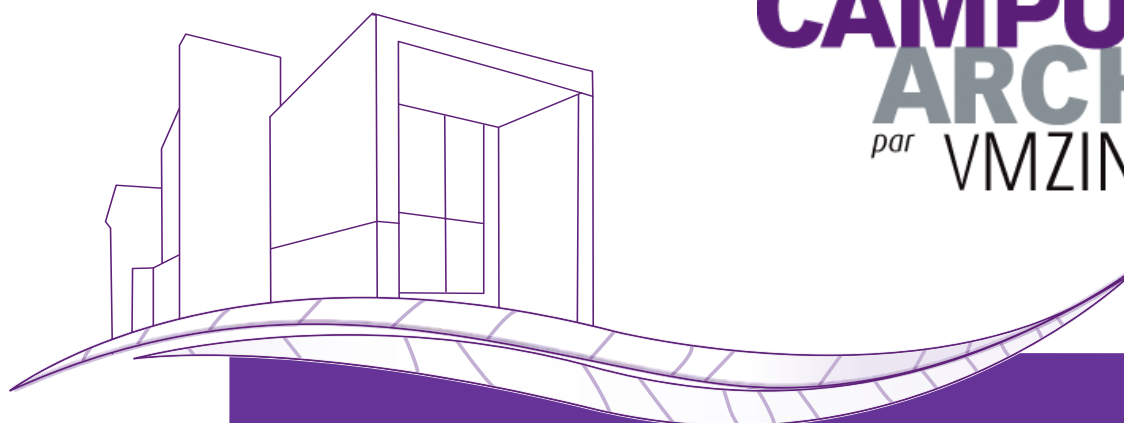


Edition

44

Programme 2016-2017



CAMPUS
ARCHIZINC
par VMZINC

The sustainable building contest for architecture students

**“Building around” : densifying and
requalifying an existing building**



Contents

1• Introduction	3
2• Programme	3
• Thème	3
• Issues	3
• Objectives	3
• Challenges and expectations	3
• Site description	4
• Programme	4
• Environmental expectations	4
3• Deliverables	5
• Graphic material	5
• Material for the environmental section	5-6
• Written material	6
4• Schedule	7
5• Jury	7
6• Prizes	7
7• Annexes	8



1. Introduction

The Archizinc Campus competition is a sustainable building competition organised by VMZINC for students in European architecture schools.

Projects submitted must incorporate the principles of sustainable development by analysing the urban & environmental context and users' needs. Projects proposing pertinent/innovative use of VMZINC solutions, particularly with regard to sustainable building, will be highly appreciated.

This document presents the programme of the third edition of the Archizinc Campus competition.

2. Programme

Theme The theme of the programme of the 3rd edition of the Archizinc Campus competition is:

“Building around”: densifying and requalifying an existing building

Problématiques Many issues associated with this theme can be broken down according to the following question:

to reduce urban sprawl, how can we increase housing density while preserving existing buildings, encouraging architectural, social and programme diversity and building sustainably?

This programme is in continuity with the 3rd edition.

Objectives Propose to restructure an existing collective residential building by significantly improving the comfort of its residents, in particular by working on its thermal performance and by creating additional private or common spaces through the following processes:

- **elevation**
- **lateral extension**
- **hollowing out all or part of certain floors**
- **working on the nature of the envelope materials and on the openings**

Challenges and expectations In this context, the main challenges and expectations are:

- **Quality of architecture in the specific context of urban integration.**
- **Concrete and measurable elements demonstrating the sustainability of the project.**

2. Programme

Site description

The site is not pre-defined.

Candidates will look for an existing building in the city and country of their choice, consisting mainly of collective housing units, whose design allows for an extension (vertical or horizontal) and therefore a realistic addition of living surface area.

The building must have sufficient structural characteristics to allow this extension.

Accurate full-scale measurements of usable surfaces must be taken on site or collected by the candidates in order to give a comprehensive presentation of the existing surface areas prior to extension.

Direct enquiries will be conducted locally to ascertain urban planning regulations and regulatory constraints applicable to the construction area (materials and colours, maximum heights, fire protection, access, shapes of volumes added and slope of roofs...). These regulations and constraints must be taken into account when designing the project.

Programme

Select a building consisting mainly of public housing units - 5 to 12 storeys - built post-WWII (1950's-1970's) with a post and beam framework in reinforced concrete. The building can be isolated, or it can be part of a group of buildings of the same type and function.

Add 30% additional space (20% for additional residents and 10% for socializing with the neighbours - not including ground spaces). The candidates will determine the functions of the additional common spaces.

The envelope should preferably be based on an eco-design approach (see Environment Spec of 4th edition of Campus Archizinc).

Materials used for the extension:

- Use light framework systems in wood or metal
- Use products in the VMZINC line to clad all or part of the extensions and/or protect the new thermal insulation, whether for the roof or the facade. **The zinc will cover at least 50% of the surfaces impacted** by the renovation or extensions. Candidates will decide on the other envelope materials to be used.

Environmental expectations

One of the key factors for evaluating the projects participating in the CAMPUS ARCHIZINC 2017 competition is the environmental dimension.

For this 4th edition, the competition juries ask students to think about the environmental characteristics of their project taking four facets into account:

- **Energy**
- **Materials**
- **Water management**
- **Biodiversity**

To encourage and help students in their eco-design approach to each of the four facets and to facilitate the jury's evaluation of the projects, each team must provide the deliverables described in the following section.

3. Les rendus

The materials submitted by the teams shall be in English only. There are two types: graphic and written.

Graphic material

A0 sheets (3 maximum):

- Site plan with identification of site assets and constraints
- Block plan (1/500)
- Floor plan(s) (1/100 or 1/50) before and after the extension
- Facade elevations (1/100 or 1/50) before and after the extension
- General section (1/100 or 1/50) before and after the extension
- Envelope section 1/20th
- Diagram showing the composition of the partition walls
- A graphic document demonstrating the construction principle (free form)
- A graphic document demonstrating how the project inserts into its environment before and after the building work (photomontage)
- As many images as are necessary for an overall appreciation of the project

Material for the environmental section

General

- Site plan with identification of site assets and constraints (access, services, potential nuisances, planted areas, remarkable biodiversity zones, etc.)
- Density increase calculation note: (number of residents in final project - number of residents in initial project) / number of residents in initial project
- Based on the site plan illustration, calculation note of the number of services within a 500-m radius from among a pre-defined list
- Based on the site plan illustration, calculation note of the number of public transport stops, bicycle spots or carsharing spots available within a 500-m radius

Energy

- 3 bioclimatic cross-sections:
 - Heat strategy
 - Cooling strategy
 - Natural lighting strategy

Using the eco-design tool developed by VMZINC and made available to students free of charge on the Campus Archizinc competition website (www.campus-archizinc.com), students will also submit the following deliverables:

- Calculation of openings (representing the weight of glazed surface areas relative to opaque surface areas)
- Calculation of Heat Transfer U (W/m²K) (representing heat loss per m² of heat-lossy surface area)



3. Les rendus

Material for the environmental section

Materials

- Identify the environmental advantages of the chosen materials (sustainability, recyclability, zero maintenance, etc.)
Using the eco-design tool developed by VMZINC and made available to students free of charge on the Campus Archizinc competition website (www.campus-archizinc.com), students will also:
- Evaluate the project's embodied energy (representing the embodied energy concerning the materials required to build the project).

Water management

- Note and/or cross-section presentation of water management strategy

Biodiversity

The envelope will mainly consist of rolled zinc. However, 15% of the surface will be dedicated to promoting the development of biodiversity on the site (revegetation, creation of wildlife refuges, creation of wetlands, etc.).

The jury will therefore pay special attention to solutions that use rolled zinc to support the development of biodiversity.

Written material

Synthesis notebook:

- A horizontal A3 (420x297mm) notebook (10 pages max)
- Presentation sheets of graphic material in reduced format (1/page)
- Presenting the architectural selected building approach



4. Schedule

The 4th edition of the Archizinc Campus competition is open to all architecture students enrolled for the 2016/2017 school year.

Below is the schedule for the competition:

Registration starts	1st October 2016
Deadline for submitting project files	12 June 2017
Deliberation	September 2017
Awards ceremony	October 2017

Projects can be sent at any time to the VMZINC team, until 12 June, 2017

5. The jury

The jury is made up of architects and teachers and will reflect the international nature of the competition.

6. Prizes

VMZINC provides an overall amount of 5,000 € in prize money, leaving it up to jury members to divide this sum fairly among the winning teams (if several winners are designated).



7. Annexes

Different examples of extension





site: www.campus-archizinc.com
email: Campus.Archizinc@eu.unicore.com