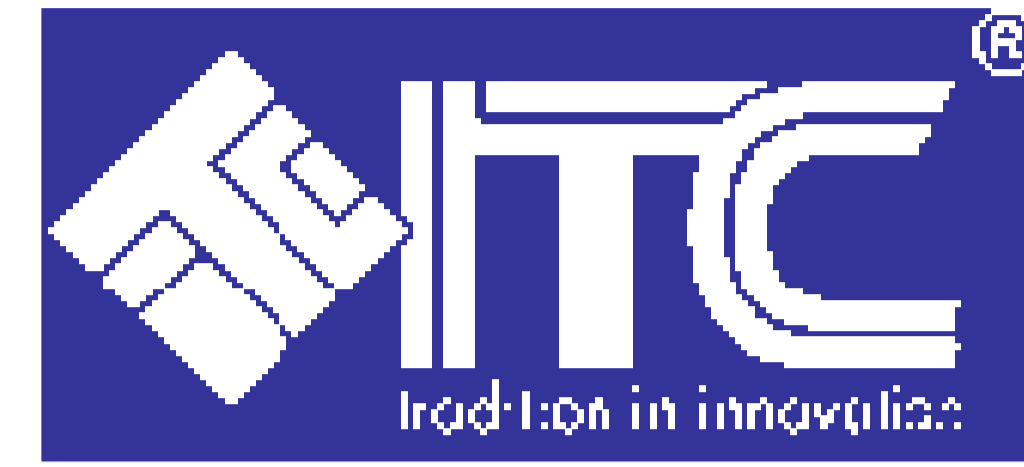


SEISMOCODE

Lifelong e-learning platform for the active implementation of the new Romanian seismic regulations harmonized with European standards

Radu PASCU, Iolanda-Gabriela CRAIFALEANU, Ovidiu ANICĂI, Livia ȘTEFAN,
Viorel POPA, Vasile Virgil OPRIȘOREANU, Ionuț DAMIAN, Andrei PAPURCU, Cristian RUȘANU



About SEISMOCODE

The SEISMOCODE platform is conceived to support civil engineering professionals in applying the new European harmonized regulations for the seismic design of reinforced concrete structures. These regulations are of paramount importance for Romania, a country affected periodically by catastrophic earthquakes.

With the accession to the European Union, the entire regulatory framework, including that concerning seismic design, underwent major changes. This affected significantly the over 50,000 civil en-

gineers in Romania, and in particular the structural design engineers, by the need of assimilating on the fly a large amount of new concepts, rules and methods.

Taking into account that 89% of the population holding a university degree in Romania is currently using the Internet, the platform is an efficient and affordable solution for the upgrading of the professional community.

SEISMOCODE is developed on the Moodle platform.

Objectives

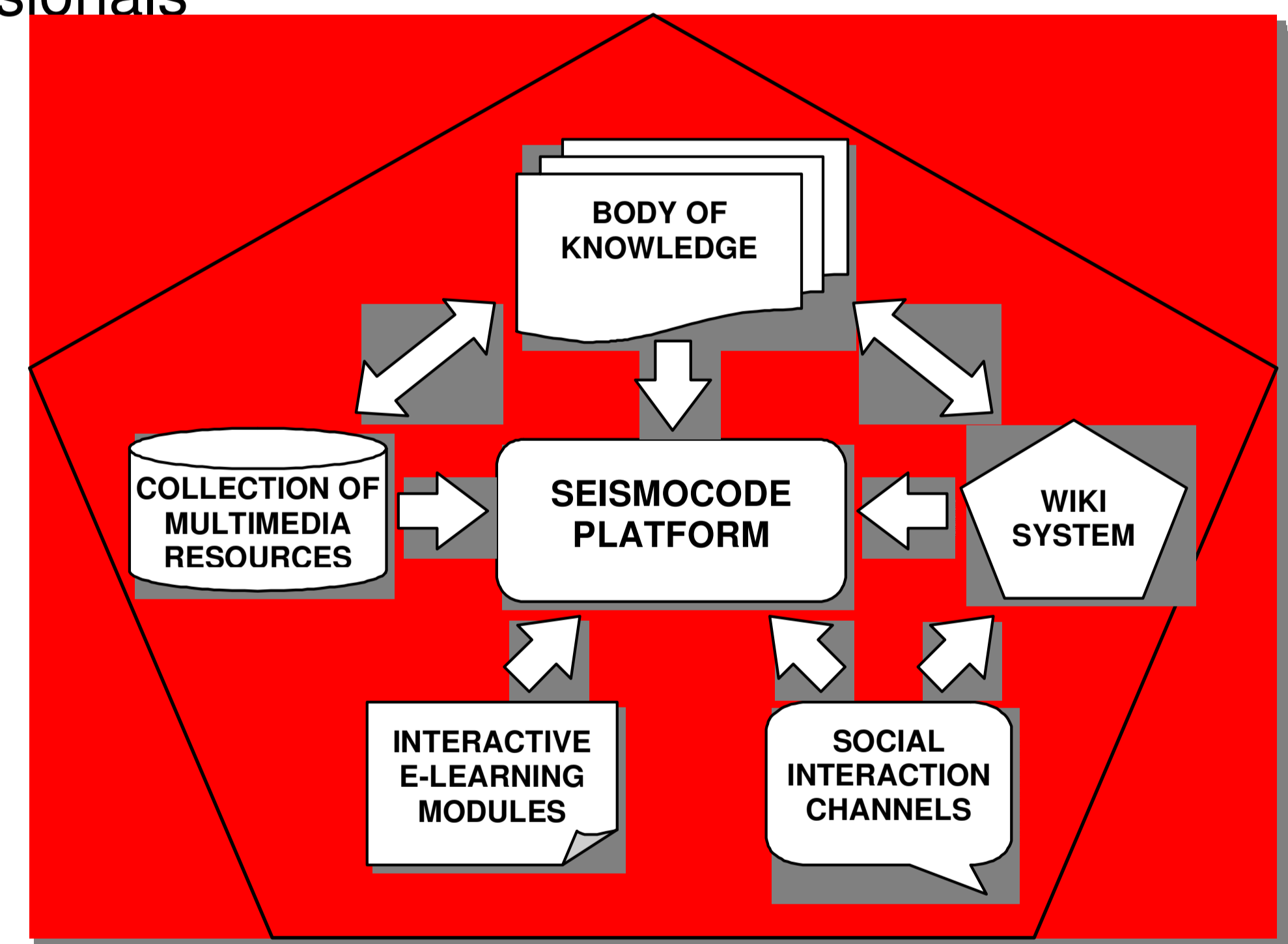
- ✓ develop a complex e-learning platform to support the implementation of the newly-adopted Romanian seismic design code, P100-1/2013, harmonized with European norms
- ✓ create a systematic and structured online body of engineering knowledge in the field of seismic conception and design of reinforced concrete buildings, which platform users can continuously develop by their own contributions
- ✓ develop a set of interactive e-learning modules for the improvement and (self-) evaluation of knowledge, facilitating the assimilation of new regulations
- ✓ create a repository of multimedia resources in the field of modern seismic conception and design of buildings
- ✓ provide a virtual space for professional discussions on the present and future development and improvement of regulations concerning seismic design and seismic risk reduction of buildings; this space will be also an important channel for interacting with platform users and with other stakeholders.

Outcomes

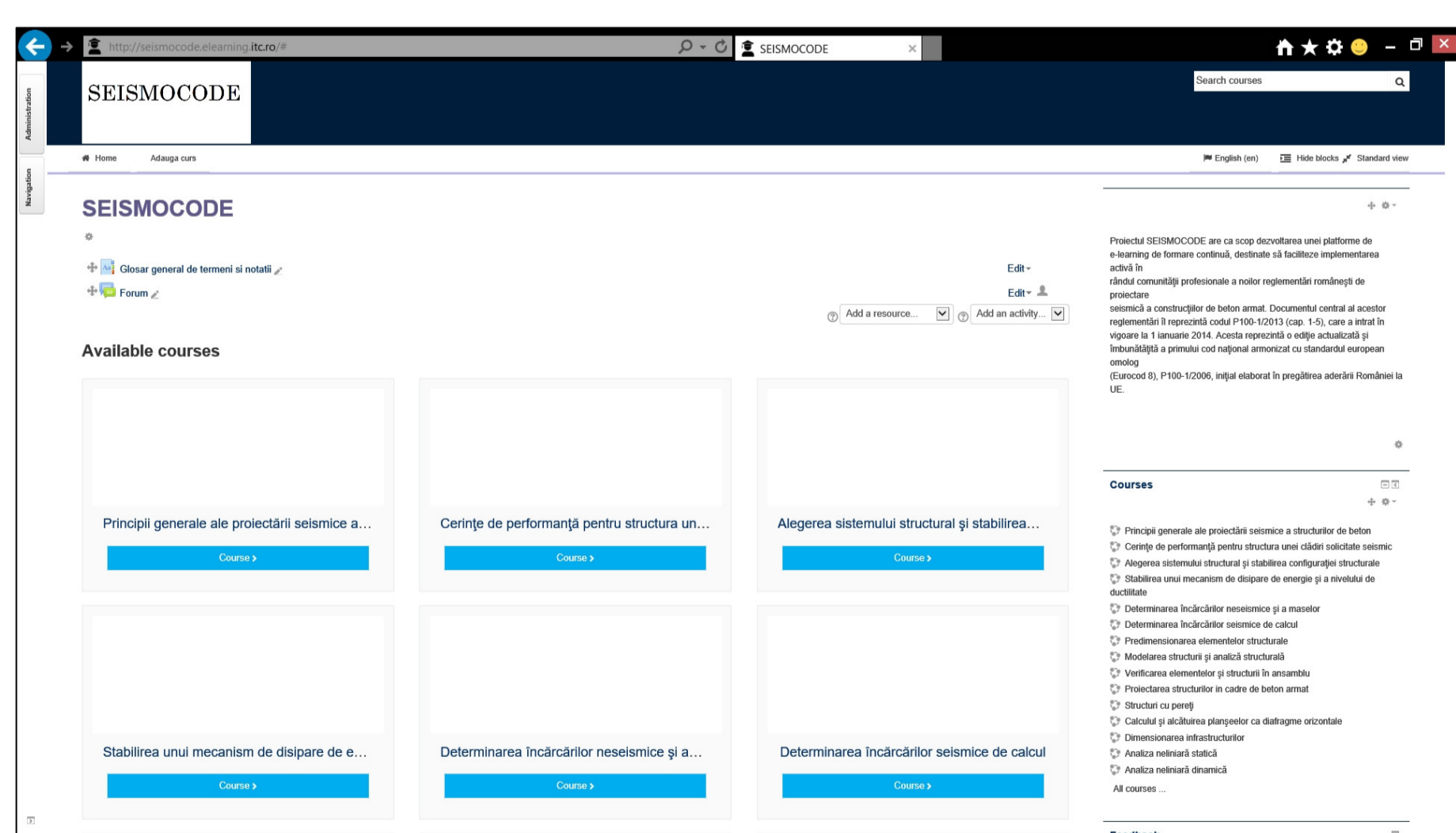
- ✓ SEISMOCODE will contribute to the professional upgrading of the civil engineering community and will support lifelong learning programs, providing also a valuable teaching resource for graduate and post-graduate university curricula.

Structure and content of the platform

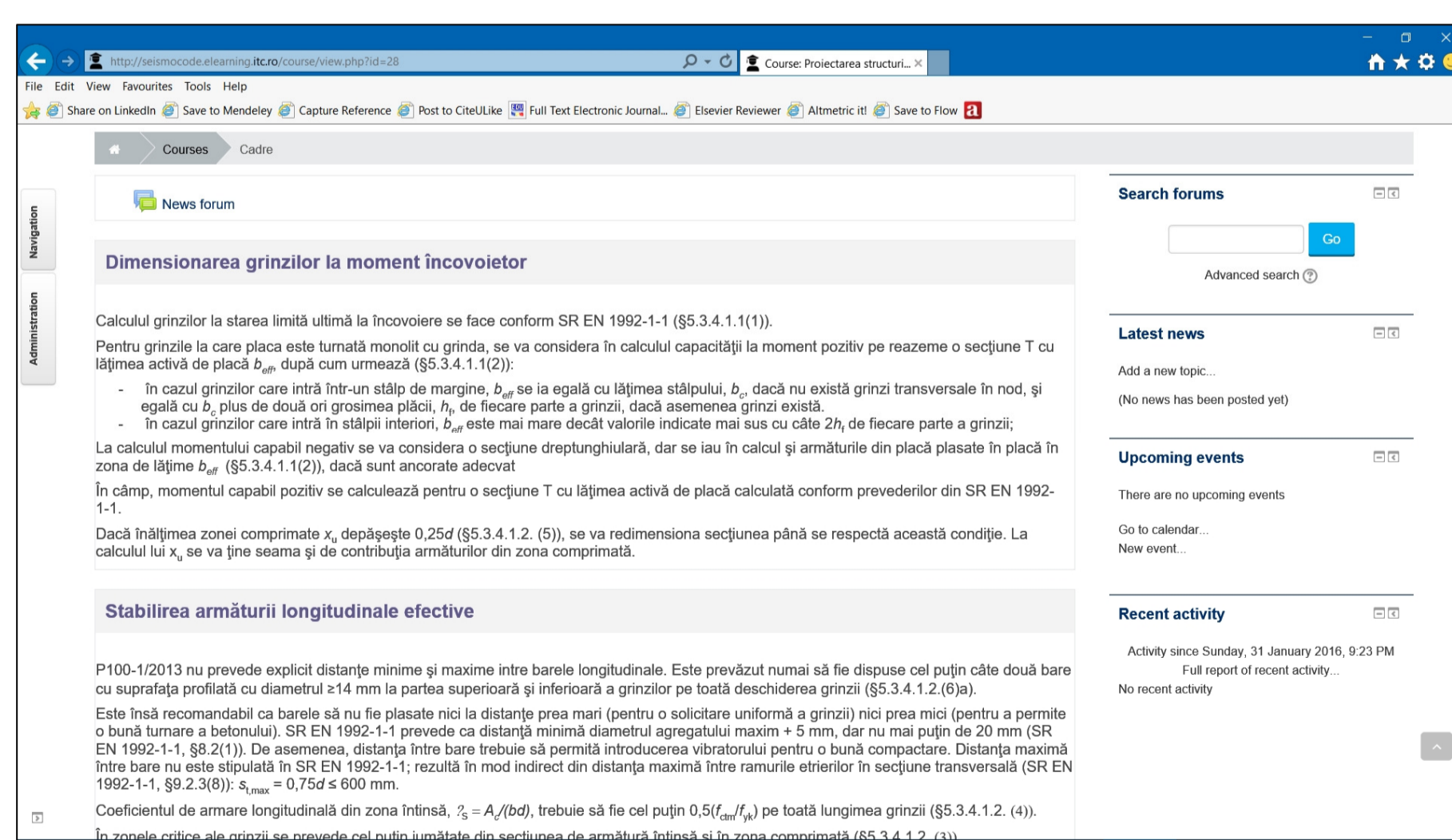
- ✓ Body of Knowledge (BK), containing the basic hypertext and illustrative material
- ✓ Wiki System (WS), interlinked with the contents of BK and allowing flexible and progressive development
- ✓ Collection of Interactive E-Learning Modules for (self-) evaluation (IELM)
- ✓ Multimedia Repository (MR), adapted for display on PCs / smartphones / tablets, with videos, webinars & presentations provided by reputed professionals
- ✓ Forum for social interaction with and between professionals



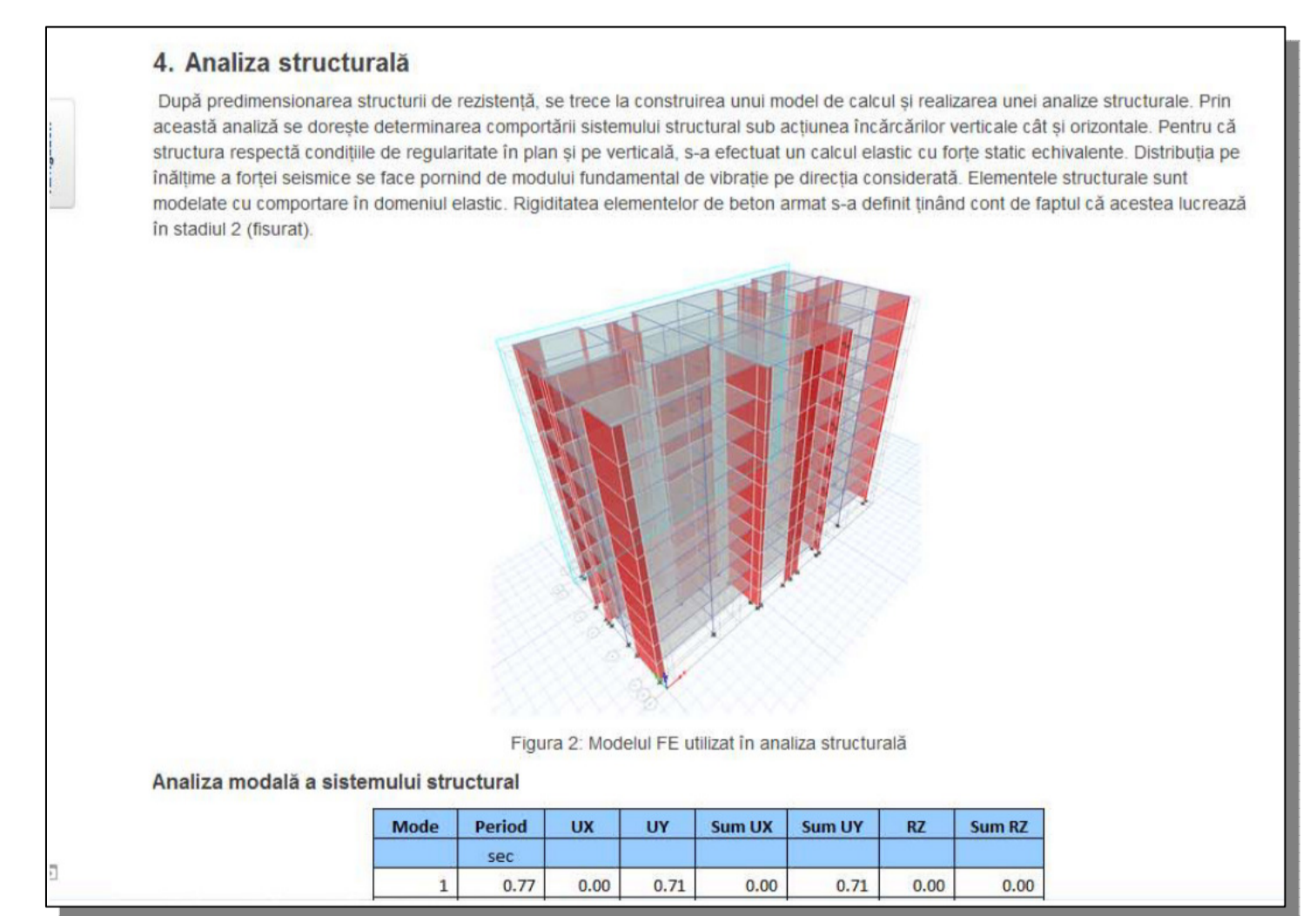
SEISMOCODE components



BK Content ("Courses")



Structuring of course information



Illustrative building models for structural analysis

Coordinator (CO): Technical University of Civil Engineering Bucharest, Romania, UTCB

Project duration: 2014-2017

Partners: National Institute for R&D in Construction, Urbanism & Sustainable Spatial Development, URBAN-INCERC, Romania
Institute for Computers, ITC S.A., Bucharest, Romania

Acknowledgements: The project "Lifelong E-Learning Platform for Active Implementation of the New Romanian Seismic Regulations Harmonized with European Standards", with the acronym SEISMOCODE, is partly funded by the Romanian Ministry of Education and Scientific Research, Executive Agency for Higher Education, Research, Development and Innovation (UEFISCDI) under Contract No. 104/2014. The Institute for Computers, ITC S.A., is a co-funding partner.

Contact: Prof. Radu PASCU, Project Director, Technical University of Civil Engineering Bucharest, Romania (UTCB), r_pascu@utcb.ro