

## Chapter 2

# Architectural Web Portal and Interactive CAD Learning in Hungary

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### ABSTRACT

*It is opportune to show the teaching web portal of the Faculty of Architecture at “Széchenyi István” University ([www.arc.sze.hu/indexen.html](http://www.arc.sze.hu/indexen.html)), its conformation and use. Nowadays, the Internet helps to look into Hungarian and foreign study aids, architectural websites, and novelties. The Internet has created potential new and effective ways of cooperation between lecturers and students of the university and other institutions of higher education. The teaching web portal mentioned above realizes the diversity and complexity of architecture with efficient grouping of information, and is attentive to high professional standards. Computer Aided Architectural Modeling ([www.arc.sze.hu/cad](http://www.arc.sze.hu/cad)) is one of the new types of online lecture notes, where many narrated screen capture videos show the proper usage of CAD software instead of text and figures. This interactive type of learning helps students become more independent learners. This type of teaching modality provides the opportunity for students who need more time to acquire subject matter by viewing video examples again. Success of our departments’ common web initiations can be measured through Internet statistics and feedback of the students and external professionals.*

### MAIN GOALS AND PHILOSOPHY

It is high time to speak of the importance of the electronic knowledge-bases in the teaching of Hungarian architects and students, as well its multidirectional possibilities for use. The pro-

fessional web portal of the “Széchenyi István” University in Győr is introduced, together with some of its subject-matters of instruction. In our time the world has been widely opened, internet gives support in getting acquainted with teaching packages from domestic and foreign sources, professional portals and novel topics, and moreover, it makes possible to effectively cooperate among

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lecturers, professors and students, as well as among institutions of higher education. Actuality of this initiative from Győr is best shown by the dynamic increase in the number of visitors since the beginning, and now achieves a rate of as high as 2300 visitors in a month. URL-address of the portal, and links to actual works are incorporated onto the homepages of numerous institutions dealing with the profession or the education in general, however, real acknowledgement is proved by responses from the users – both students and industrial experts.

Our “Database for Architecture” ([www.arc.sze.hu/indexen.html](http://www.arc.sze.hu/indexen.html)) started in 2001 with the target to provide *up-to-date and easily useable, editable* knowledge materials *that can be easily accessed at any time and from any place*, to the education of architects at any level in Győr. A more effective education at a higher level can be achieved with the help of electronic subject-matters following the changes in the profession in a flexible way. Knowledge on the fields of related branches, the most recent aims of science and technique, and examples realized in practical life are dynamically coupled with basic knowledge. Through the step-by-step building up of the complexity-aimed database-concept of several special branches, *versatility and richness of our profession* has also been outlined, and at the same time it was an important point of view to fulfill proper selection by *correct technical content, its perfection levels and actuality of information*.

Realization of the above targets till now means – on the example of the subject Building Constructions – that lecture notes, practical guides and study aids with references, electronic stores of drawings, and planning and construction sheets and brochures of leading companies manufacturing building materials – all that can be achieved at the same place. In addition to that, further homepages of professional and scientific character, journals, reviews and periodicals from Hungary and abroad, as well as a selection of independent articles can be found here.

Successful operation of the Database for Architecture is maintained – beside its logical structural arrangement, good selection of contents and favourable appearance – by *numerous special services* (search possibilities, integrated dictionaries, forum, students’ administration, news bar).

In our days, it is a general experience that the county borders are getting more and more permeable within Europe of the regions – thereby making wide-ranging collaborate and cooperation very easy. An important precursor and catalyst of this process is the world-wide web where results of international research and practical achievements can be published, as well. Internet is, however, much more than simply one of the media because cooperation can be established and practised on a daily basis among different institutions of higher education owing to its *interactivity*. There is a possibility to more reasonable sharing of the activities, or publishing the results in a common knowledge base. The electronic type knowledge bases serve – owing to the interactivity they provide, too – as *educational tools of extreme efficiency*.

In the meanwhile it must always be taken into consideration that education of future architects has the characteristic feature of often being highly individual regarding the duties given and solutions obtained therefore a personal master-and-follower contact is and shall be of uppermost importance. The knowledge base provides a very useful background for these works, too, for example in sensible and impressing performing of the variety of good solutions.

## **ELECTRONIC TEACHING KNOWLEDGE BASES AS ARCHETYPES**

Through existing domestic professional databases and ideas there were favourable impulses given for a new viable concept suitable for the above detailed wide-ranging demands at our university. These were then complemented a continuous “evo-

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