



RMs Manager Winter School

"Creative Ideation & Innovation for Circularity and Sustainable Management of Raw Materials and Natural Resources"

Dates: 1 -3 December 2020 Duration: 20h Training modality: On-line Language: English Accreditation: Certificate of Completion Organiser: Campus Iberus – Campus of International Excellence of the Ebro Valley

Summary

The RMs Manager Winter School is a 3-day online course in creativity & ideation skills for challenged-based innovation. Driven by circular economy and sustainability principles, students will be able to complement their academic profile and professional competences by gaining practical skills highly demanded by the labour market and needed by all innovation professionals in the field of raw materials and natural resources management.

A total of 20 hours of lectures combining interactive case-based presentations, practical exercises and solution-focused team work activities have been devised in the programme curriculum. The course is free of charge and it is open to Bachelor, Master and PhD students.

The RMs Manager Winter School is part of the pilot activities of the EIT RMsManager Project, funded by the European Institute of Innovation and Technology (<u>EIT Raw Materials</u>) and implemented by eight academic and industrial organisations from six European countries.

Description

Global consumption of materials such as biomass, fossil fuels, metals and minerals is expected to double in the next forty years, while annual waste generation is projected to increase by 70% by 2050. As a result, sustainable supply and management of resources have become a priority for Europe, which calls for increasing the value given to protecting and restoring natural ecosystems and improving circularity and sustainability of primary and secondary raw materials systems.





This priority is reflected in the growing number of jobs linked to the circular economy in the EU, which is expected to generate 700.000 new more jobs by 2030.

To accelerate this green transition phenomenon, future innovation managers are required to have the right skills and competences to respond to the demands of the industry, society and environment, to react proactively to a rapid changing context, to adapt to new forms of working, and to understand the dynamics of value co-creation within the innovation value chain.

The RMs Manager Winter School will enable students to discover a new mindset and think-outside-the-box attitude from a creative and multifocus perspective, to learn how to use effective methodologies and tools applied across the innovation cycle, and to build capacities leading to the ideation of concepts and generation of transforming solutions. Upon successful completion of this course, students will be able to:

- Analyse challenge-based innovation theory and best practices
- Apply effective ideation and creativity methodologies, techniques and tools for complex idea and concept generation
- Devise transforming solutions and understand techniques for validation and prototyping
- Assess ideation and innovation processes for value improvement

Methodology

The RMs Manager Winter School will run for three days with a total of 20 hours of online lectures. Course materials and training dynamics include interactive case-based presentations, practical activities with utilisation of dedicated ICT-tools, solutionfocused team work activities, and self-assessment. Case-based presentations will consider a regional context approach.

A EIT Raw Materials-labelled <u>Certificate of Completion</u> will be conceded to all students after completing the course. In order to get the certificate of completion, students are required to complete at least 80% of the total number of lecture hours.





Content & Tentative Programme

CET Time	Day 1 - 1 December 2020
09.00 - 09.30	Welcome & introduction
09.30 – 10.30	Setting the scene: Challenging circularity and sustainability. EU
	approach and the EIT.
10.30 – 11.00	Break
11.00 – 12.30	Presentation of challenged-based case-study 1, 2 y 3
12.30 – 13.00	Induction icebreaker and group dynamics
13.00 – 13.30	Theory (DIP Methodology + next activities)
13.30 – 14.30	Break
14:30 - 16.30	Starting from the end (Pre-made)
	Stakeholder mapping (Pre-made)
	How might we (pre-made + practice as example)
	Picking a target (Practical exercise)
	Customer persona (pre-made + practice as example)
16.30 – 17.00	Discussion, Q&A, Wrap-up day 1
CET Time	Day 2 - 2 December 2020
09.00 – 11.00	Keys to improve creativity
	Mind map
	Voting methodologies
11.00 – 11.30	Break
11.30 – 13.30	Crazy 8 & Mixing ideas
	Sketching the solution(s)
13.30 – 14.30	Break
14.30 – 16:30	SWOT & SWOT strategies
16.30 – 17.00	Discussion, Q&A, Wrap-up day 3
CET Time	Day 3 - 3 December 2020
09.00 - 11.00	Defining the idea
	Validating the idea
11.00 – 11.30	Break
11.30 – 13.30	Types of prototypes and useful prototyping tools
	Modifications and improvements
13.30 – 14.30	Break
14:30 – 16:00	Solution(s) delivered versus challenge addressed: assessing
	fitness and feasibility
	Getting familiar with creativity and ideation tools
16:00 – 16:30	Discussion, Q&A, Wrap-up day 3





Delivery Method & Student Requirements

The RMs Manager Winter School will be conducted entirely in English. Students are required to have a good command of English and effective communication skills in this language.

The RMs Manager Winter School will be conducted entirely online. 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. More information about systems requirements for Zoom can be consulted <u>here</u>.

About the Organiser

Campus Iberus is a strategic partnership which brings together four high-profile research universities from four different regions along the Ebro valley in north-east Spain: University of Zaragoza – UNIZAR (region of Aragón), Public University of Navarra – UPNA (region of Navarra), University of Lleida – UdL (province of Lleida in Catalunya) and University of La Rioja (region of La Rioja).



As the main Higher Education and R&I actor of the Ebro Valley, Campus Iberus focuses on five specialisation areas, which reflect the strongest academic and scientific capacities of its universities, in line with the priorities of the Smart Specialization Strategies (RIS3) of the four regions involved in the alliance:

- Circular Economy and Bioeconomy
- Energy and Sustainability
- Agro-Food and Nutrition
- Health Technologies
- Social and Territorial Development





Addicionally, Campus Iberus has an extensive experience in fostering universitybusiness cooperation, both at the regional and the national level, having implemented first-of-its-kind initiatives in the territory over the last 10 years, such as DEMOLA, the Circular University Challenge, the Iberus Labs or Santander Intraemprende, and becoming a successful case-study for the European Commission. With circa 50.000 students, about 10.000 staff members, nearly 500 research groups, more than 270 educational programs, participation in over 300 R&I framework and EU territorial cooperation projects, and collaborations with about 2.300 organisations from more than 60 countries across the globe, Campus Iberus offers a competitive academic and scientific portfolio built upon excellent researchers, professionals from the regional innovation ecosystems and numerous international collaborators.

Campus Iberus is a Task Partner of the EIT RMs Manager Project.

The EIT RMs Manager Project

The RMs Manager Winter School is part of the pilot activities of the EIT RMsManager Project, funded by European Institute of Innovation and Technology (EIT Raw Materials). The main goal of the EIT RMsManager Project is to create and deliver new and innovative curricula aimed at strengthening the skills and increasing the capacity of students and professionals for a transition towards a circular management of raw materials and natural resources, particularly by:

- Modernising higher education institutions by aligning and adapting education offer and practices to the needs of the industrial sector and global challenges;
- Equipping students with up-to-date industry-demand skills required for a circular transformation and sustainable management of raw materials and natural resources;
- Establishing sustainable collaboration between Academia, Researchers, Industry and Professionals of the raw materials sector, with a Regional Innovation Scheme perspective;
- Ensuring the incorporation of Circularity and Sustainable Development principles in the educational strategies and curricula of the RMsManager Project universities.

The EIT RMsManager Project brings together eight high-profile academic, research and industrial partners from six countries across Europe, represented by:

- 6 Higher Education Institutions
- AGH University of Science and Technology (Poland) Coordinator
- Lappeenranta University of Technology (Finland)
- Technical University of Kosice (Slovakia)
- National Technical University of Athens (Greece)
- Campus Iberus (Spain: University of Zaragoza, Public University of Navarra, University of Lleida and University of La Rioja) – RIS Task Partner
- Kyiv National University of Trade and Economics (Ukraine) RIS Task Partner





- 1 Research Organisation
 - Agenzia Nazionale per le Nuove Tecnologie, l'Energia e lo Sviluppo Economico Sostenibile - ENEA (Italy)
- 1 Industrial Partner
 - KGHM Cuprum (Poland)



Supported by RawMaterials Connecting matters

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