

Materials and techniques for the conservation of construction materials of monuments

This course describes technologies, materials and guidelines for the application and assessment of conservation treatments on historical and high-value buildings. Information about the main properties of traditional conservation products, underlying positive aspects and drawbacks, as well as best application methods will be discussed. Practical information about the testing protocols to perform condition assessment and evaluation of the treatments on-site will be described. New technologies and innovative materials will be included, aiming at giving an update on current trends and future commercial products.

This course aims at providing guidelines for the selection of the best materials and techniques for the conservation (cleaning, consolidation and protection) of natural stone and mortars, taking into account the different properties and characteristics (lithotype, mineralogical composition, state of conservation, etc.). Importance will be placed on the durability of the treatment with reference to the function of the substrate and environment interaction.

Student performance is assessed by both elaborating a project relative to the objectives of the course and an oral examination.