

CALL FOR STUDENTS - Terms and conditions

PackAlliance - European alliance for innovation training & collaboration towards future packaging

1. Object

PackAlliance (<https://packall.eu>) brings together a strong and balanced consortium of 8 partners from 4 EU countries (Spain, Poland, Finland and Italy), representatives of both the academic and business sector:

- 4 high-profile HEIs, that are actively involved in the R&I activities aimed at applying circular economy approaches to the plastic packaging sector;
- 4 industry partners including large companies and a business cluster working within the plastic packaging area.

HIGHER EDUCATION INSTITUTIONS	
Campus Iberus (Spain)	https://campusiberus.es
AGH University of Science and Technology (Poland)	https://www.agh.edu.pl/en/
TAMK Tampere University of Applied Sciences (Finland)	https://www.tuni.fi/en/about-us/tamk
UNISA - Università degli Studi di Salerno (Italy)	https://web.unisa.it/en/home
BUSINESS SECTOR	
Ecoembes (Spain)	https://www.ecoembes.com/en/home
Synthos Group (Poland)	https://www.synthosgroup.com/en/synthos-group/
Pyroll Group (Finland)	https://www.pyroll.com/en/pyroll/
Consorzio per la promozione della cultura plastica - Proplast (Italy)	http://www.proplast.it/

One of the major goals of PackAlliance is to provide market-oriented high education & training for students and professionals in the area of sustainable packaging.

Through this call, up to 80 students will have the opportunity to participate in the first edition of this training programme and obtain a certificate of **Specialist in the circular economy of plastic packaging** signed by the 4 higher education institutions of the consortium.

2. Course summary sheet

Title	Specialist in the circular economy of plastic packaging
ECTS load	30 ECTS
Delivery language	English
Delivery methods	Blended learning with the possibility of international mobility or Online with priority for professionals with a current contract
Start and end dates	From 1st October till 20th May
EQF level	5

Content

The training programme consists of two parts:

1- An entirely online part dedicated to the four thematic areas:

- New materials and bio-based materials
- Eco-design and novel manufacturing processing
- Residue management and valorisation
- Citizen and consumer engagement

2- A two-month practical part using a novel challenge-based training methodology called CHAINS (CHALLENGE INNOVATION TEAMS)

Module 1 New materials and biomaterials

The module on new materials and bio-based materials will review the issues related to the knowledge of the possibilities of using innovative materials, including biomaterials in the plastic packaging industry in the context of the development of the circular economy. The module is divided into two parts.

The first part is focussed on importance of the latest knowledge in the field of material innovation in solving cognitive and practical problems in the area of circular economy,

You will learn:

- Characteristics of the principles of the circular economy, bioeconomy in the context of development of new materials and bio-based materials: main strategies in selected countries, regions and enterprises, analysis of determinants for development of the packaging, analysis of the legal act and industrial trends, tools for economic assessment
- Characteristics of new materials and biomaterials, and their types and use: bio-based, biodegradable, compostable, materials;
- The production methods and raw materials of “new” and “bio” materials
- Rules of certification and labelling of biomaterials

- Evaluate the effects recyclable of the use of biomaterials in the circular economy

The second part is addressed in an entrepreneurial manner. Students will be required to evaluate the environmental consequences of their activities in a professional context.

You will learn:

- Principles of eco-innovations
- Physico-mechanical and biochemical properties of packaging materials and their influence on their use for packaging purposes
- Analysis and evaluation of materials for the production of packaging, including packaging intended for contact with food
- Management tools for implementation of CE for development of plastic packing in the field of new materials and biomaterials
- Methods of post-consumer packaging waste management

MODULE 2. Eco-design and novel manufacturing processing

The module will review strategy elements, methods and new production technologies to develop packaging solutions that are easy on the environment and conserve resources. The module is divided into two parts.

The first part is focused on selected strategy elements of packaging design for sustainability and on the evaluation of a product environmental impact.

You will learn:

- The four strategy elements to develop an Eco Design strategy for a packaging: (1) Design for Sustainable Sourcing; (2) Design for Optimised Resource Use; (3) Design for Environmentally Sound Use; and (4) Design for Recycling
- How to perform a Life Cycle Assessment (LCA) analysis

The second part is dedicated to novel manufacturing processing for packaging systems.

You will learn:

- Technologies for innovative sustainable polymer compounds (nanocomposites, active systems, recycled systems, biopolymers)
- Overview on production processes for rigid and flexible plastic packaging: injection moulding, blow moulding, foaming, cast film extrusion, film blowing
- Novel processing technologies for rigid plastic packaging and prototyping: Advanced manufacturing processes and Additive Manufacturing techniques (3D Printing)
- Manufacturing processes for new packaging solutions: cast and blown film coextrusion and lamination
- Innovation and sustainability in surface treatments
- Sustainable printing technologies
- New production technologies and Industry 4.0

MODULE 3. Residue management and valorisation

The module on residue management and valorisation will review the issues related to the end of life of plastic packaging materials. The module is divided into three parts.

The first part is focussed on the optimisation of logistics, waste separation and sorting of packaging materials. You will learn:

- Introduction to polymer materials and polymer processing: main processing processes applied to the production of polymeric materials; requirements for the production of recycled plastic materials; current industry position on plastic production and recycling
- Residue management: municipal solid waste, management methods for solid waste handling; plastics value and lifetime

The second part is dedicated to recycling systems and novel business models for the second life of residues. You will learn:

- Optimization of plastics recycling: strategies to increase the efficiency of plastic sorting and recycling processes
- Mechanical recycling: main methods and technologies available for the industrial recovery of packaging waste
- Secondary plastic products: examples and market trends
- Chemical recycling: main available alternatives and future prospects.

The third part will address the economic, environmental and legislative aspects of plastic waste. You will learn:

- Economic and environmental analysis of plastic waste handling: landfilling, incineration and recycling
- European Union's strategy for plastics: key points and policies, stakeholders' vision, and future scope

MODULE 4. Citizen and consumer engagement

This module will discuss the topics of communication, interaction, and engagement with focus on the consumers of plastic packaging and more broadly the citizens. The module is divided into two parts.

The first part is focused on citizen interaction. You will engage in media follow up, role play and portfolio working to familiarize with the following topics:

- Principles of circular economy and its benefits to the society
- The relationship of plastic packaging, circular economy and the society
- Practices in communications planning and stakeholder engagement
- Effective use of communications and engagement methods
- Assessing the impact of communications and engagement campaigns

The second part is focused on consumer communication. You will benefit your personal experiences as a consumer and get to know different companies' communication and engagement strategies to familiarize with the following topics:

- Characteristics of consumer behaviour and consumer trends in plastics packaging in the era of circular economy - Understanding consumers of today and tomorrow
- Consumer communication and engagement regarding sustainable plastic packaging - Opportunities and pitfalls
- Value creation within circular economy – Viewpoints of consumers and the value chain players

Applying consumer centered approach in the design of communications and marketing of sustainable plastic packaging

MODULE 5. Challenges Innovation Teams.

PackAlliance is not just another postgraduate programme. Developing innovative knowledge about packaging industry also needs an innovative working framework.

After the four thematic modules the programme will include a hands-on module that will be carried out preferably in the PackAlliance Hubs. This last module is based on project-based learning by creating small, tutored groups (CHAINS - CHALLENGES INNOVATION teams) that will work on specific real challenges proposed by sector representatives to stimulate innovative and entrepreneurial spirits.

Each CHAIN will work for a period of 2 months, guided by appointed academia and industry mentors, in order to find innovative solutions to the challenges assigned by companies. Expertise, support and resources necessary for the students' work will be provided by the PackAlliance Hubs.

CHAINS will approach the challenge through an innovation methodology based on Design Thinking that englobes three phases:

- 1- Definition phase (1 week): Fully understanding of the challenge, information gathering, ...
- 2- Ideation phase (4 weeks): includes several divergence and convergence sub-phases to choose and define the idea for the solution
- 3- Prototyping phase (4 weeks): validation and manufacturing of the ideated prototype

Calendar

The first part, modules dedicated to the four thematic areas, will be held from October 1st 2021 (presentation day) to March 18th 2022 distributed as follows:

- Module 1: from October 4th to November 5th 2021.
- Module 2: from November 8th to December 10th 2021.
- Module 3: from December 13th 2021 to February 4th 2022.
- Module 4: from February 7th to March 18th 2022.

The second part will consist of a two-month practical module from 28th March until 20th May.

2021

October

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2022

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May

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Module 1 Module 2 Module 3 Module 4 CHAINS

Delivery methods

As explained, the training programme consists of two parts:

- 1- This first part dedicated to the four thematic areas will be held entirely online.
- 2- The second part is a two-month practical one known as CHAINS.

For this pilot programme two modalities for CHAINS are offered:

- Face-to-face: they will take place in the PackAlliance Hubs in the four participating countries. Up to 6 participants per country of this modality will have the opportunity to carry out an international mobility to one of the other countries' PackAlliance Hubs.
- Online: For this modality, preference will be given to professionals with a current employment contract.

Students are required to possess a computing device with appropriate technology requirements in order to engage in our digital learning environment (Moodle-based) and streaming tools (Zoom). A stable high-speed internet connection is also required.

Certificate

Students completing successfully the entire training programme will receive a certificate reporting the following details:

- Name and surname of the student
- Details of the programme and individual units within the programme
- The level of the programme

- The ECTS size of the programme
- Date and HEI stamp

3. Eligible students and selection criteria

PackAlliance study programme Specialist in the circular economy of plastic packaging is aimed at **Professionals** working already in the plastics packaging value chain and wishing to improve their competences and enhance career development and **Fresh graduates** wishing to develop their professional career in the plastics packaging sector.

To be eligible to apply you must hold a fresh Bachelor/Master of scientific, technical, or related discipline (chemistry, life sciences, data science and engineering, industrial and service design, ...). Applicants who are finishing their degree studies are also eligible. For professionals working in the plastics packaging value chain, a vocational/Bachelor/Master's degree and minimum of 2 years of field specific work experience after graduation is required.

The programme is conducted in English. Sufficient English language skills are required.

The selection of students will be based on:

- Degree and/or work experience
- Different training profiles are desirable to form multidisciplinary teams
- Letter of motivation (1x A4 or 500 words) and personal/group interview may be conducted by the HEI (15 min)

Letter of Motivation

The purpose of the motivation letter is to outline the applicant's motivation and to share his / her interests and goals and the readiness to participate the programme. The applicant describes his / her career and plans and how the studies are related to it. The applicant also presents how he / she intends to organize the studies considering work and life situation. The applicant also evaluates his / her current skills in relation to the curriculum.

CHAINS mobility selection

Limited number of students are selected to participate the Module 5 in another partner's country of the programme. Since the beginning of the pilot programme, the possibility of international mobility during the last phase of the training programme will be announced to enrolled students. Students not selected for the mobility will participate in the collaborative project in the PackAlliance Hubs at their countries.

The selection of students will be based on:

- Average marks in modules 1 and 2 of the postgraduate programme (20%)
- Letter of motivation (80%)

Students will be selected through an open, informed, and transparent recruitment process which will be based on equal treatment of all candidates and will not imply discrimination on the basis of gender, race, age, nationality, ethnic or social origin at any time.

To ensure transparency, the whole selection process will be supervised by the HEI's members of the PackAlliance Quality Committee. Each HEI will issue a report justifying their decision based on the established criteria.

4. Implementation of the practical training and mobility opportunities

Practical training (CHAINS) is offered in two modalities:

- Face-to-face
- Online

Face-to-face CHAINS will take place at PackAlliance Hubs. There is one Hub in each participating country:

<p>FINLAND</p> <p>TalentFactory (TAMK main campus) Kuntokatu 3 FI-33520 Tampere Finland</p>	<p>ITALY</p> <p>Proplast Cluster Proplast headquarter Via Roberto Di Ferro n. 86 15122 Alessandria Italy</p>
<p>POLAND</p> <p>Faculty of Management AGH Campus Antoniego Gramatyka 10 30-067 Kraków Poland</p>	<p>SPAIN</p> <p>TheCircularLab Parque Municipal de Jardinería, Carretera del Cristo, 15 26005 Logroño Spain</p>

Up to 6 students from each country will have the opportunity to do the two-month practical training in a Hub in one of the other three countries. I.e.: 2 students from Poland will be able to do the practice in Finland, 2 in Italy and 2 in Spain.

International mobilities will receive a grant funded by this Erasmus+ project according to the following table:



Origin	Destination	Travel costs	Subsistence costs
Finland	Italy	360,00 €	2.400,00 €
	Poland	275,00 €	2.400,00 €
	Spain	360,00 €	2.400,00 €
Italy	Finland	360,00 €	2.400,00 €
	Poland	275,00 €	2.400,00 €
	Spain	275,00 €	2.400,00 €
Poland	Finland	275,00 €	2.400,00 €
	Italy	275,00 €	2.400,00 €
	Spain	360,00 €	2.400,00 €
Spain	Finland	360,00 €	2.400,00 €
	Italy	275,00 €	2.400,00 €
	Poland	360,00 €	2.400,00 €

Hubs in some countries could offer financial support to students who have to travel for internships within their own country.

Online CHAINS are designed so that professionals who are working and do not have the possibility to travel during the practical module, have the opportunity to complete the entire course and obtain the certificate.

During the two-month practical training, synchronous online sessions will be combined with asynchronous individual or team work. Voluntary face-to-face meetings may also be arranged during this period, especially at the beginning and at the end, to facilitate group work and the finalisation of the outcome obtained from the challenge-based practical work.

For both modalities, face-to-face and online, the Intellectual Property of the results and prototypes obtained from the challenge-based practical work will belong to the students. Nevertheless, the exploitation rights of the mentioned results will belong to the industry partner of the Hub of each country, which shall bear the costs necessary for development and implementation.

5. Learning assessment

The main goal of the student assessment is to check if the knowledge, skills and competence was achieved during the course. Each of the modules will be assessed separately. To complete the course the 80% of attendance on the learning activities is required.

The final learning assessment for the thematic modules will include:

- 25% active participation in the live and social learning activities

The active participation in the live virtual sessions and social activities like chats and forums will be considered in the final evaluation.

- 25% completion of the learning activities

Examples of online learning activities are: Q&A, quiz, error identification, task, test, etc... They are intended to measure and check the students' knowledge obtained during the learning activities on the subjects included in the programme.

- 50% Conduction empirical research for presentation of the project

Based on the short-written report on the specific subject, the group of students aims to prepare the presentation on the chosen topic within the collaboration between teacher and student.

The final learning assessment of the CHAINS will be based on active participation during the group work (40%) and on the final presentation of the solution elaborated by the team (60%).

6. Programme monitoring and quality assurance

A Common Internal Quality Assurance Policy, concerning this training programme, was outlined to ease its recognition within the European Higher Education Area in the perspective of the programme sustainability beyond the project lifetime.

To this purpose, the "Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015)" is referred to in defining the procedures for the quality monitoring of the programme, during four fundamental phases of its lifecycle, i.e.:

1. programme design
2. programme implementation
3. short term impact of the programme
4. programme review

In particular, a peer-review process, concerning the structure, contents and teaching methodologies of the different modules of this training programme, was implemented during the programme design step. Moreover, in the outlined approach the quality assurance policy covers both the academic and administrative aspects of the programme. Two consortium management bodies, i.e. the Technical and Quality Committees, are involved in the internal quality assurance activities and the feedback on the programme by different stakeholders, such as students and teaching staff, will be taken into account.

7. How to apply

There are two admission periods.

First admission period:

- Deadline for applications: June 20th 2021 at 13:00 CET
- Communication to applicants: before July 1st 2021

Second admission period and waiting list:

- Start: July 1st 2021
- Deadline for applications: 7th September 2021 at 13:00 CET
- Communication to applicants: before September 15th 2021

Start of the programme: October 1st 2021

Applications must be made using this electronic [form](#). The following documents must be sent to the e-mail address info@packall.eu:

- Letter of motivation - compulsory
- CV in English (Europass format) - optional
- Document proving language proficiency: minimum B1¹ - optional

Admitted applicants will be required to send the “Commitment declaration” and the “Photograph, video or audio recording consent form” duly completed and signed within 15 days upon receipt of the admission notification to the e-mail address info@packall.eu. Application will not be considered until they are complete (form and documents). Incomplete or late applications may be dismissed.

¹ Certificates accepted:

Preliminary English Test (PET)

First Certificate in English (FCE)

Certificate in Advanced English (CAE)

Certificate of Proficiency in English (CPE)

Business English Certificate (BEC) Preliminary

Business English Certificate (BEC) Vantage

Business English Certificate (BEC) Higher

Certificate in English for International Business and Trade (CEIBT)

English for Speakers of Other Languages (ESOL)

International English Language Testing System (IELTS), more than 4 points

Test of English as a Foreign Language (TOEFL). TOEFL minimum scores according to test type:

- at least 41 points in Internet-Based Test (iBT);
- at least 460 points in Paper-Based Test (PBT) supplemented with at least 3,5 points in Test of Written English (TWE) and with at least 50 points in Test of Spoken English (TSE)
- at least 550 points in International Communication (TOEIC);

B1 certificate from official language schools

B1 level university degree course.

Once enrolled, applicants will be additionally asked to provide a proof of identity in order to issue the certification of course completion.

8. Participants' obligations

To apply as a student, you are requested to complete the electronic form linked in the "How to apply" section of this document and send the required documents by email.

You acknowledge and agree that your application as a student does not ensure and guarantee your participation in the training programme. Indeed, after your application, your requirements for eligibility will be verified and you will be notified of the outcome determining your participation or exclusion from the programme. During the verification, PackAlliance consortium is entitled to ask for clarifications and additional documentation if it deems it appropriate at its own discretion. During the admission, personal or group interviews may be held with the applicants to expand on the relevant curricular information or to assess language skills when an official certification can not be provided.

By making the application as student you expressly:

- Request a free subscription to PackAlliance training programme;
- Declare to be in possession of the eligibility requirements set out in the "Eligible students and Selection criteria" section of this document;
- Declare that the information provided during the application process and the entire performing of the programme is complete, true and accurate;
- Agree to comply with all commitments undertaken with the host organization of the assigned PackAlliance Hub (listed in the "Implementation of the practical training and mobility opportunities" section) during the practical training;
- If you are admitted, you undertake to send the "Commitment Declaration" and the "Photograph, video or audio recording consent form" duly completed and signed within 15 days of being notified of admission.

Even though you have been considered as eligible for the training programme, we reserve the right to exclude you at any time:

- Immediately, if you have lost your requirements for the eligibility as student and/or,
- Immediately, if you breach any of your obligations set out in this document

The partners of the PackAlliance consortium may suspend or cancel any of the programme activities for reasons of force majeure or for reasons of internal organisation of the consortium itself. Students will be given as much notice as possible.

You expressly agree to indemnify and hold the PackAlliance consortium partners harmless from any claims brought by any of the consortium partners and/or third parties against the PackAlliance consortium partners and from any damages suffered by the latter as a consequence of your application as student and/or your participation in the training programme.

Confidentiality

Students in the PackAlliance programme, concerning their participation in the practical training may be required to sign a confidentiality agreement with the institutions managing the Hub.

9. Personal data protection

Privacy policy available in <https://www.packall.eu/>