



Zeitz MOCAA — silosy zbożowe przekształcone w muzeum (Heatherwick Studio)

Re-Thinking Existing Architecture

Adaptive Reuse as a Design Strategy in the Era of Climate Change

The course focuses on the design transformation of existing architectural structures as one of the key strategies in contemporary design practice in response to climate, social, and technological challenges.

Adaptive reuse is approached as a methodology that integrates environmental resource conservation, preservation of cultural values, and the creation of new spatial qualities responding to current user needs.

Throughout the course, students analyse the potential of existing buildings and urban structures, identify their constraints, and develop transformation strategies addressing functional, environmental, and social aspects. Particular emphasis is placed on climate-responsive design, resource optimisation, and the role of architecture in urban transformation processes.

The course combines an analytical component with design studio work, preparing students for diploma projects. It integrates seminar discussions with conceptual design exercises, enabling the development of both analytical and creative competencies.

Numer semestru: 2	Nazwa zajęć ELECTIVE DESIGN II	Liczba punktów ECTS
Stop. Stud.: MGR		Rok akad.: 2025/2026

Katedra prowadząca przedmiot
**DEPARTMENT OF HOUSING
SAM**

Supervisor:
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Ph. D, Eng. Arch., Dipl. Ing. Arch.

Course objectives

- understanding adaptive reuse as a design strategy
- developing skills in analysing existing structures
- learning design methods in the context of climate change
- integrating environmental, social, and cultural aspects in the design process
- preparing students for diploma project development.

Teaching format

seminar + conceptual design studio

Assessment

conceptual design project for the transformation of a selected building accompanied by a short analytical report



Course content

- strategies for transforming existing architecture
- architecture in the context of climate change
- cultural values and place identity
- environmental performance and low-carbon design
- new functional programmes
- adaptation of historic and post-industrial buildings
- architectural intervention strategies
- contemporary case studies

Recommended literature

1. Plevoets B., Van Cleempoel K. Adaptive Reuse of the Built Heritage: Concepts and Cases of an Emerging Discipline Routledge, 2019
2. Brooker G., Stone S. Re-readings: Interior Architecture and the Design Principles of Remodelling Existing Buildings RIBA Publishing, 2004
3. Cantell S. The Adaptive Reuse of Historic Industrial Buildings: Regulation Barriers, Best Practices and Case Studies Virginia Polytechnic Institute, 2005
4. Douglas J. Building Adaptation Butterworth-Heinemann, 2006
5. Foster N., Partners Reinventing the Existing: Sustainability Through Adaptation Prestel, 2020
6. Koolhaas R. Preservation Is Overtaking Us GSAPP Columbia Books, 2014
7. United Nations Environment Programme 2023 Global Status Report for Buildings and Construction
8. COMOS The Paris Declaration on Heritage as a Driver of Development
9. Bullen P., Love P. Adaptive reuse of heritage buildings Structural Survey Journal
10. Brand S. How Buildings Learn: What Happens After They're Built Penguin Books, 1994

Course schedule — 15 weeks

WEEK 1

Introduction to the course
Adaptive reuse as a contemporary design paradigm

WEEK 2

Climate change and the built environment
Why reusing buildings matters

WEEK 3

Theory of adaptive reuse
Key concepts and definitions

WEEK 4

Reading the existing building
Methods of architectural analysis

WEEK 5

Cultural values and heritage significance

WEEK 6

Environmental strategies in adaptive reuse
Low-carbon design approaches

WEEK 7

Functional transformation strategies

WEEK 8

Mid-review — analytical presentations

WEEK 9

Design methodologies for architectural interventions

WEEK 10

Case studies of contemporary adaptive reuse projects

WEEK 11

Social dimension of transformation
Architecture as a catalyst for change

WEEK 12

Developing design concepts
Individual consultations

WEEK 13

Project development and refinement

WEEK 14

Final presentations

WEEK 15

Discussion and course summary
Reflection on adaptive reuse as future practice