MÉFOBIO

Educational Guidelines in the Grand Est Region: Preparing for Future Agriculture through an Industrial Biotechnologies Lens

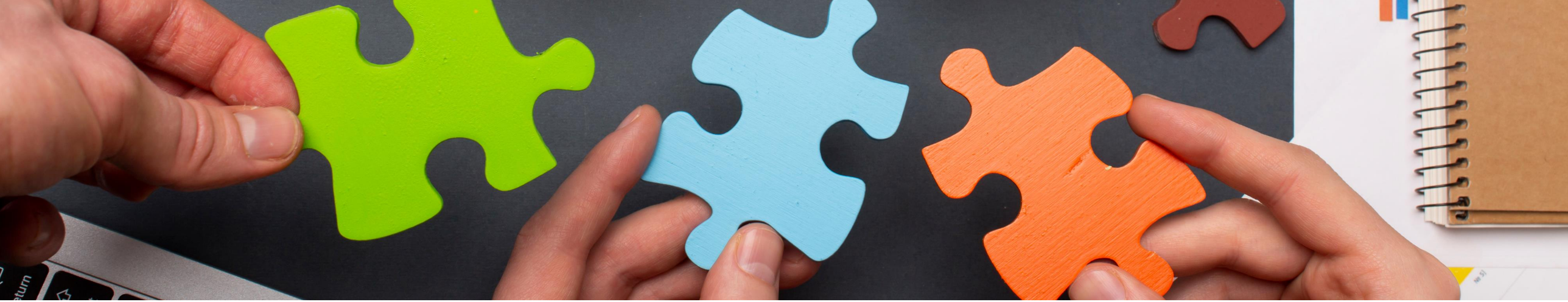
CAMPUS DES MÉTIERS ET DES QUALIFICATIONS D'EXCELLENCE
Bioeco Academy Grand Est

UNIVERSITÉ DE REIMS CHAMPAGNE-ARDENNE

GOUVERNEMENT
Liberté
Égalité
Fraternité

BANQUE des TERRITOIRES | Caisse des Dépôts Groupe

FRANCE 2030



Objective

Méfobio allowed to identify the **knowledge and skills needed** to meet strategic challenges in **industrial biotechnologies required for the biobased products production** in the Grand Est region.

Key areas of focus

01

Biological production processes

02

Sustainable agricultural practices

03

Innovation and regulation compliance

Skills identified for the biobased products production

TECHNICAL SKILLS

Developing students' expertise in key scientific areas critical to modern agriculture

- Biological production
- Biochemistry and microbiology

PROJECT MANAGEMENT SKILLS

Coordination across departments and adaptability in changing environments

- Inter-departmental coordination
- Team management
- Adaptability

CROSS-CUTTING SKILLS

Interdisciplinary Learning

- Knowledge of regulations
- Innovation capacity

Preparing Graduates for the Bioeconomy

Sustainability and Bioeconomy Integration:

- ✓ Valorization of byproducts from agricultural processes (e.g., bioethanol byproducts for biosurfactant production)
- ✓ Focus on reducing waste and enhancing agricultural efficiency

Strategic Outcomes:

- ✓ Graduates prepared to innovate in sustainable agricultural practices
- ✓ Equipped with both technical expertise and cross-disciplinary skills

Keep Connected with Us

CAMPUS
DES MÉTIERS
ET DES
QUALIFICATIONS
D'EXCELLENCE

Bioeco Academy
Grand Est

GISELL BURGOS PAT
International Project Manager
gisell.burgos-pat@univ-reims.fr

agreenium

BIOECO++:

A review of higher education programs on the scope of bioeconomy that helps precising skills for the future of agriculture

AgroParisTech · Bordeaux Sciences Agro · cirad · INP ENSAIA Enstib Épinal · Université de Lorraine · Toulouse INP Ensat L'AgroToulouse · ENSFEA · envt école nationale vétérinaire toulouse · INRAE · L'Institut agro · Oniris · VetAgro Sup

agreenium

Key findings :

- About 100 training programs in bioeconomy for Agreenium members and 1000+ training programs in France
- **Main topics related to the future of agriculture:**

Sustainable agriculture and forestry	**Organic raw material management**
Ecosystemic services	**Bioprocess engineering**
Climate change mitigation	**Biogaz and methanization**
Sustainable procurement for food & other industries	**Green chemistry**
Biotechnologies	**Bio data and AI**

Major issue:

- Connection between agriculture activities/ industrial challenges for transitions / territories issues

Skills in Bioeco++ Study : exploration of cross-disciplinary skills for the development of bioeconomy

Key findings :

60 cross-disciplinary skills

5 major kind of cross-disciplinary skills:

- Group and collaborative work
- Systemic approach and interdisciplinarity
- Transformation processing and management
- Foresight and environmental analysis
- Human – nature relationship

Assesment

- **How the bioeconomy training programs of the members of the Agreenium alliance cover these cross-disciplinary skills:** 90% of the cross disciplinary skills are taught, but with high variations among programs

Test with some heads of HRD:

- a great interest for cross-disciplinary skills considered as rather key skills for the future
- A certain difficulty to recognise / value these skills in job offers and careers

agreenium

THANK YOU FOR YOUR ATTENTION

More information

https://www.agreenium.fr/domaines/focus/bioeconomie

Contact:

cecile.ernst@agreenium.fr