



## Call for Papers

## Special Issue on

## Emerging Technologies to Enhance Engineering Education

### Guest Editor

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One of the most significant deficits in Technology Enhanced Learning or E-learning Approaches was always the capacity of systems to provide ways for knowledge creation and renewal of learning content through the exploitation of the social interactions and learning experiences. In a way it seemed that e-learning could not exploit and capitalize the “knowledge and learning assets” generated in the context of the unique e-learning experience. The contribution on Knowledge Management, Organizational Learning, Learning Objects Metadata, Learning Designs and Semantic Web in this area is significant.

However today the scientific field of Technology Enhanced Learning has good momentum: Web 2.0 sets new milestones for the exploitation of knowledge, social networks (social capital) and especially for Technology Enhanced Learning.

Information technologies in the area of engineering education systems have become more and more popular. Systems allow students access to the online resources provided by academic staff and discussions is possible with instructors in any location, at any time. Students not only download materials, but share relevant experiences and information with other classmates. Knowledge sharing is one of the most salient issue in online engineering education systems. Knowledge management strategies focus on the creation or acquisition of knowledge, its storage, combination, diffusion and renewal, as discussed in the key book “The Knowledge Creating Company” by professors Nonaka and Takeuchi. Knowledge can be generated at four ontological levels: individual, group, organizational and interorganizational.

In this special issue we explore the potential of Web 2.0, Technology Enhanced Learning and Strategies and Knowledge Management in engineering education. Additionally the special issue will analyze the state of the art in theoretical foundations and technological applications of these areas of research in the context of engineering education.

### Topics of interest include

- Knowledge management and engineering education
- Learning and knowledge communities in academia
- Learning and unlearning process in engineering education: students, academic staff and institutions
- Impact of Information technologies on student-academic staff relation

- Students satisfaction and motivation with IT in academic context
- New forms of interaction in social systems
- Blogging as a social activity and approaches to semantic blogs
- Collaborative filtering in social settings
- Analysis of social interaction for finding knowledge on web users
- Analysis of large online communities web communities of practice
- Network analysis for building social networks
- Semantic social networks metadata and annotation techniques
- Wikis, semantic wikis and other collaborative knowledge creation systems
- Online social networking

**Submissions will be sent by e-mail in MSWord (.doc) to Prof. Patricia Ordóñez de Pablos [patriop@uniovi.es](mailto:patriop@uniovi.es)**

### **Important Deadlines**

Submission of abstract (two pages):	October 30, 2012
Notification of reviewers' feedback:	November 15, 2012
Submission of manuscript	December 15, 2012
Notification of reviewers' feedback:	February 15, 2013
Submission of final manuscript:	March 15, 2013

Manuscripts must be written in English and limited to 12 one-sided, one-column, single-spaced pages. Manuscripts should include keywords, complete affiliation of the authors and short biographies, the citing and listing of references should be in the IJEE style. Figures and illustrations should be suitable for non-color printing. Accepted, revised manuscripts will be copyedited and typeset.

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 Specific Information for authors is available at:  
<http://www.ijee.ie/GuideForAuthorsNov09.html>  
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