

# URBAN MINING AS A DRIVER FOR TEACHING ARCHITECTURAL DESIGN

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**ABSTRACT:** To teach sustainable architecture is an ongoing process of establishing a frame where the student's creativity can be challenged by dealing with actual demands on the anthropogenic scene. To use Urban Mining as a driver has been one of the most challenging teaching approaches since many years. This approach involves a complex journey from investigating and harvesting local resources to gaining insight into metabolism and finally to design a project of diversity. The methodology used was based on industrial ecology. By realizing local resources and their potentials, the students acquired knowledge of available materials, and components and as well as their upgrading versus downscaling. The design process explored ways of interconnecting the mined resources and to establish businesses based on these interconnections, producing economic value and social identity for the locals. Working on a site characterized by abandoned buildings was a challenge. Both human and environmental aspects were implemented in the project to meet the necessity of future responsible architecture. The discussion sums up the experiences done during a semester course at the graduate level and speculates how the material streams could be utilized, if a better and easier access is established located at the urban areas. The conclusion argues that there is a need of critical studies and change of the waste industry and hereby give possibilities for new perspectives in architectural design.

*Keywords: urban mining, teaching, local materials, abandoned buildings, transformation, social space*