UPM IMPACT in SDG11
Sustainable Cities & Communities
EELISA ACITIVITIES AROUND SDG11

Volunteer Program of the Universities of Madrid

Description

The European Researchers' Night is a pan-European event of which the 12th edition took place place on the 24th and 25th of September 2021. In Madrid, it is managed by Fundación para el Conocimiento madri+d. This project has received funding from the European Union's Horizon 2020 research and innovation programme-Marie Skłodowska.

The activity "Gymkhana of sustainability for families in the open air" consisted of a circuit of interactive outdoor activities in which participants learned and resolved questions about sustainability and its relationship with our lifestyle, urban space, mobility, and energy.

The participants were grouped in small teams.

The activity was organized and held by researchers from the UPM who showed how academic and research work impacts society.

Assessment: Participation to the whole activity by doing the proposed activities

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	
Kind of activity	Social event		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	all	Teaching mode	In person
Link	https://community.eelisa.eu/activities/gymkhana-of-sustainability-for-families-in-the-open-air-european-research-night/		

Workshop: The Tao of Artificial Intelligence, Tech Diplomacy and Conflict Resolution

Description

The activity aimed to build narratives together with citizens around technological solutions that contribute to the adaptation and mitigation of climate change.

The session was held online on the 4th of November.

UPM faculty members, researchers, and representatives of some European companies and projects dialogued on designing new technologies based on sustainability and their implementation in cities.

It delved into projects related to the introduction of Nature-Based Solutions (SBN), decentralized energy generation, the start-up of energy communities, and the importance of interdisciplinarity when launching these initiatives.

Assessment: Participation to the whole activity

Deliverables: A short report of the activity was delivered to the coordinator for SDGs of UPM since the activity was co-organized with SDGs Node of the School of Architecture

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	
Kind of activity	Workshop		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master	Teaching mode	Synchronous remote
Link	https://community.eelisa.eu/activities/have-you-ever-wondered-what-the-forms-of-sustainability-are-madrid-science-and-innovation-week/		

Use of rainwater resources

Description

Citizen laboratories (CL) provide meeting places for cooperation, experimentation and collaborative prototyping of projects that seek to improve life together. In this course, students will learn about hiw citizen laboratories work, and design their own citizen laboratory in a neighborhood, a university or a public library.

Deliverables: Collective creation of projects that seek to improve live as common good.

Assessment: Attendance will score 10%. Students must write a call (project / collaborators). This report accounts for 90% of the examination rating.

Community	Egalitarian Societies: Opportunities for Everyone (ES: O4E)		
Coordinator	jorgeenrique.perez@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/how-to-set-up-a-citizen-laboratory-cl/		

Seasonal School Management of Innovation and Common Good in Pisa

Description

The main objective of the assignment is the application of the concepts studied in the current course that encompasses the processes of cyber-physical systems modelling. Students have to address the following: system

requirements and missions definition, and those models that are applicable to represent the overall system. This assignment has been devised to be performed by teams of about 5 people.

Currently, university campuses must be energy-aware and manage the energy consumption of their buildings efficiently. To that end, the information provided by the crowd (students) is critical, since they can

provide massive information about the luminosity or temperature of the installations in order to only consume the required energy.

Nowadays, there are no applications to obtain this information from the crowd and to provide an added value for the students and institutions. From this need and the results of the project CROWDSAVING, the project Smart Campus aims to construct a proof concept in TRL-7 is based on the construction of a crowdsensing platform that consists of a crowdsensing mobile application, a distributed sensor network and acquisition and grouping data services.

This Smart Campus proof of concept is going to provide an added value to the university community, since it may help the improvement of energy efficiency, cost-saving, teaching quality, classroom well-being, and use of public transports. In addition, the product will provide a huge amount of data that can be queried by other institutions, companies or researchers to be used for research or innovation activities.

Assessment: The students should submit a report documenting their solution and the report is assessed by the professors enrolled in the course.

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	agustin.yague@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/smart-campus-software-architecture-design/		

IDEEE online conference - Innovation and Design in European engineering education

Description

The course focuses on the development of contemporary architecture projects that involve the recovery and reuse of cultural heritage and landscape. The aim is for the student to develop their ability to know, interpret, and value built architecture, and then come up with proposals that allow spaces to rethink and give them a new life. The objective of this course is to encourage the student in the possibilities of projecting, from a current vision, on the built architecture and the landscape, seeking congruence and dialogue, enhancing awareness, knowledge and criteria for intervention on heritage built.

Deliverables: A first phase of preliminary studies and diagnosis by teams will be developed, a second stage of individual work to define the concept, a third period of development of the preliminary project and a final stage in which the intervention project will be elaborated.

Community	Sustainable Buildings, Cities and Communities		
Coordinator	ildefonso.munoz@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	Hybrid
Link	https://community.eelisa.eu/activities/partimonio-cultural-ciudad-construida-arquitectura-contempranea-y-paisaje/		

Seasonal School Issues on China- Innovation, Society and Culture in Pisa

Description

Los estudiantes diseñan y construyen bóvedas tabicadas de distintos tipos para cubiertas en arquitectura.

Community	Sustainable Buildings, Cities and Communities		
Coordinator	cesar.desantos@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/taller-experimental-bovedas-tabicadas/		

AIRONE - Artificial Intelligence and Robotics in Extended Reality Seasonal School in Pisa

Description

The course focuses on the development of conservation and restoration projects that involve the recovery and reuse of cultural heritage and their environment. The students develop their ability to know, interpret, and value built architecture, proposing actions or projects to reuse buildings in order to make them more sustainable.

Community	Sustainable Buildings, Cities and Communities		
Coordinator	m.palma@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	Hybrid
Link	https://community.eelisa.eu/activities/taller-experimental-de-intervencion-en-el-patrimonio-arquitectonico/		

Mandatory Internship for Innovative Rapid Prototyping

Description

In the last semester of the Bachelor's Degree in Architecture, students have a subject that integrates the knowledge of the entire degree and which is specified in what would be the constructive development of a project for the execution of a building designed by each student, complying with all the Spanish technical and performance regulations.

This experience has been reinforced with two theoretical-practical classes of 2 hours each on how to design a zero energy and sustainable building, and a second class taught by GBCE on how to evaluate a sustainable building according to the VERDE tool developed by the Green Building Council Spain, and how a self-assessment can be done as a pre-certification.

Students incorporate energy efficiency and sustainability strategies into their projects and apply the tool to their project by qualitatively assessing each and every one of the 46 evaluation topics for buildings.

Students not only gain an in-depth understanding of all the qualities sought in a sustainable building (a 700-page manual on why and how to evaluate them is provided), but also have the option to improve their project by incorporating these strategies between the mid-December and mid-January deliverables, learning how to incorporate them into a real project.

It is hoped that with the additional voluntary activity the students will become aware of sustainable design, understand the globality of the aspects that must be integrated, and will be able to apply this knowledge to make buildings and cities more sustainable in their daily professional activity in the future.

Community	Sustainable Buildings, Cities and Communities		
Coordinator	sergio.vega@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/green-pscyt-pre-certification-self-assessment/		

Mandatory internship (f/m/d) Data Science in the context of forecasting of energy timeseries

Description

In the UPM's Oficial Master Degree in Construction and Building Technologies - MUCTA, students learn to think in technical terms through the theoretical classes and the development of an execution project from an architectural, functional and constructive point of view, which makes up the Master's Thesis., complying with all the Spanish technical and performance regulations.

This experience has been reinforced this edition with new theoretical-practical classes of a new subject (30h about Building Sustainability) and two new classes about how to think energy efficient and sustainable buildings and how to design them. Finally, a 6h workshop conducted by GBCE on how to evaluate a sustainable building according to the VERDE tool developed by the Green Building Council Spain, and how a self-assessment can be done as a pre-certification.

Students incorporate energy efficiency and sustainability strategies into their projects and apply the tool to their project by qualitatively assessing each and every one of the 46 evaluation topics for buildings. We challenge students to improve their projects to achieve a rating of three VERDE leaves.

Students not only gain an in-depth understanding of all the qualities sought in a sustainable building (a 700-page manual on why and how to evaluate them is provided), but also have the option to improve their project by incorporating these strategies in their projects design.

It is hoped that with the scheduled activities the students will become aware of sustainable design, understand the globality of the aspects that must be integrated, and will be able to apply this knowledge to make buildings and cities more sustainable in their daily professional activity in the future.

Community	Sustainable Buildings, Cities and Communities		
Coordinator	ramon.araujo@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master	Teaching mode	Synchronous remote
Link	https://community.eelisa.eu/activities/green-mucta-pre-certification-self-assessment/		

Optimizing the nitrogen management on the farm level by using proximal and remote sensing.[OBJ]

Description

Workshop module of the Master's Degree in Advanced Architectural Projects to be developed in the first semester of 2022, focused on research through the project of inclusive housing and communities related to demographic change and new technologies.

Deliverables: Research work through architectural design (Research by Design)

Community	Sustainable Buildings, Cities and Communities		
Coordinator	sergio.martin@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master	Teaching mode	In person
Link	https://community.eelisa.eu/activities/housing-for-the-third-machine-age/		

The State of the Ocean: a series of lectures

Description

Trabajo Fin de Master del MPAA (Máster en Proyectos Arquitectónicos Avanzados), centrado en la investigación y propuesta de transfromación de entornos para un envejecimiento activo e inclusivo en áreas rurales sostenibles (caso de estudio en la provincia de Toledo, España).

Community	Sustainable Buildings, Cities and Communities		
Coordinator	sergio.martin@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master	Teaching mode	In person
Link	https://community.eelisa.eu/activities/la-ciudad-del-jubileo-arquitectura-para-el-envejecimiento-en-areas-rurales/		

Law & Economics of Nature: "The Question of Governing Space Debris"

Description

The Solar Decathlon Europe 2023 will be activated as a design theme on an interdisciplinary experimental workshop, in an internal university competition comprising the three first stages of the Design Thinking Methodology. The students start by working in small groups, as the process progresses, the teams grow larger and the number of designs decreases. Urban design, Architectural design, Indoor Environmental Quality, Mechanical systems, Structural systems, industrialization are the topics to be integrated. The main tools that will be made at the disposal of the students will be Bioclimatic Design Tool, Energy simulations and BIM.

In this workshop Deliverables #1 and #2 of Solar Decathlon Competition will be created:

LDU Design development

LDU Building simulations

Construction Design

Building Services Engineering

Project Manual and Drawings Preparation

Press Kit /Press Release/ Webside Concept/Social Media

Audio-visual (presentation of project)

Community	Sustainable Buildings, Cities and Communities		
Coordinator	beatriz.arranz@upm.es	ECTS	
Kind of activity	Workshop		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2022-06-24	Ending date	2022-06-25
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/solar-decathlon-2023-competition-interdisciplinary-experimental-workshop/		

Managing Scarce Resources in the Climate Change Era: Theoretical, Ethical and Economic profiles

Description

Monitoring of the response of citizens to urban space and materials will be measure. Specifically, the stimuli generated (positive or negative) by the outdoor environmental quality and by the different characteristics of the urban materials: textures and colours. This will be monitored measuring brain activity using techniques available in the field of Neuroarchitecture.

The measurement of stimuli will be performed in two environments: virtual and real.

Virtual Environment: Different citizens will be subjected to the observation of images with different degrees of complexity, recording their brain activity

Guide walks in urban environment: Based on the monitoring of the case studies, routes with high interest will be selected due to both, good and poor environmental quality data. These itineraries will be followed by different individuals collecting their brain activity using portable devices and recording the spaces they transit, linking image and noise with the activity recorded

Community	Sustainable Buildings, Cities and Communities		
Coordinator	beatriz.arranz@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	Hybrid
Link	https://community.eelisa.eu/activities/monitoring-of-the-citizens-response-to-urban-stimuli/		

Design thinking- Technology for elderly people

Description

The third activity of the second call of EELISA on-the-move was a two day hackathon (18th and 25th of May 2022) regarding the use of big data and privacy coordinated by Professor Fabián García Pastor. The first day (18th May), challenges were presented to the students participating by collaborators from IBM, PwC, Human Trends, OdiseIA and TransyT (UPM).

The second day (25th May), students presented their proposals and solutions. Mentorized by Oscar Martinez from TransyT / EELisa on-the-Move, groups 5 and 6 worked on Big Data and its application to urban mobility. Among other interesting ideas from all groups, Group 5 included a proposal regarding the use of big data for improving access in public transport to disabled people, in order to achieve SDG 11.

Community	EELISA-on-the-MOVE		
Coordinator	julio.soria-lara@upm.es	ECTS	
Kind of activity	Challenge		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2022-05-18	Ending date	2022-05-25
Target group	all	Teaching mode	In person
Link	https://community.eelisa.eu/activities/hackathon-for-privacy/		

THINK TANK EUROPEAN SPACE AGENCY – SUSTAINABLE BCC COMMUNITY (ESA-ESAC-SUSBCC)

Description

In this activity, participants will have the opportunity to visit an industrialized construction site in Torrejón de Ardoz, about 25 km away from Madrid. Participants will engage in conversations with UPM professors and contractors in charge of the construction. They will gain knowledge on how industrialization is shaping the way new buildings are being constructed.

WHEN

Thursday November 3rd, 2022 from 11:00 am – 13:00 am CEST.

WHERE

Offline: Torrejón de Ardoz (Madrid)

FOR WHOM

UPM students (undergraduate, graduate and doctorate)

DEADLINE

October 31, at 12:00 pm (CEST)

Community	From Industrialized Construction to Near-Zero Consumption Buildings (INCO-0)		
Coordinator	m.fernandez@upm.es	ECTS	
Kind of activity	Workshop		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2022-11-03	Ending date	2022-11-03
Target group	master|bachelor|phd	Teaching mode	In person
Link	https://community.eelisa.eu/activities/on-site-visit-to-an-industrialized-construction/		

Engineers becoming Quantum-aware

Description

The ESA-ESAC - SUSTAINABLE BCC think tank is an educational activity topromote innovation and generate fresh ideas to launch a comprehensivesustainable refurbishment of the European Space Agency (ESA) building "A" inSpain. Together with ESA-ESAC (partner of SUSBCC) we will organise a highimpact activity consisting of a large think tank, with the participating studentsand the support of professors, researchers, and professionals, to undertake acomprehensive rehabilitation operation in the spirit of the New EuropeanBauhaus and with the triple bottom line approach of sustainability (social,economic, and environmental).

For more information please check the following page: https://blogs.upm.es/eelisasustainablebcc/

Travel and accommodation might be covered, please contact your local EELISA project coordinator.

Community	Sustainable Buildings, Cities and Communities|Designing a Sustainable and Decarbonized University (DISCOVERY)|The CIRCULAR and REGENERATIVE CAMPUS (EELISA CRC Community)		
Coordinator	lj.sanchez@upm.es	ECTS	2
Kind of activity	Workshop		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2023-01-23	Ending date	2023-01-27
Target group	master|bachelor|phd|researcher|educator|business	Teaching mode	Hybrid
Link	https://community.eelisa.eu/activities/think-tank-european-space-agency-sustainable-bcc-community-esa-esac-susbcc/		

Practical work to create value by improving the understanding of the activities of the Numerical Control Machines

Description

| Place: Museu Nacional de História Natural e da Ciência - National Museum of Science & Natural History, Lisbon.

| Time of the event: from 5pm to 12pm, Sept 29.

Through an interactive game, participants will be invited to think about the social and global challenges for a more sustainable future. Considering the various challenges of the game, the participant must then draw what, for them, is a possible solution to the challenge, letting their imagination run wild. Creativity is the most precious part of this game, along with reflection. We are looking for anyone who can draw, but especially for those who want to think with us the way to new ways of looking at old problems. Come join us!

Community	Circular EELISA Community		
Coordinator	i.navalhas@campus.fct.unl.pt	ECTS	
Kind of activity	Challenge		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2023-09-29	Ending date	2023-09-29
Target group	all	Teaching mode	In person
Link	https://community.eelisa.eu/activities/shall-we-design-a-more-sustainable-future/		

Be Circular Seminars: the role of businesses and governments
Description

ABOUT

This year, the third LDAC Summer School dedicated to the application of semantic web, linked data and web of data technologies in architecture, engineering and construction (AEC) is hosted in Matera, Italy. Considering the growing interest in these technologies from the AEC industry, this Summer School will provide a starting point for participants that are new to the topic entirely and the opportunity to enhance the understanding and overview of implementations and approaches in the built environment for participants that wish to deepen their knowledge in this field.

The Summer School brings together experts and researchers on this topic and welcomes a broad domain of participants from diverse backgrounds such as computer science, architecture, and engineering. With a mixture of lectures, personal interactions with experts in the field, hands-on exercises and coding challenges, it gives participants the opportunity to explore the possibilities of the semantic web, linked data and web of data technologies for their own research and practice needs in their individual pace and depth.

GOALS

The aim of the LDAC Summer School is to introduce participants to the principles of the Semantic Web and potential as well as implemented applications of it in the architecture, engineering and construction domain. It provides an overview of the technology behind it and current trends in ongoing research in this area, focusing on:

Learning about the technology, its benefits over other web technologies, and its development workflows in high quality lectures from experts in the field;

Gaining experience in designing and querying ontologies and applying them in a practical context in the Summer School's hands-on coding challenge;

Exploring the already existing approaches to describe Linked Building Data and come up with new ideas on how LBD can support your use cases, and innovative solutions to deal with the complexity of the built environment.

Participation requirements

You should attend this Summer School, if you are interested in:

New approaches to link building data of different stakeholders and domains via Semantic Web technologies;

Generating new information from building, product or infrastructure data;

Designing domain-specific ontologies;

Aligning domain-specific and generic ontologies;

Describing building, product or infrastructure data on the Web;

Converting building, product or infrastructure information to linked data;

Handling Linked Building Data.

The LDAC Summer School is tailored for:

Participants that want to deepen their knowledge about the Semantic Web and its applications in the architecture, engineering and construction domain;

Researchers or entrepreneurs that are new to the field (M.Sc. students, PhD students, post-Docs) from various domains, namely:

Computer Science

Architecture

Engineering

Infrastructures

Industry professionals from the AEC industry looking for innovative solutions to deal with the complexity of the built environment.

Although there are no strict requirements for attendance, it is good to know that we expect the following from participants.

Since the Summer School will include a hands-on coding challenge, coding experience is highly recommended;

Participants should bring their own laptops with the required software already installed, as communicated after registration;

It is recommended to have language skills in English, as the Summer School will be held in it;

Plenty of motivation and spirit of innovation!

Community	Sustainable Buildings, Cities and Communities		
Coordinator	ldac2023@linkedbuildingdata.net	ECTS	
Kind of activity	Summer / Winter / Seasonal schools		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2023-06-12	Ending date	2023-06-14
Target group	master|phd|researcher	Teaching mode	In person
Link	https://community.eelisa.eu/activities/ssoldac-3rd-summer-school-of-linked-data-in-architecture-and-construction/		

Working student (f/m/diverse) in Innovation & Incubation at evosoft in Nuremberg, Germany (Job ID: 359038)

Description

We want to present the new activity incoming for the next month on 6, 7, 8 of October in Madrid.

The event will consist on a three-day intensive multidisciplinary seminar for identifying and designing urban mobility solutions in the context of Madrid Low Emission Zone.

The objective of this seminar is to promote the student learning in a real problem, searching firsthand the solutions and knowing new people and cases of others countries, members of the EELISA Community such as ITU ,BME, ENPC.

The participants will be students and teaching staff from prominent universities of the EELISA network, and stakeholders from multiple disciplines, such as Urban Planning, Transport Planning, Civil, Environmental, and Industrial Engineering.

This activity will be recognised with a badge for your EELISA Credential (Academic recognition of the participation in innovation based activities organized by communities such as EELISA on-the-MOVE).

Community	EELISA-on-the-MOVE		
Coordinator	eemove.community@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2022-10-06	Ending date	2022-10-08
Target group	master|bachelor|phd|alumni	Teaching mode	In person
Link	https://community.eelisa.eu/activities/urban-mobility-solutions-for-liveable-cities-the-challenge-of-low-emission-zones/		

International Summer School "Sustainable Energy Technologies and Optimization" at UPM

Description

In November 2022, EELISA DISCOVERY and research community UPM TULE will organize the seminar "Transforming school environments and university campuses into resilient and healthy places through NBS" in the framework of the program UPM Seminars, promoted by the Vice-Rector's Office for Research, Innovation, and Doctorate of the Universidad Politécnica de Madrid. The session will be organized by the UPM Research Communities "Colaboratorio" and "Transition towards an Emissions-Free University" (TULE UPM), the UPM EELISA Community "DISCOVERY" involving members from UPM, ITU and UPB, Madrid City Council, Valladolid City council and other stakeholders that will be defined in the next future.

The seminar will be organized around the following specific themes, all of them related with the use of Nature-based solutions:

Ameliorating rainwater and greywater treatment

Improving acoustic absorption

Reducing urban heat island effect

Promoting healthy habits by playing sports

Deliverables: A short report of the activity will be delivered to the organizing team of the activity.

Assessment: Participation to the whole activity

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2022-11-01	Ending date	2022-11-30
Target group	all	Teaching mode	In person
Link	https://community.eelisa.eu/activities/transforming-school-environments-and-university-campuses-into-resilient-and-healthy-places-through-nbs-upm-seminar/		

Live cities: designing, building and living in the urban worlds of the future

Description

BUILDING A CIRCULAR FUTURE – THE UNIVERSITY OF THE FUTURE

| How to apply?: If you would like to attend our parallel session during the conference, please answer to the next requests: https://forms.gle/xFhtqhGQtiVSkEFg9 .

| Where?: National University of Science and Technology POLITEHNICA Bucharest. Central Library – Room 4.1

EELISA Circular Community invites students from EELISA universities to join the challenge session "Building a Circular future – The university of the future", organized as part of the 1st EELISA Conference, which will be held in Bucharest on 4-6 October 2023.

We can build together a Sustainable Future in our Universities by using the Circular approach!

Be an active student for the university of the future and join us!

We are looking 20 enthusiastic students of an EELISA university who will be present in Bucharest, and who wants to participate to a Circular and Socio-civic learning experience. By analyzing the social and civic implications of our challenges, students will reflect on them and will actively participate in identify how they approach challenging situations and develop solutions.

Community	Circular EELISA Community		
Coordinator	circular.community@upm.es	ECTS	
Kind of activity	Conference		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	
Starting date	2023-10-06	Ending date	2023-10-06
Target group	all	Teaching mode	In person
Link	https://community.eelisa.eu/activities/building-a-circular-future-the-university-of-the-future/		

Somatosensory science and artificial touch engineering: fertile synergies between neuroscience and biorobotics- guest lecture by Prof. Calogero M. Oddo

Description

The research delves into the concepts of smart city and smart parks and then identifies the measures that will transform El Retiro Park into a sustainable and smart park.

The objectives of the research are:

To present the concepts of "Smart Cities", "Sustainable Cities" and "Sustainable Smart Parks", relating, in turn, these three concepts to the management of historic parks.

To present the legal framework for the protection of historical parks (state, regional and local).

To present the existing state plans in Spain regarding Smart-Cities.

To present the technological and sustainability measures that have been carried out so far in the management of historic parks applied to the case study of El Retiro Park.

To propose, in the light of the different cases to be analyzed, new technologies for the management, maintenance and intelligent and sustainable conservation of the Buen Retiro Park.

To analyze the administrative procedure to be carried out for the implementation of new technologies in the Buen Retiro Park.

Community	Sustainable Buildings, Cities and Communities		
Coordinator	patricia.hlamas@hotmail.com	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG 3 - Good Health & Well-Being|SDG 4 - Quality Education
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/new-smart-and-sustainable-measures-for-the-management-of-historic-parks-the-case-of-el-retiro-park-in-madrid/		

HACK|BAY- a hackathon for everyone- challenge DISRUPTING HR PROCESSES WITH AI

Description

The activity is proposed as a teaching innovation project that will integrate the didactic itinerary of two subjects from two UPM Schools: on the one hand, the subject from the University Master's Degree in Urban and Territorial Planning (ETSAM): "Theory and practice of urban regeneration in the European framework "; on the other hand, the subject "Project Management " from the degree in Engineering and Telecommunication Systems.

The objective is the introduction of the digitalization process in the urban regeneration of disadvantaged neighborhoods. Students can:

be an agent of their own learning process;

learn from each other;

carry out learning within a multidisciplinary framework;

develop the practical work of then full contact wih and facing the real problems in vulnerable neighborhoods.

The PSL Paris University will collaborate with us in the course. Its students and teachers will conduct a similar training itinerary, which allows students from both universities to exchange knowledge and reflect together on the practical work they are doing. This type of activity was put into practice within the UPM ApS Project "Urban Resilience Classroom" during the 2020-21 academic year, being highly valued by the students from PSL Paris and UPM.

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	sonia.degregorio@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG 4 - Quality Education
Starting date	2020-10-01	Ending date	2021-02-28
Target group	master|bachelor	Teaching mode	Hybrid
Link	https://community.eelisa.eu/activities/resiliencia-urbana-regenerando-nuestros-barrios/		

Freshwater fish community maps

Description

This learning-service project proposes incorporating people as a fundamental part of the energy use process in municipal markets to make their business more viable. This approach complements and develops the technical training that students receive, making them leave their comfort zone to reinforce their learning, complementing the theoretical aspects with eminently practical questions.

Deliverables: Study of the energy and water consumption of the Mercado de la Paz during the last 3 years. Study of the savings in energy and water consumption obtained during the development of the project.

Community	Egalitarian Societies: Opportunities for Everyone (ES: O4E)		
Coordinator	jorge.gallego@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG 7 - Affordable & Clean Energy
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/?post_type=eelisa_activity&p=1198		

From minimally invasive surgery to nanorobotics. A voyage in the field of intervention robotics

Description

A household is considered to be in fuel poverty when it is unable to access basic energy services at home as a result of the lack of energy efficiency of the dwelling, high energy prices or low household income. This is a problem traditionally considered to be associated with winter conditions. However, in southern European countries, energy poverty is equally important during the summer months. According to the latest Eurostat survey, more than 20% of Spanish households report that they are unable to keep their homes at an adequate temperature in summer. This situation is expected to worsen due to climate change and, in urban areas, due to the heat island effect.

The experience proposed to be developed in this ApS activity is intertwined with the activities proposed in the project COOLTORISE: raising summer energy poverty awarenes to reduce cooling needs, funded by the H2020 programme of the European Commission in its call LC-SC3-EC-2-2018-2019-2020 - Mitigating household energy poverty, which aims to mitigate summer energy poverty in households in Spain, Italy, Greece and Bulgaria. It is planned to reach a minimum of 3100 households, 450 of them located in the city of Madrid, during the years 2022 and 2023. The activities foreseen with these households include the development of home visits, the development of awareness-raising and bill review workshops, the installation of low-cost kits for the improvement of indoor conditions, and the development of small community interventions in the public space (pocket gardens).

For the implementation of these activities, this project includes as a novelty the participation of university students as volunteers (see the Grant Agreement of the project). In addition to mitigating the situation of summer energy poverty in the municipality, the aim is to improve the training of professionals who, in a few years' time, will graduate with a technical degree from our universities, especially those related to the housing stock. In this context, service learning is the ideal vehicle for channelling the participation of the student community, providing a structured and regulated framework of knowledge and learning objectives that guarantees maximum benefit and recognition of the activities carried out.

This Learning and Service project is part of the activities proposed by the EELISA Community "Sustainable BCC" coordinated by professors Sergio Vega and Soledad García Morales from the School of Architecture.

Community	Sustainable Buildings, Cities and Communities		
Coordinator	carmen.sanchezguevara@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG 7 - Affordable & Clean Energy
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/sepas-summer-energy-poverty-agents/		

SVCP2023 – Summer School on Video Coding and Processing

Description

In November 2022, EELISA DISCOVERY and research community UPM TULE will organize the seminar "Working at community and district scales to accelerate energy transition" in the framework of the program UPM Seminars, promoted by the Vice-Rector's Office for Research, Innovation, and Doctorate of the Universidad Politécnica de Madrid. The session will be organized by the UPM Research Communities "Colaboratorio" and "Transition towards an Emissions-Free University" (TULE UPM), the UPM EELISA Community "DISCOVERY" involving members from UPM, ITU and UPB, Spain Community Energy Coalition, the energy cooperative "La Corriente" and other stakeholders that will be defined in the next future.

The seminar will be organized around the following specific themes, all of them related with the role of local and citizen's initiatives in the construction of new energy models:

Positive Energy Districts

Renewable energy at a local scale

Renewable energy communities and citizen energy communities

Energy models for low-carbon and sustainable cities.

Deliverables: A short report of the activity was delivered to the organizing team of the activity

Assessment: Participation to the whole activity

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG 7 - Affordable & Clean Energy
Starting date	2022-11-01	Ending date	2022-11-30
Target group	all	Teaching mode	Synchronous remote
Link	https://community.eelisa.eu/activities/working-at-community-and-district-scales-to-accelerate-energy-transition-seminar-at-upm/		

Organization of the 1 week summer school on photovoltaics "Summer
School on III-Sb applications: Solar Cells"

Description

It is a Final Year Project (TFG) for a student.

Deliverables: Delivery and public defense of the final year project (TFG)

Community	Green Planet		
Coordinator	jm.menendez@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG12 - Responsible Consumption & Production
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/?post_type=eelisa_activity&p=1230		

FemTechTalk "Entrepreneurship x Female Power"

Description

Final degree Thesis focused on the energy efficiency of the departmental Building of the School of Architecture throughout the analysis of the thermal bridges, thermal comfort, monitoring and energy simulation of the building and drafting of architectonical solutions.

Deliverables: Intermediate deliverable and final one with oral presentation.

Community	Sustainable Buildings, Cities and Communities		
Coordinator	carmen.sanchezguevara@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG12 - Responsible Consumption & Production
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master	Teaching mode	In person
Link	https://community.eelisa.eu/activities/hacia-la-transicion-ecologica-en-el-pabellon-nuevo-de-la-etsam/		

Seasonal School PHOTONS-@3 Photonic Technologies for Sensing Applications Seasonal School in Pisa

Description

General information about UPM International Summer Schools

The UPM International Summer Schools are multilingual study abroad programmes. They address some of the latest trends in engineering and architecture, combined with a taste of Spanish language and culture in one of Europe's most cosmopolitan cities.

The UPM International Summer Schools reach out to a worldwide audience by combining courses taught in English (Anglotech) and Spanish (Hispanotech).

Students of the UPM International Summer School will:

Get acquainted with the latest technological trends, visit laboratories and benefit from the insight of industry experts

Gain access to advanced knowledge on architecture and engineering, and visit notable buildings and sites

Experience learning in a multicultural classroom with peers from different parts of the world

Get a feeling for Spanish language, an appreciation of Spanish culture and enjoy the Spanish way of life

The UPM International Summer Schools offer face to face courses on one of the UPM's campuses. They also offers an interesting cultural and social programme, including day trips to world heritage sites like Toledo, Segovia, and guided walks around Madrid and visits to the Prado and Reina Sofía Museums.

Registration deadline:

Until 30 April 2023.

Topic:

Cities are made of several pieces from different periods and origins. By using multiple strategies, this workshop explores the concept of circularity as a wide field to find new and unexpected solutions to the development of future cities. In an abstract environment, the students will define a new reality by adapting and modifying already built objects. As architects dealing with

preexistences. Concepts such as size, stability, in-between spaces, and drawing and construction techniques will be considered, in a hands-on workshop experience.

Contact Hours70Dates 17-28 JulyDirectorJesús UlarguiPrice1,225€

Reduced participation fees, travel and subsistence support

With regard to the registration fee, UPM offers students from EELISA universities (BME, ENPC, ITU, PSL, SNS, SSSA, FAU, UPB, UPM) a discount which consists in the payment of 50% of the registration fee. A discount and support for travel and accomodoation cannot be granted twice to the same EELISA applicant for UPM international summer schools 2023. UPM decides on the final assignment of spots and fees. Travel and accommodation might be supported by your EELISA institution, please contact your local EELISA project coordinator.

Community	STAR – Sustainable Territories through Action & Research|Sustainable Buildings, Cities and Communities		
Coordinator	info.summer.school@upm.es	ECTS	
Kind of activity	Summer / Winter / Seasonal schools		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG12 - Responsible Consumption & Production
Starting date	2023-07-17	Ending date	2023-07-28
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/international-summer-school-patchwork-city-at-upm/		

AEROENTREPRENEURSHIP 2022

Description

This is an outreach activity framed in the yearly "Semana de la Ciencia y de la Innovación 2021", organized by the Region of Madrid government.

Some report links here:

https://www.escuelaindustrialesupm.com/ingeniero-industrial/ciencia-y-economia-circular-de-una-botella-a-un-macetero/

https://www.escuelaindustrialesupm.com/ingeniero-industrial/ciencia-y-economia-circular-de-una-botella-a-un-macetero/

The activity can be replicated year after year, with some improvement lines that have been identified.

The organizing team comprises around 10 students from the CircularizatE initiative.

Community	The CIRCULAR and REGENERATIVE CAMPUS (EELISA CRC Community)		
Coordinator	ruth.carrasco@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG12 - Responsible Consumption & Production|SDG 4 - Quality Education
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/the-perfect-circle-learning-how-regeneration-expands-plastics-lifespan/		

Towards nitrogen neutrality in agricultural systems, a way for sustainable Food Production

Description

Several students of the Circularizte initiative participated as facilitators and rapporteurs in the working groups of this seminar, including experts from companies, public administration, environmental NGOs, etc.

https://www.retema.es/noticia/nace-conversaciones-sobre-circularidad-un-espacio-para-el-dialogo-sobre-economia-circ-tWXBd

http://www.itd.upm.es/2021/07/28/conversaciones-sobre-circularidad/

https://www.conversacionescircularidad.es

Deliverables: Conversations report (in the process to be published by ecoembes), very interesting input for classes on circular economy

Community	The CIRCULAR and REGENERATIVE CAMPUS (EELISA CRC Community)		
Coordinator	ruth.carrasco@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG12 - Responsible Consumption & Production|SDG 4 - Quality Education
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	Synchronous remote
Link	https://community.eelisa.eu/activities/conversaciones-para-la-circularidad-with-ecoembes/		

An Introduction to Quantum Computation

Description

The students completed a series of activities in gymkhana or parkour format, answering questions and challenges based on the Circular Economy.

The EELISA Circular Community organized the activity "3VIA: A trivia trilogy to enhance knowledge and awareness on the circular economy" in November, as part of Madrid Science and Innovation Week. 3VIA was jointly undertaken by the Universidad Politécnica de Madrid, the Istanbul Technical University and the Universitatea Politehnica din București, and conceived as an online evening of collaborative learning and research to foster awareness on the circular economy across Europe for the youth.

The event included short informative presentations, quizzes and discussion sessions geared towards first- and second-year university students from diverse countries. Besides a brief presentation of the basics on the concept of the circular economy, and an introduction to the EELISA Alliance, the event consisted of three theme-based trivia involving intro-level questions related to the three main activities promoted by the circular economy: recycle, reuse, and repair. The trivia trilogy was completed with open discussions on circular economy open to all participants in the main session. Up to 64 participants (among them, 44 students) from different universities and countries joined the meeting and formed groups to solve the quizzes.

Community	Circular EELISA Community		
Coordinator	justo.gnavarro@upm.es	ECTS	
Kind of activity	Challenge		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG12 - Responsible Consumption & Production|SDG 4 - Quality Education
Starting date	2021-11-12	Ending date	2021-11-12
Target group	master|bachelor|educator	Teaching mode	In person
Link	https://community.eelisa.eu/activities/3via-a-trivia-trilogy-to-enhance-knowledge-and-awareness-on-the-circular-economy/		

CIRCULAR EELISA SHORT VIDEOS: CRITICAL RAW MATERIALS AND URBAN MINING

Description

The workshop is the second and final activity of the HI-QUAKE project of the Circular EELISA Community funded by the second EELISA joint call, topic 1: challenge-based learning projects. It is an international and interdisciplinary collaboration of two universities under the EELISA European University Alliance: İstanbul Teknik Üniversitesi (ITU) from Türkiye, and Universidad Politécnica de Madrid (UPM) from Spain. Graduate students from all universities and countries are welcome to attend!

HI-QUAKE aims to help participating professors, researchers and graduate students gain insight into the aftermath of the Kahramanmaraş earthquakes of February 2023 affecting Türkiye and Syria in a collaborative setting. The scope of this project encompasses (1) improving knowledge about the earthquakes' effects and damages on buildings and infrastructure, (2) collecting relevant information on the case at hand, (3) analyzing the technical, societal and economic features derived from the said earthquake areas, and (4) elaborating a set of seismic retrofit and restructuring measures and recommendations for the future.

Building on the seminar series on the main causes and modes of infrastructure failure and building collapses with the aid of AI applications held in Madrid in July 2023, the aim of this international workshop is to collaborate in two main tasks: (1) analyzing the physical, social, economic and environmental issues and impacts around the Kahramanmaraş earthquakes, and (2) generating ideas for seismic retrofit of existing buildings and the restructuring of the affected areas. Both tasks will utilize AI tools that will improve the efficiency of relevant scenarios and strategies.

The two-day workshop will comprise short seminars on the impacts of the Kahramanmaraş earthquakes, post-disaster restructuring of the affected areas physically and socio-economically, and the use of AI in scientific research, more specifically, in disaster preparedness and response. The seminars will steer the two challenges of analyzing the existing conditions and generating frameworks with the help of AI tools, mentored by ITU, UPM and IPA experts.

Participants will be presented workshop certificates, and digital EELISA badges with SDGs 11, 12, and 17.

Community	Circular EELISA Community		
Coordinator	imgeawaite@itu.edu.tr	ECTS	
Kind of activity	Workshop		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG12 - Responsible Consumption & Production|SDG17 - Partnerships for the Goals
Starting date	2023-09-28	Ending date	2023-09-29
Target group	master|phd|researcher|educator	Teaching mode	Hybrid
Link	https://community.eelisa.eu/activities/ai-driven-visions-post-disaster-retrofit-and-restructuring/		

Hackathon on Entrepreneurship and Innovation in Deserted Areas

Description

Data collection and analysis of waste generated on site and its management.

Community	Advanced Materials for a Sustainable Future		
Coordinator	alejandra.vidales@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action
Starting date	2021-01-01	Ending date	2021-12-31
Target group	all	Teaching mode	In person
Link	https://community.eelisa.eu/activities/principal-reseacher-in-project-circular-economy-in-residential-building-works/		

AgriDev - Climate resilient, biodiversity-based agriculture for sustainable development- Winter school in Pisa

Description

The objectives of this project are to develop an analytical and reflective view of the environmental situation of young people's immediate environment and to design nature-based solutions to respond to identified environmental challenges.

More specifically:

Promote scientific culture from experimentation in the classroom and outside it.

Connect with entities and initiatives in your environment that work for the environmental

improvement of your neighborhoods.

Develop digital and scientific skills, through the development of sensors developed by young

people themselves.

Encourage creativity and cooperation in the classroom as a way to address environmental

challenges.

Encourage their empowerment and initiative for the ecosystem improvement of their

neighborhood.

Test with Nature-based Solutions as a way to improve the environmental quality of your

nearest environments.

External actors involved:

Basurama, Asociación Plataforma Nave Boetticher, MonteMadrid. Colegio de Educación Infantil y Primaria de República de Brasil y el Centro de Educación Especial Ponce de León.

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	margarita.martinez@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/young-innovator/		

FAU visit of student Community on Energy Transition and International Exchange

Description

The Final Degree Work or Diploma Project (TFG) will consist of the elaboration, presentation, and defense in a panel of academic judges an original academic work, carried out individually and related to any of the disciplines studied during the degree program. It must be based on the creative application of transversal knowledge that affects diverse areas and subjects in the field of architecture.

Assessment: Lectures attendance (5%), Oral presentations assessed by all the professors assigned to the TFG classroom, approximately 15 different marks (20%+30%), Written report by the supervisor (10%). At least 3 written reports by experienced faculties connected with the topic (35%).

Deliverables:

First oral presentation: title & topic proposal.

Intermediate oral presentation.

Deliverable written document.

Final oral presentation and defence.

Oral presentation and defence (only in case of obtaining the maximum mark in Deliverable #4).

Community	Sustainable Buildings, Cities and Communities		
Coordinator	manuel.rodriguezp@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master	Teaching mode	In person
Link	https://community.eelisa.eu/activities/tfg-rehabilitacion-energetica-del-pabellon-nuevo-de-la-etsam/		

Tech for Sustainability Campaign & Hackathon 2023

Description

The Final Degree Project or Diploma Project (TFG) will consist of the preparation, presentation and defense in a panel of academic judges an original academic work, carried out individually and related to any of the disciplines studied during the degree. It must be based on the creative application of transversal knowledge that affects various areas and subjects in the field of architecture.

The initial engine of the work has been the student's personal interest in energy rehabilitation and the efficiency of the facilities as key aspects of the future in sustainable architecture.

Assessment: Lectures attendance (5%), Oral presentations assessed by all the professors assigned to the TFG classroom, approximately 15 different marks (20%+30%). Written report by the supervisor (10%). At least 3 written reports by experienced faculties connected with the topic (35%).

Community	Sustainable Buildings, Cities and Communities		
Coordinator	manuel.rodriguezp@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action
Starting date	2021-01-01	Ending date	2021-12-31
Target group	bachelor	Teaching mode	Hybrid
Link	https://community.eelisa.eu/activities/tfg-las-viviendas-de-san-blas-diseno-y-rehabilitacion-de-instalaciones/		

Curso La Tierra como Material de Construcción en el Siglo XXI

Description

Set of seminars to introduce students to the actions that will contribute to the transformation of university campuses from the perspective of sustainability with different transversal axes focused on energy, water, buildings, urban green infrastructure, mobility, monitoring, and change of habits. The aim is to make students aware of the problems we are currently facing in the field of sustainability, decarbonization, ecological transition, energy efficiency, among other things. Moreover, it is the goal to present the university campus as an environment in which to apply certain multidisciplinary and collaborative actions between students, teachers and administrative and service staff.

7 hours of lecture, 23 hours of personal work

Evaluation by means of student participation in 5 of the 7 sessions and

the completion of a reflection exercise on the course's contents.

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	1
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master	Teaching mode	Synchronous remote
Link	https://community.eelisa.eu/activities/introduction-to-seminars-on-campus-sustainability/		

International Summer School "Nanotechnology" at UPM

Description

Set of online courses aiming to introduce students to the possible actions that will contribute to urban transformation from the perspective of sustainability with topics focused on Agenda 2030, SDGs, partnership management, air quality, noise management, construction and climate change. Through this training, students might be aware of the problemas we are currently facing in the field of sustainability, decarbonization, ecological transition, energy efficiency, among others, and to present the city as an environment where certain multidisciplinary and collaborative actions can be applied. This set of online courses gives continuity to the first set of online courses named "Introduction to Campus Sustainability" to be delivered in November 2022.

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	1
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action
Starting date	2023-04-01	Ending date	2023-04-30
Target group	all	Teaching mode	Asynchronous remote
Link	https://community.eelisa.eu/activities/lunch-talks-exploring-campus-sustainability/		

International Summer School "Technology applied to Health and Transport" at UPM

Description

This workshop will be organized following a hackathon format and oriented to design innovative solutions to one or various challenges linked to campus sustainability. These challenges will be proposed by the coordination team of EELISA DISCOVERY based on the diagnostics realized by the students in the framework of the Climate Fresk workshop.

Furthermore, this workshop will be connected to the two sets of seminars organized by EELISA DISCOVERY as the technical solutions of these lectures will constitute valuable inputs to inspire students. Participants will work in groups of 4-6 people and will have to present their prototypes in a pitch to a jury that will evaluate their proposal. Then, on the basis of this evaluation, teams will work together to build common solutions that will be enriched by all proposals. The final solutions will be then studied by an expert panel in order to estimate their viability and possibility to implement them in the campus.

This workshop is aimed to be organized jointly with all EELISA partners being part of the EELISA DISCOVERY community. Thus, it will depend on collaborations formalized at that time.

Assessment: Participation to the whole activity and presentation of a project that would adress the challenge/s proposed.

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	1
Kind of activity	Contest		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action
Starting date	2021-01-01	Ending date	2021-12-31
Target group	all	Teaching mode	In person
Link	https://community.eelisa.eu/activities/hackathon-designing-a-sustainable-campus/		

International Summer School "Artificial Intelligence" at UPM

Description

The set of training courses aims to introduce students to the possible actions that will contribute to the transformation of University Campuses from the perspective of urban sustainability with different transversal axes focused on energy, water, buildings, urban green infrastructure, mobility, monitoring and change of habits. Through this introduction students might be aware of the problems we are currently facing in the field of sustainability, decarbonization, ecological transition, energy efficiency, among other things, and to present the University Campus as an environment in which to apply certain multidisciplinary and collaborative actions between students, teachers and administrative and service staff. This set of training courses will be followed by a second one named "Exploring Urban Sustainability" to be delivered in April 2023.

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	1
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action
Starting date	2022-11-01	Ending date	2022-11-30
Target group	all	Teaching mode	Asynchronous remote
Link	https://community.eelisa.eu/activities/lunch-talks-1-introduction-to-campus-sustainability/		

Summer School "Sustainable farming and food systems in the EU law and policy framework" in Pisa

Description

Climathon is a global hackathon initiative promoted by EIT Climate-KIC that takes place in many different cities around the World with the aim of generating innovative ideas to rethink cities and the future in which we want to live. The event was open to the participation of companies, institutions, associations, students, researchers, entrepreneurs, as well as technicians and professionals.

Participants had to design innovative solutions to one of the following challenges in groups of 4-6 people:

How to make the food system in Madrid more sustainable?

How to communicate, educate and raise awareness about the problems related to Climate Change in Madrid?

The teams had to present their prototypes in a Final Pitch and a jury chose the winner team, which won a basket of products from Huertos Vega del Tajuana. In addition, a certificate of participation was given to all participants and all teams are able to present their ideas to the Climathon award call that Climate-KIC has recently published to incubate projects aligned with the New European Bauhaus.

Community	Designing a Sustainable and Decarbonized University (DISCOVERY)		
Coordinator	francesca.olivieri@upm.es	ECTS	
Kind of activity	Contest		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action|SDG 2 - Zero Hunger
Starting date	2021-01-01	Ending date	2021-12-31
Target group	all	Teaching mode	In person
Link	https://community.eelisa.eu/activities/climathon-madrid-2021/		

Reflexión, debate y publicación en inglés en el blog de la comunidad EELISA de cuestiones publicadas en el blog "Accesible" de Miguel Ángel Valero

Description

HACK THE CITY was the first activity carried out within the EELISA-on-the-MOVE community. It consisted of a 2-day long hackathon (21st – 22nd May 2021) coordinated by professor Fabián García Pastor (EEMOVE member).

This flagship project was oriented to collective thinking between over 150 students, scholars and other stakeholders to map potential urban mobility problems, and most innovatively, to design solutions to overcome them.

Assessment: A specific jury evaluated the work made by students during the 2 days.

Community	EELISA-on-the-MOVE		
Coordinator	fabian.garcia@upm.es	ECTS	
Kind of activity	Contest		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action|SDG 4 - Quality Education
Starting date	2021-05-21	Ending date	2021-05-22
Target group	all	Teaching mode	Synchronous remote
Link	https://community.eelisa.eu/activities/hack-the-city-hackathon/		

EELISA Challenge. Transforming the construction value chain through technology: closing the loop of construction and demolition waste (CDW). European Week for Waste Reduction 2021

Description

This activity consists in developing a business model for the proposals made in the Flagship Project 2.

Deliverables:

Creation of business model from the specific solutions designed during the previous activity "international seminar: moving towards new urban centralities: Multimodal stations".

Assessment: A specific jury was used to evaluate the students work.

Community	EELISA-on-the-MOVE		
Coordinator	juanmanuel.deandres@upm.es	ECTS	1
Kind of activity	Workshop		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action|SDG 4 - Quality Education
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master|bachelor	Teaching mode	Synchronous remote
Link	https://community.eelisa.eu/activities/workshop-business-model/		

Online Women in Data Science (WiDS) Conference

Description

Three-day long (14th - 16th October 2021) international seminar that took place at the UPM School of Architecture and Príncipe Pío Interchange Station in Madrid.

The seminar mainly consists of a student workshops addressing specific urban mobility challenges in the context of Príncipe Pio station. It is also combined lectures by experts and stakeholders on different topics related to urban mobility and town planning, and guided technical visits.

Deliverables:

SWOT analysis identifying concrete objectives to be addressed in the context of Príncipe Pio station.

Specific solutions designed by peers-of-students addressing the mentioned objectives.

Assessment: A specific jury evaluated the work made by the students.

Community	EELISA-on-the-MOVE		
Coordinator	andres.monzon@upm.es	ECTS	3
Kind of activity	Workshop		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action|SDG 4 - Quality Education
Starting date	2021-10-14	Ending date	2021-10-16
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/international-seminar-moving-towards-new-urban-centralities-multimodal-stations/		

Seasonal School Economics of Innovation and Technological Change in Pisa

Description

Community	Engineering & Architecture responding to societal challenges, cultural heritage & common European identity (HEAR-European Identity)		
Coordinator	anabelen.berrocal@upm.es	ECTS	
Kind of activity	Challenge		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG13 - Climate Action|SDG17 - Partnerships for the Goals|SDG 4 - Quality Education
Starting date	2022-11-01	Ending date	2022-11-30
Target group	master|society	Teaching mode	Blended
Link	https://community.eelisa.eu/?post_type=eelisa_activity&p=3488		

International Summer School "Patchwork City" at UPM

Description

In this seminar, a multidimensional and interdisciplinary database will be generated including information such as satellite images and cartography as well as field and meteorological data. The integration of field data and products derived from satellite imagery time series is a key aspect for urban forest assessment and management. The participants will collect, structure and enter the information in the system. Information on the necessary activities and technical needs in the restoration process or other actions associated to the territorial units will be also defined . Professors from different specialities will help the participants to collect organize and enter the information.

The objective of this seminar/workshop is the development of a Territorial Information System linked to the spatial information of the units included in the "Metropolitan Forest" and "Producer Neighborhoods", projects led by the city of Madrid.

Participation requirements

The course/seminar is designed for undergraduate and graduate students. We expect a minimal background in remote sensing and / or programming, but we welcome any student with a strong interest in modern remote sensing approaches aimed at sustainability.

Coordinators

UPM: Prof. Alicia Palacios, Prof. Silvia Merino de Miguel

UPB: Assoc. Prof. Anamaria Rădoi, Prof. Alina Catrinel Ion, Prof. Dragos Taralunga

ITU: Prof. Behçet Uğur Töreyin, Prof. Elif Sertel

Travel and subsistence support

There are 8 spots for applicants from EELISA partner universities, for which enrollment fees are waived. Scuola Sant'Anna decides on the final assignment of these spots. Travel and accommodation might be supported by your institution, please contact your local EELISA project coordinator.

Community	Green Planet		
Coordinator	silvia.merino@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG15 - Life on Land|SDG 2 - Zero Hunger
Starting date	2023-04-24	Ending date	2023-04-28
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/activities/creation-and-start-up-of-a-multidisciplinary-territorial-information-system-for-the-proposal-of-activities-within-the-framework-of-the-projects-metropolitan-forest-and-producer-neighborhoods/		

Interns (f/m/d) (Economics, Business Administration) at the Ludwig Erhard ifo Center for Social Market Economy and Institutional Economics in Fürth, Germany

Description

Community	Engineering & Architecture responding to societal challenges, cultural heritage & common European identity (HEAR-European Identity)
Coordinator	graziella.trovato@upm.es	ECTS	
Kind of activity	Workshop
Principal SDG	SDG11 - Sustainable Cities & Communities	Others SDG	SDG17 - Partnerships for the Goals|SDG 4 - Quality Education
Starting date	2022-10-17	Ending date	2022-10-18
Target group	master|bachelor	Teaching mode	In person
Link	https://community.eelisa.eu/?post_type=eelisa_activity&p=3489