



**UNiversity Exchange program
creating UNique Learning
environments for urban
HEALTH**

2019
1st edition



Project Director **Ester Higuera García**
RESEARCH GROUP ABIO
UNIVERSIDAD POLITÉCNICA DE MADRID



ARUP

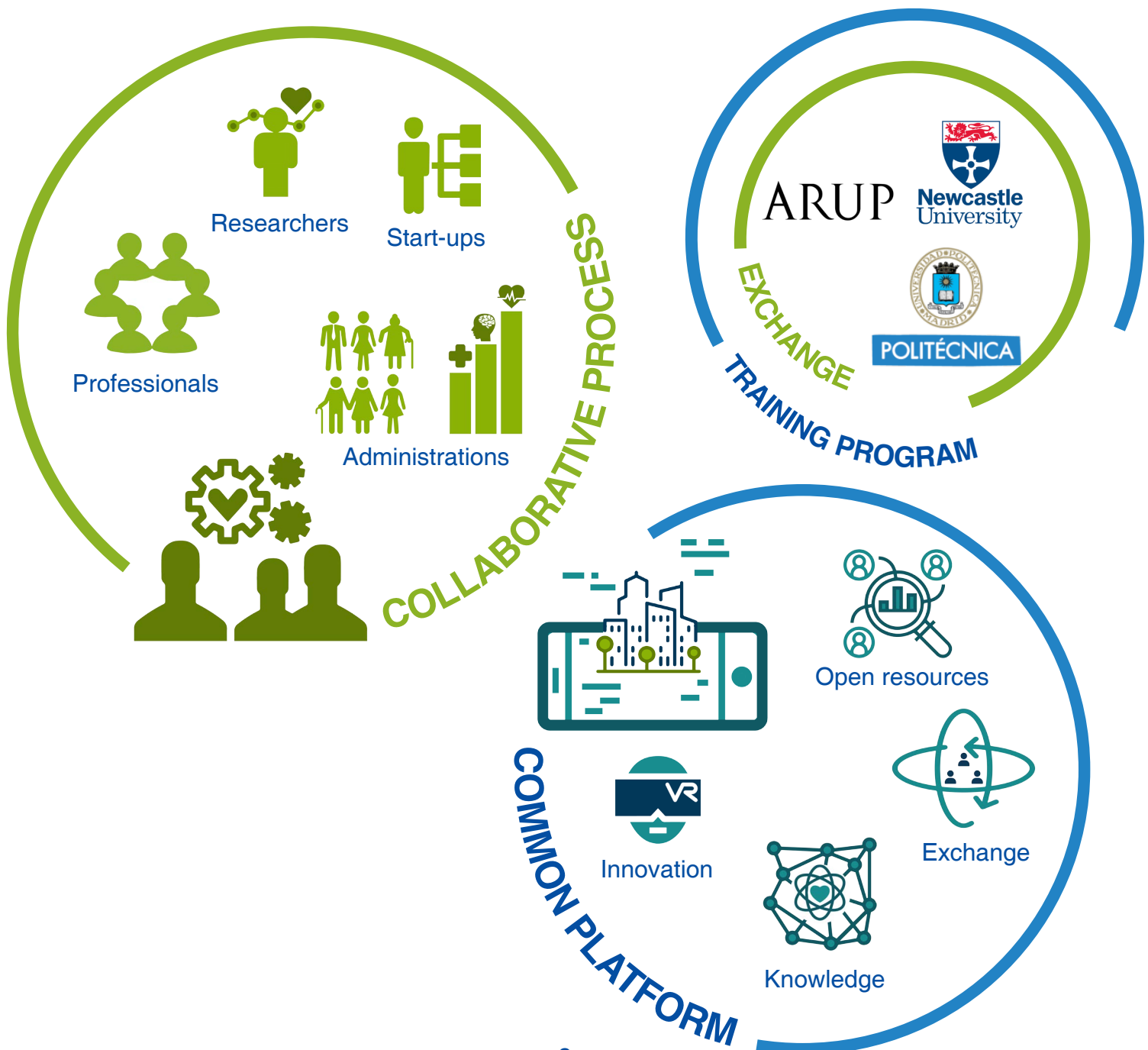
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*Apply for information.
The program offers a grant in ARUP - Madrid,
after selection process.

What is UNI-Health?

UNI-Health is an **European Knowledge Exchange and Innovation Training Program** engaging **students** and **researchers** from EU Universities in the production of a database of technological advances and applications **improving urban health conditions**, through **Seminars** and **Working Groups**, which will lead to an **interactive virtual and open access library**, and a final Festival with practical presentations and a Knowledge Exchange Workshop, linking Universities with the market.



Why?

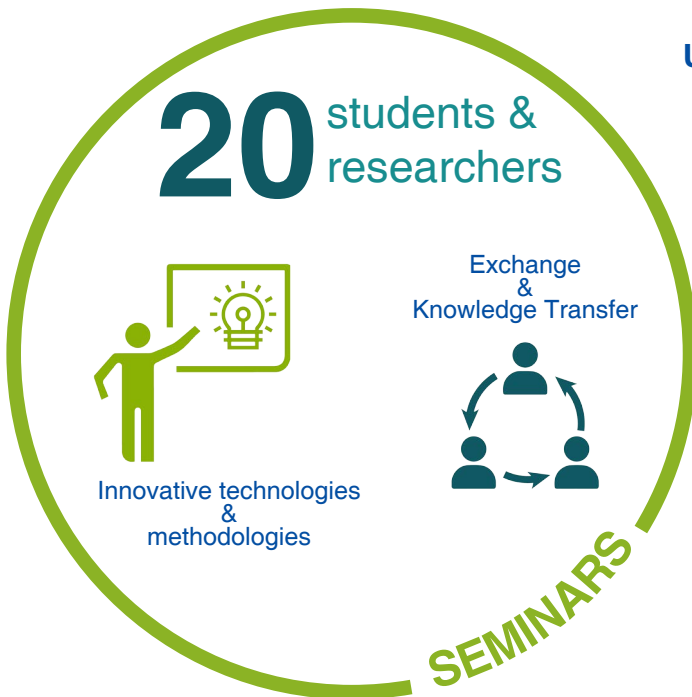
Non-clinical Factors and Determinants of Health such as environmental factors are crucial for the formulation of consistent **health policies**. **Promotion of healthy life styles** and **well-being for all at all ages**, requires more data and analysis tools to address health-related issues such as environmental degradation, aging population or climate change factors. A better understanding of this data and its integration to clinical data, will improve not only healthcare services, but also urban services and management.

UNI-Health pursues to review recent advances in **design** and **technologies** promoting **healthier cities**, and exchange knowledge between sectors (education, research, market and citizens). In doing so, attention to **environmental parameters** relevant to health and the most innovative technologies and solutions to monitor, manage and address this public health related data will be paid, and in turn, **specific training on urban health** will be provided.

Exchange and Training Program on the urban determinants of public health creating a UNlque learning, experimental and networking environment, being Universities linkage players between technologies developers, communities and decision and policy-makers. It includes **Seminars** and **Working Groups** on market advances and best practices open to students and researchers, with mentoring, assistance from a well-recognized company and guest speakers, to create a virtual library and a Workshop and a Festival to discuss the most innovative ideas.

Who can apply?

UNI-Health educational methodology is based in an exchange program, structured in two different and complementary parts:



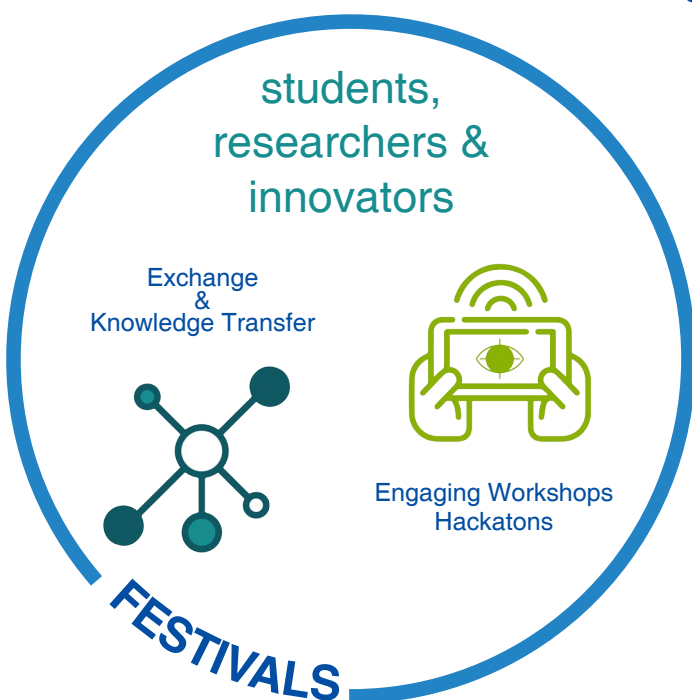
UNI-Health SEMINARS

are addressed to **master** and **PhD students** and **researchers** from different fields with expertise in urban design, urban planning, health and policy-making.

The program is open to **public health** and **epidemiology**, **architecture**, **civil engineering**, **forestry** or **agricultural engineering**, **biology** or **IT** students, and related profiles.

PRICE **360€***

*See detailed information in **seminars** section.



UNI-Health FESTIVALS

are scheduled as **closing event** of the course. The project developed during the seminars and workshops will be presented to the **local administration** and **citizens** involved.

Also there will be **workshops** for citizens and **guided visits** to rise awareness about healthy habits and lifestyle and how **urban environment** can impact on health.

Other activities like **hackatons**, **showrooms** or **exhibitions** will take place during the festival.

Program

UNI-Health is a Training Exchange Program focused on healthy urban environment issues. This Program is based on two Pilots:



AGE-FRIENDLY CITIES

Spring: 02/2019 – 06/2019

SEMINAR: February - May 2019

Study case on a local neighborhood
Citizen participation
Simulations and Labs

FESTIVAL: 20th-21st June 2019

Open call for IT developers and stakeholders
Presentation to local administration
Citizen workshops



INNOVATING WITH NATURE FOR HEALTHIER ENVIRONMENTS

Fall: 07/2019 – 12/2019

SEMINAR: October 2019

Study case on a local problematic: green spaces
Citizen participation
Simulations and Data Visualisation
VOICE EIT Health Living Labs

FESTIVAL: December 2019

Inauguration of the new Research Centre for Active Ageing
Open call for IT developers and stakeholders
Presentation to local administration

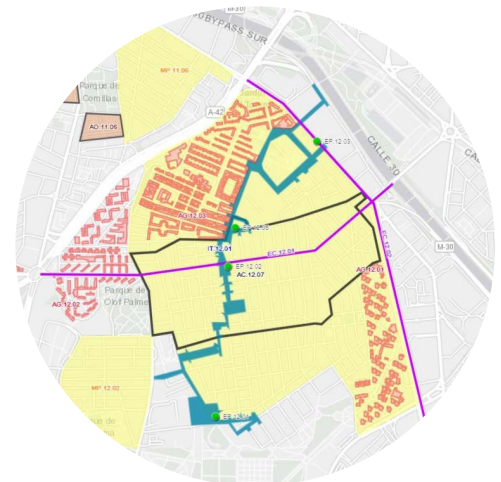
The neighborhood: USERA



USERA district is located in the south-east of Madrid. There we can find several Renovation Neighborhoods, created in the middle 70s and 80s to eradicate poor housing settlements in the south-east peripheral area, due to the strong rural migration between 50s and 60s.

It comprises seven quarters: Orcasitas, Orcasur, San Fermín, Almendrales, Moscardó, Zofio and Pradolongo. Its limits are defined by M-40 at south, A-42 at west and north-west and by Manzanares river at east and north-east. It takes a surface of 770,28 hectares with a population of 134.015 inhabitants, according to 2016 data.

The **opportunity** to work on this area is due to local administration of Madrid, that has planned **Madrid + Natural** program in Usera district. The main objective is to renovate this area from Julián Marías Square, Pablo Ortiz Street and Tizas Square. This project is included in a more ambitious agenda that aims **to create a connection corridor** between Manzanares river and Pradolongo Park.



MADRID RECUPERA
Urban Renovation Strategy

The project “**sets the base for renovating the public space from an integral perspective, through the creation of living pathways in Urban Renovation Areas in Madrid city**”¹. It aims to coordinate the implementation of smaller projects, through the execution of a first pilot to improve the conditions according to climatic comfort and livability of public space. In this context, it is complementary to other Plans of Urban Renovation in Madrid. All these issues are completely linked with the objectives of this course.

Livable Pathways- Basis for intervention in public space in Urban Renovation Areas, Improvistos 2016.

Team

The project is coordinated by the Research Group **ABIO: Bioclimatic Architecture in a Sustainable Environment**, at the Universidad Politécnica de Madrid (UPM) and the **University of Newcastle**. **ARUP** is the third and external partner of this team, creating a connection outside the academy.



Research Group **ABIO** from the Universidad Politécnica de Madrid shares its experience in **green urbanism** and **nature-based solutions**. They have a strong research background on topics such as climate change, sustainable methodologies, landscape and bioclimatic design, from a theory and practical approach. Their expertise comprises both architectural and urban projects as well as territorial planning strategies, always linked with a **sustainable** and **environment-friendly** approach.



Newcastle University has a deep knowledge on **age-friendly communities** and a large expertise on the application of planning strategies to create **healthier communities**. They have developed **innovative tools** and methodologies to **engage citizens** in the urban process towards **healthier environments** and vibrant communities through a collaborative and **co-construction** process.

ARUP

OVE ARUP&PARTNERS S.A.U. is an international Consultancy, with presence in many European countries, and an extensive **know-how** and experience in research, training and consultancy work to promote **healthy buildings** and **cities**. The **practical approach** and implementation strategies for the data management and urban analysis is a added value to this program, as it offers the opportunity to approach to **real study cases** with specific and applied solutions.

Seminars

The seminars of this first edition are organized every Monday from February to April of 2019, following this program:

FEBRERO/FEBRUARY	
LUNES 4	Inicio curso y presentación/Welcome session and presentation
12-12:30 h	Bienvenida curso. Presentación del proyecto UNI-Health/ <i>Welcome to the course and presentation of UNI-Health project</i> Coordinadoras UPM: Ester Higuera, Emilia Román, Cristina Gallego, Elisa Pozo
12:30-14 h	Salud urbana/ <i>Urban Health</i> José Fariña Tojo. Profesor Emérito de la Universidad Politécnica de Madrid. Arquitectura, urbanismo y sostenibilidad.
Almuerzo saludable/Healthy Lunch	
	Presentación del taller. Problemática del barrio Usera/ <i>Workshop presentation. Local problematic and presentation of the neighborhood Usera</i> Coordinadoras UPM
15-16 h	Proyecto "Itinerarios Habitables"/ <i>Project "Livable Pathways"</i> Estudio Improvisos
16-17 h	Proyecto urbanización tramo de Usera/ <i>Urban and Design Project Usera</i> Marcos Montes. Grupo de Estudios y Alternativas 21, S.L (GEA 21)
17-18 h PRESENTACIÓN + ACTIVIDAD	Presentación del taller y formación de grupos. Localización y delimitación geográfica del ámbito de estudio: Distrito de Usera (Madrid)/ <i>Presentation of the workshop and forming student groups. Local problematic and presentation of the District Usera (Madrid)</i>
LUNES 11	Cambio climático y salud/Climate change and health
12-13 h	Cambio climático y salud. Temperaturas extremas/ <i>Climate change and health. Extreme temperatures.</i> Cristina Linares. Doctora en Medicina Preventiva y Salud Pública, del Instituto de Salud Carlos III.
13-14 h	Evaluación bioclimática con la herramienta HADES/ <i>Bioclimatic evaluation through HADES tool.</i> Green Building Council España
Almuerzo saludable/Healthy Lunch	
15-17 h	La situación de las personas mayores en el Distrito de Usera/ <i>The situation of the elderly in Usera District</i> Carmen Herrera. Jefa del Departamento de Servicios Sociales de Usera
17-18 h ACTIVIDAD	Búsqueda de información por grupos, en función del tema asignado: Apps, programas informáticos, sistemas tecnológicos, productos, empresas innovadoras, etc. Presentación de resultados por grupos. Debate./ <i>Information research by groups, according to assigned topic: Apps, informatic programs and software, technological advances, products, innovative start-ups, etc. Presentation of results by groups and discussion.</i>
LUNES 18	La salud psíquica en la ciudad/Psychological health in the city
12-14 h	Psicología ambiental urbana. Paisaje urbano, espacios públicos y espacios verdes/ <i>Urban environmental psychology. Urban landscape, public spaces and green areas</i> José Antonio Corraliza. Catedrático de la Universidad Autónoma de Madrid. Experto en Psicología Social y Ambiental.
Almuerzo saludable/Healthy Lunch	
15-17 h	Entornos urbanos seguros. La perspectiva de género en el diseño urbano. Diseñando para todas las personas/ <i>Safe urban spaces. Gender perspective in urban design. Designing for all</i> Cristina Gallego Gamazo. Asociación Otro Hábitat. Doctora arquitecta por la UPM. Especialista en procesos de participación inclusivos e integradores.
17-20 h	Visita al barrio. Toma de datos in situ y entrevistas con agentes del barrio./ <i>Visit to the neighborhood. Data collection in</i>
LUNES 25	Innovación en la tercera edad. Experiencia de Newcastle/Innovating in third age. Newcastle experience
12-13 h	Envejecimiento e implicaciones para la sociedad/ <i>Ageing and its implications for society.</i> Professor Tom Scharf. University of Newcastle.
13-14 h	Ciudades Amigables con las Personas Mayores. El caso de Newcastle./ <i>Age-friendly cities. Newcastle experience.</i> Barbara Douglas. University of Newcastle.
Almuerzo saludable/Healthy Lunch	
15-16 h	Innovación y envejecimiento. Proyectos en Newcastle/ <i>Innovation and ageing. Projects in Newcastle.</i> Graham Armitage. University of Newcastle.
16-17 h	Proyecto hogares futuros/ <i>Future Homes.</i> Professor Rose Gilroy. University of Newcastle.
17-18 h ACTIVIDAD	Búsqueda de datos para caracterización del barrio por equipos. Análisis de los datos obtenidos. Con la información proporcionada en la primera parte, los alumnos deberán elaborar una matriz DAFO por cada área temática tratada./ <i>Data research for characterisation of the neighborhood by teams. Analysis of the data. Students will be asked to create a SWOT matrix applied to each of the topics considered</i>

MARZO/MARS		
LUNES 4	Enfoque práctico. Análisis de datos y proyectos/Practical approach. Data analysis and projects	
12-14 h	Metodología WELL, certificaciones. Metodología SROI. Buenas prácticas y ejemplos de diseños saludables/ <i>WELL methodology and certifications. SROI certification. Good practices of healthy designs</i> Susana Saiz. Directora asociada en ARUP sede Madrid. Doctora arquitecta por la Universidad Politécnica de Madrid.	UPM
Almuerzo saludable/Healthy Lunch		
15-17 h	Proyecto MODIFICA. La isla de calor de Madrid. Contexto Usera/ <i>MODIFICA project. The heat island in Madrid. Usera</i> Emilia Román. Profesora Departamento de Urbanística y Ordenación del Territorio de la ETSAM, UPM	UPM
17-18 h ACTIVIDAD	Búsqueda de datos para caracterización del barrio por equipos. Análisis de los datos obtenidos. Con la información proporcionada en la primera parte, los alumnos deberán plasmar su análisis DAFO en un Plano de Diagnóstico Integral/ <i>Data research for characterisation of the neighborhood by teams. Analysis of the data. Students will be asked to translate their SWOT analysis into a Integral Diagnosis Cartography.</i>	
LUNES 11	Datos ambientales y entornos urbanos/Urban environments and data	
12-14 h	Parámetros ambientales, habitabilidad, bioclimática y salud/ <i>Environmental parameters, bioclimatic and health.</i> Ester Higuera. Profesora Titular de la Universidad Politécnica de Madrid experta en Urbanismo Bioclimático y Entornos Habitables.	UPM
Almuerzo saludable/Healthy Lunch		
15-17 h	Accesibilidad universal. Los retos en la tercera edad/ <i>Universal accessibility. Challenges for the elderly.</i> Carlos Rodríguez Mahou. Centro de Referencia Estatal de Autonomía Personal y Ayudas Técnicas (CEAPAT)	UPM
17-20 h	Coordinadoras UPM y Carlos Rodríguez. Visita al barrio- estudio de accesibilidad. Toma de datos y comprobación del análisis realizado. Constraste de resultados./ <i>Visit to the neighborhood - accessibility study. Data collection and verification of the analysis. Discussion of the results.</i>	Barrio
LUNES 18	Visualización de datos de salud urbana/Visualisation of urban health driven data	
12-14 h	Cartografías. Sistemas de Información Geográfica/ <i>Cartography. Geographic Information Systems</i> Pedro Rico Contreras. Empresa ESRI (ArcGis)	UPM
Almuerzo saludable/Healthy Lunch		
15-17 h	Visualización de datos en entornos urbanos. Ejemplos aplicados. Programación visual/ <i>Data visualisation in urban environment. Applied examples. Visual programming</i> Elisa Pozo. Arquitecta urbanista especialista en programación visual de datos.	UPM
17-20 h	Elaboración de propuestas por grupos para la mejora del ámbito, considerando tanto los problemas detectados, como los aspectos positivos en los que se pueden apoyar las actuaciones que se consideren./ <i>Proposals by groups for the improvement of the neighborhood, considering both detected problems as well as the positive aspects that can reinforce the actions.</i>	Barrio
LUNES 25	Primeros análisis y conclusiones/First analysis and conclusions	
12-14 h	Salud y territorio. El mapa como instrumento para el conocimiento y la participación./ <i>Health and territories. Instrumental cartographies for sharing knowledge and citizen participation.</i> Andrés Iriso Calle. Dirección General de Salud Pública. Sección de Zoonosis y Riesgos Biológicos. Consejería de Sanidad. Comunidad de Madrid.	UPM
Almuerzo saludable/Healthy Lunch		
15-17 h	Experiencias del Consejo sectorial de las Personas Mayores de Madrid. Plan de Acción Madrid Ciudad Amigable con las Personas Mayores/ <i>Experiences of the Sectorial Council of Elderly People in Madrid. Action Plan "Madrid Age-Friendly City"</i> Fidel Revilla González. Consejo sectorial de las Personas Mayores de Madrid.	UPM
17-18 h	DAFO y diagnóstico. Exposición de resultados por grupos. Debate con representante del consejo sectorial de las Personas Mayores de Madrid y asociaciones de vecinos./ <i>SWOT and diagnosis. Exhibition of the results by groups. Discussion with spokesperson of the Advisory Council for Older People of the City of Madrid.</i>	

ABRIL/APRIL		
LUNES 1	Talleres y tutorías/Workshops and mentoring	
12-14 h	Elaboración de propuestas por grupos para la mejora del ámbito./ <i>Proposals by groups for the improvement of the neighborhood.</i> Coordinadoras UPM	UPM
Almuerzo saludable/Healthy Lunch		
15-17 h	Visita laboratorio e instalaciones ARUP/ <i>Visit ARUP's lab.</i> Susana Saiz. Directora asociada en ARUP sede Madrid. Doctora arquitecta por la Universidad Politécnica de Madrid.	ARUP
LUNES 8	Presentaciones, feedback y revisiones de propuestas y networking/Presentations, feedback, proposal review and networking	
12-14 h	Conclusiones finales y presentación de los resultados por grupos. Debate con agentes del barrio (administración local, tejido asociativo y vecinos)/ <i>Final conclusions and presentation of the results by groups. Discussion with the agents of the neighborhood (local administration, citizen association and neighbors)</i> Coordinadoras UPM + Junta de Distrito de Usera + NCL en Streaming + Local Associations	UPM
Almuerzo saludable/Healthy Lunch		
15-17 h	Evaluación y debate de las estrategias de mejora del barrio e identificación de soluciones técnicas asociadas con agentes del barrio en la ETSAM (administración local, tejido asociativo y vecinos)/ <i>Evaluation and discussion of the strategy schemes for the improvement of the neighborhood and identification of related technical solutions with the agents of the neighborhood (local administration, citizen association and neighbors)</i> Coordinadoras UPM + Junta de Distrito de Usera + NCL en Streaming + Local Associations	UPM
17-18 h EVALUACIÓN Y DEBATE	Coordinadoras UPM. Publicación online de los resultados/ <i>Online publication of results</i>	
SEMANA SANTA/EASTER		

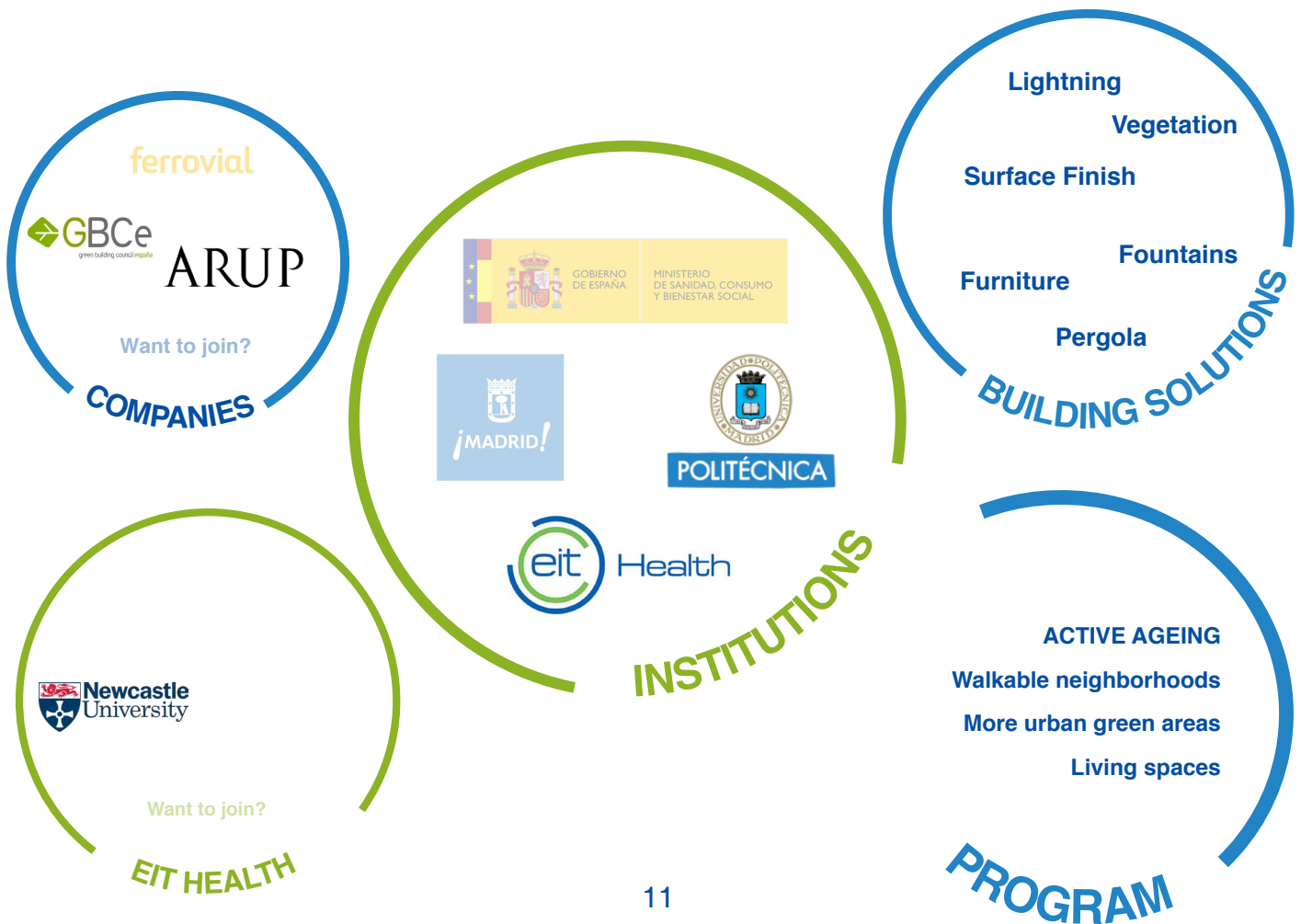
*The price includes:

Continuous Course UPM Diploma on **Planning and Health in the city**
 (Assistance > 80% and workshop project in teams of 4 people)
 Knowledge on **urban design with health criteria**
 Lunch “healthy-picnics” every monday at the faculty
 Visits to the neighborhood and exhibition in Madrid
 On-line **specialize material and documentation**

Festival

The festival will be organized on 20th and 21st of June as a closure activity of the course. It will be held between the **Escuela de Arquitectura de Madrid** and the **Junta de Distrito de Usera**. Through the activities that will be scheduled during these days, we will have the opportunity to link the academic institutions with companies, start-ups, local administration and local associations from the neighborhood.

SEMANA SANTA/EASTER		
LUNES 22		
12-14 h	Coordinadoras UPM + ARUP + NCL. Jornadas de coordinación del festival/ <i>Coordination sessions for the festival</i>	UPM
MAYO/MAY		
LUNES 6		
12-14 h	Coordinadoras UPM + ARUP + NCL. Jornadas de coordinación del festival/ <i>Coordination sessions for the festival</i>	UPM
LUNES 13		
12-14 h	Coordinadoras UPM + ARUP + NCL. Jornadas de coordinación del festival/ <i>Coordination sessions for the festival</i>	UPM
LUNES 20		
12-14 h	Coordinadoras UPM + ARUP + NCL. Jornadas de coordinación del festival/ <i>Coordination sessions for the festival</i>	UPM
JUNIO/JUNE		
JUEVES 20		
FESTIVAL		
12-14 h	Presentación de resultados: Ciudades para caminar e incremento de zonas verdes/ <i>Presentation of results: Walkable cities and improvement of green areas</i>	UPM
18-20 h	Presentación de resultados: workshops with neighbors/ <i>Presentation of results: workshops with neighbors</i>	Junta de Distrito Usera
VIERNES 21		
FESTIVAL		
12-14 h	Presentación de resultados: Espacios de convivencia./ <i>Presentation of results: Shared spaces for coexistence</i>	UPM
18-20 h	Presentación de resultados: workshops with neighbors/ <i>Presentation of results: workshops with neighbors</i>	Junta de Distrito Usera



Want to be involved?

Different **academic departments** can apply to join the program and integrate it in their academic year schedule as **complementary formative program**. This first edition will focus on **active ageing** and **nature-based** solutions towards **healthier communities**, but it is thought as an open program that will evolve depending on the partnerships, location and background and expertise of the host universities in ongoing editions, and it could be also complemented with practical study cases, broadening thus the knowledge generated with the involvement of more **Universities** and **cities**.



UNI-Health will establish a **collaborative learning** and **knowledge exchange framework**. Not only will it be developed in the academic context through the training of students, researchers and professionals; but it will create **networking opportunities** between society and the market. Experiences all around the countries can enrich each local context with study cases that address issues as air quality, feeding, healthy habits and mobility patterns.

Engaging the academic program with start-ups and stakeholders will create a common space for **innovation**. The **international character** will reinforce the connections and synergies all around Europe to enlarge the possibilities for development in terms of **improvement of health, services** and **production**.



ARUP

Information and registration
uni-health@upm.es

PROJECT COORDINATION

Director

Ester Higuera García

Team

Cristina Gallego Gamazo

Elisa Pozo Menéndez

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