricultural Research,
Ltd. Troubsko

BIOBEC - Best practices & success cases

BIObec partners have gathered a series of best practice examples representing regional, national, European and International case studies and collaborations. These case studies include many examples from the bioeconomy sector, however, several case studies from other sectors have also enriched the depth and breadth of best practice including examples detailing thematics that focus on: AR/VR technology integration in education; mentoring programmes for AI graduates and best practice in networking the hydroenvironment.

Each case study has been classified under 11 thematic areas:

- 1 Pedagogies
- 2 University engagement and collaboration with industry
- 3 Lifelong learning and continuous personal development
- 4 Clusters/networks /partnerships
- 5 Research & Development supports
- 6 Funding & Investment networks
- 7 Enterprise Development supports
- 8 Mentoring Programmes (academic or industry)
- 9 Digital technologies and integrations
- 10 Diversity and inclusion practises
- 11 Engagement with civic society

Understanding BIO-ERKO



The project aims to develop a new work-based learning and teaching model to develop international bioeconomy competence in Eastern Finland by working life oriented continuous learning.

It is organised jointly by the University of Eastern Finland, Karelia University of Applied Sciences, and Savonia University of Applied Sciences.

The studies are completed within 18 months, which are carried out as multiform teaching, consisting mainly of online studies, but also including contact days. Teaching and learning are based on company-specific development tasks.

The education is organised with special funding from the Ministry of Education and Culture. The development of Bioeconomy specialisation studies – innovation and expertise provided jointly by universities and companies for the growth and structural change sector in Eastern Finland and developing international bioeconomy competence in Eastern Finland by working life oriented continuous learning were funded by the European Social Fund.

Main characteristics of this education model

- personal study and development plan including mentoring from university (academic mentor) through studies
- compulsory courses which introduce the bioeconomy (concept, needs, change in society, views to future)
- company and/or student specific development project including mentoring from university (academic mentor and experts/researchers), working life mentor and peers (student from same class)
- bioeconomy process courses which give students the possibility to deepen his/her knowledge on certain topics (forests, biorefining, energy, circular economy etc.). There is possibility also to select courses from organising universities



Who can join the programme?



- People who work, or will be working, in the field of bioeconomy in companies, consultation or promotion tasks, or as vocational teachers, or who operate in the public sector to promote bioeconomy.
- Entrepreneurs or individuals who aim to become entrepreneurs in the field of, for example, bio-based production and raw material procurement for bioproducts.

The applicants must have a suitable university degree or other degree suitable for the field of bioeconomy.

What differentiates this programme from others?

The specialisation education brings a new form of training offered by the universities in cooperation with industries, designed to complement previous degrees for people working in certain professions so that they would have stronger expertise in their current jobs. In addition:



Bioeconomy specialisation education allows university teachers/researchers and experts from other organisations to get familiar and learn from each other.



Students see the provided education valuable for their professional development, new networks, development project – connects studying and work, multidisciplinary view to bioeconomy, company visits and presentations are valued, getting to know universities (education, RDI, professionals), motivates to learn more, tools for communication in bioeconomy.



The model has a contribution in upgrading the skills for people that have already graduated and worked in a bioeconomy related field and it contributes to developing new skills for people that want to be active in this field.



This education is a way to enhance cooperation between universities and companies.

MORE INFORMATION

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