



UNIVERSIDAD  
POLITÉCNICA  
DE MADRID



Estimad@ alumn@:

La Universidad Politécnica de Madrid es partner del Proyecto Europeo Erasmus+ con título “**REcube: REthink, REvive, REuse, Transmitting the knowledge for the green regeneration of the European Concrete Heritage**”.

El proyecto se articula en una serie de actividades docentes enfocadas a la conservación y a la rehabilitación de las obras en hormigón armado. Las principales actividades de este proyecto son: un MOOC online, un Frontier taller online (de 10 a 14 de junio) y otro presencial (REgenerate) en el *Politecnico di Milano* (de 13 a 18 de julio).

El proyecto ahora está en la fase de selección de participantes para este 2024. **La UPM puede participar con 3 alumn@s**. La financiación de la Unión Europea cubre los gastos de organización, y el taller presencial en Italia está cubierto con bolsa de viaje de 565€ por alumno. Considerando que hay 11 universidades partner, y que cada una puede seleccionar entre 3 alumnos, al final los participantes serán 33, de diferentes nacionalidades. La estimación de la carga de trabajo es de 50 horas. Todas las actividades son grupales. Los grupos estarán formados por alumnos de diferentes nacionalidades.

Los alumnos que participarán al proyecto recibirán un *certificate of accomplishments* y créditos ECTS adicionales en su diploma final. Además, dicha actividad se considerará muy favorablemente en la evaluación (para quien se matricule) de la asignatura optativa “Conservación, auscultación y rehabilitación estructural” del máster de ICCP y del máster en Ingeniería de Estructuras, Cimentaciones y Materiales.

A continuación, se dan más detalles sobre el proyecto. En alternativa se pueden visitar las web <https://www.recube-project.eu> y <https://www.facebook.com/REcubeerasmusplus/>

Un cordial saludo  
Leonardo Todisco ([leonardo.todisco@upm.es](mailto:leonardo.todisco@upm.es))

STARTING OF THE ACTIVITIES

**June 2024**

ENDING OF THE ACTIVITIES

**September 2024**

**The initiative aims at teaching a sustainable, integrated and holistic approach to the conservation and renovation of Modern Concrete European Architectural Heritage.** The target is represented by students coming from 11 different Architecture and Engineering Master's programmes across Europe.

Through the Frontier+REgenerate Workshops and the MOOC+Meet the Makers, the REcube learning programme delivers the technical knowledge and the specific skills needed for the green and safe management and protection of Modern concrete heritage, contributing to the development and expansion of future professional competences.

REcube intends to expose the students to a cross-disciplinary education in Modern Heritage Preservation with focus on research, innovation, durability and preservation.

The learning and training activities of the Frontier and REgenerate Workshops will last 5 days each, the Frontier being online and the REgenerate being in presence. To implement learning activities in a greener way and sustain an eco-friendly approach, the Frontier Workshop will be an online intensive course on cutting edge topics as pathologies and physics of reinforced concrete buildings. The aim is to provide participating students with a complete overview, applying a blend of theoretical knowledge and practical learning. It will be subdivided into lectures and an in-depth analysis of case studies belonging to Pier Luigi Nervi's architectural heritage.

Outcomes will be then integrated in the learning activities of the following REgenerate Workshop, where students will implement the knowledge acquired in the Frontier. Consequently, the REgenerate Workshops will centre on performing the multifaceted assessment and analysis of a concrete architecture by Pier Luigi Nervi, to be preserved and repurposed. Always taking place in Lecco on the PoliMI campus, the REgenerate workshop will be an intensive face-to-face programme based on a case study. Learners will evaluate and interpret the different data acquired on the chosen structure and present the problems to be solved, as well as the preparatory analysis to be performed before the renovation design. A visit to the project site is also planned, the costs of which will be borne by the REcube project.

#### **Who can apply and how to apply**

Students enrolled to the 4th year of a Bachelor degree in Civil Engineering or the 1st/2nd year of any Master degree of the School of Civil Engineering (ETSICCP) or the School of Architecture (ETSAM). To obtain the certificate and credits is required attendance, final project and presentation.

To apply, please send an email to Leonardo Todisco – [leonardo.todisco@upm.es](mailto:leonardo.todisco@upm.es), including: i) a short letter of motivation (max 1 page), ii) a brief CV with Academic Record, **by the 15<sup>th</sup> of February 2024**. The winners will be announced by March, 2024.