

## Benefits for new VIPA Partners

Join the VIPA project to:

- Use and share the e-learning facilities provided by VIPA
- Participate in the development and the expansion of a new professional area for architects
- Be a partner in upcoming research projects in the fields of e-learning, e-content, e-culture, IST, etc.

## Partners of VIPA

The consortium of VIPA consists of the following partners:

**adm™ (A)**, a design and research company, acts as project developer and project manager for VIPA, coordinating the interests and activities of the various educational institutions.

**Technical University Vienna (A) - Institute of Architecture and Design** The research project is coordinated by the Department of Building Theory and Design. Among the research areas of this department are Hybrid Architecture and Didactics of Architecture.

**University of East London (UK)** The research is coordinated by the Centre for Evolutionary Computing in Architecture (CECA) within the School of Architecture and the Visual Arts.

**University of Ljubljana (SL)** The faculty offers academic education and professional research in architecture, urbanism and graphic and product design.

**University of Aalborg (DK)** offers a programme in Digital Design with a focus on public authorities, on design, game and film industries that work with interactive and virtual worlds.

**FH Joanneum - University of Applied Sciences (A)** The R&D Department of Information Design provides high-level educational consultancy, services, and training.

**E. Gabriel - Immersive Systeme (GER)**, a software company, provides visualization technologies and know-how especially for VIPA 3-D courseware.



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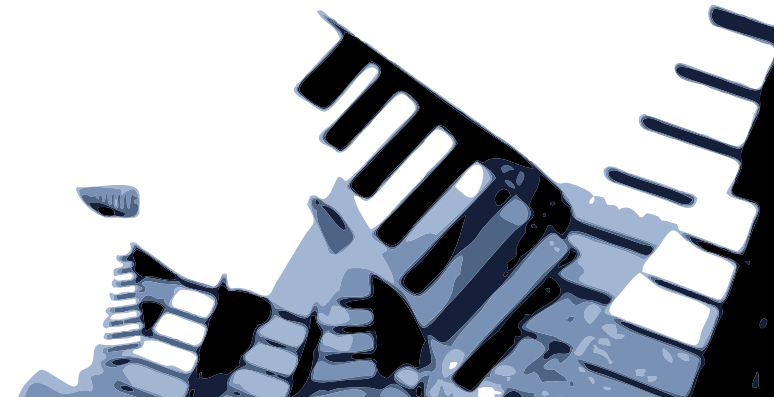
www.vipa.adm.at

a transnational virtual  
campus for European  
universities in the field  
of Virtual Space Design



Supported by the European Community  
Directorate-General for Education and Training  
Under the elearning Action

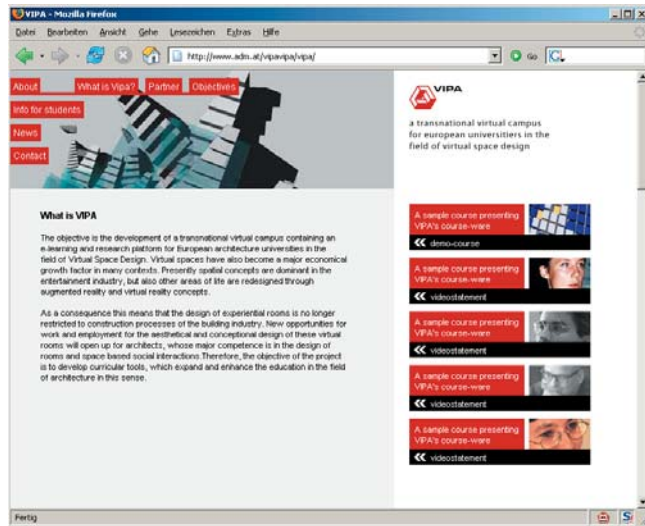
cover image courtesy of Manfred Wolff-Plottegg



## What is VIPA?

The design of space as a container for social interaction is of central concern to architects. Increasingly, the design and implementation of space and place is no longer reliant on the physical construction processes of the building industry. In consequence, new opportunities for work and employment in the field of aesthetical and conceptional design of these virtual places are opening up for architects.

In response to this challenge, a transnational virtual campus based on the e-learning system Moodle is currently being developed; it contains an e-learning and research platform for European architectural schools with a focus on Virtual Space Design. The virtual campus integrates administrative, curricular, and communicative infrastructures, interactive, multimedia 3-D contents, and pedagogical considerations in respect of aims, content and technologies employed. The virtual campus, its didactical and technical functionalities as well as its content is being developed in collaboration with four European architectural faculties, a commercial partner in the field of interactive 3-D authoring tools and a partner with competencies in the development of e-learning curricula.



The VIPA public website (www.vipa.adm.at)

## The Objectives of VIPA

The overall objective of the project is to expand and enhance education in the field of architecture within a virtual campus through development of pedagogical courseware and appropriate technological platforms. Project goals include:

- A virtual campus integrating administrative, curricular and communicative infrastructures for schools of architecture
- Competence development in the design of 3-D spaces of virtual and augmented reality for students of architecture
- Use of industrial know-how in the field of interactive 3-D authoring for the training of architects
- Content and conception input from the field of architecture to various industries
- Coordination and research at European universities of architecture in relation to VR design
- Internationalisation of curricula into joint or double-degree developments for students and/or graduates of architecture
- Additional and more intensive cooperation between the respective educational institutions across Europe
- Participation in the further development of new fields of professional activities and research areas for architects

## Core Target Groups

**Formal institutions (universities) with curricula in the field of architecture** will benefit from internationalisation. The use of state-of-the-art methods and techniques increases their potential for establishing themselves on the educational market. VIPA offers efficient tools for administration and communication internally and externally as well as tools for HR and technical resource sharing.

**The Software Industry/Media Industry:** access to highly-skilled designers who with their planning competences as architects can comprehend and shape the more and more complex opportunities of virtualised rooms. VIPA as a platform for basic research will provide access to information and participation in potential development partnerships in this area. In this way VIPA is a valuable instrument for recruitment.

**Students in the formal and non-formal sector:** virtual mobility (courseware, general services, etc.), digital literacy, state-of-the-art standard of education, internationalisation of studies, application of telematic instruments for a closer relationship to the market.

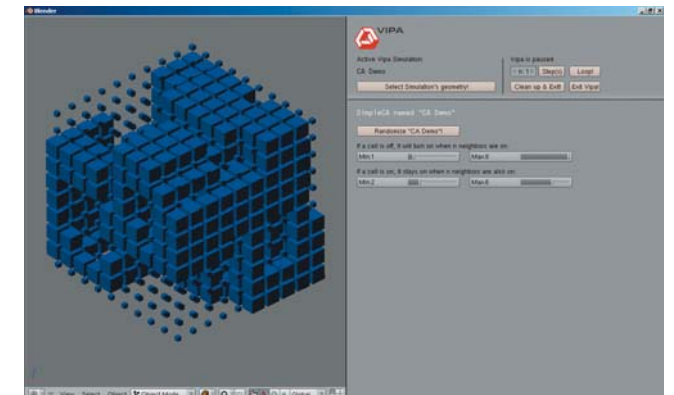
**Administrative staff and teachers:** improvement of pedagogical/didactical methods and instruments, closer contact with students, easily available information and communication tools (Internet), better opportunities for teachers' mobility.

## 3-D Courseware

VIPA's courseware presents a novel method to teach students of architecture the fundamentals of computational design. It presents several canonical examples from the fields of generative algorithms, AI and AL as simulations running within an interactive 3-D environment.

Students can observe the simulations, navigate through them and change the parameters that define and control them, thereby developing an understanding for the rules that govern their virtual environments. They can also change the geometry used in the simulations and work with and export their output.

Finally, students whose curricula include programming can modify the simulations at the code level, combine them, make them aware of each other or write entirely new simulations.



Example of a VIPA 3-D course