**Editor: Ahmad Ibrahim** 

## Volume 25 Number 4

Part I
Special Issue
Instructional Technologies in Engineering Education
Guest Editors
Kinshuk, Athabasca University, Canada
Tzu-Chien Liu, National Central University, Taiwan
Mohamed Jemni, University of Tunis, Tunisia

# Part II Contributions in: Active learning, Design-based learning, Computer Engineering, Electrical Engineering, Robotics, and Mechanical Engineering

# The International Journal of ENGINEERING EDUCATION

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# The International Journal of ENGINEERING EDUCATION

#### Aims and Scope

This journal serves as an international interdisciplinary forum of reference for engineering education.

A balance between papers on developments in educational methods technology, case studies, laboratory applications, new theoretical approaches, educational policy and survey papers is aimed for.

Comprehensive coverage of new education schemes and techniques makes the journal a unique source of ideas for engineering educators who are keen to keep abreast of latest developments in educational applications in all fields of engineering.

Some of the areas covered more extensively in recent issues are:

CAD, CAE, Computer applications in teaching thermodynamics, Material science, Electrical Engineering, New Courses and Curricula, Engineering Management, Control Engineering, Mechanical Engineering, Engineering Design, Student Evaluation, and Institutional Accreditation.

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Structure: logical layout, proper use and adequate number of figures/diagrams, etc.

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Final accepted manuscripts will be text and copy edited, proofs in PDF format will be sent to the author for approval before publication.

Total page charges are calculated according to the number of pages to be published based on the proofs sent to the authors.

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## A selection of papers accepted for publication

Moon—Teaching Product Lifecycle Management (PLM) with Enterprise Systems

**Gutierrez and Sastron**—A Computer Simulation Game for Learning Product Lifecycle Planning through the Engineer-To-Order Case

Alejo et al.—The Integrated Use of PLM and Life Cycle Energy Analysis Software in The Teaching of Automobile Life Cycle

Vila et al.—Collaborative Product Development Experience in a Senior Integrated Manufacturing Course

Green et al.—Design for Frontier Contexts: Classroom Assessment of a New Design Methodology with Humanitarian Applications

Sankar et al.—Preparing Students for Global Research Experiences: U.S.-India Summer Projects

Kasapbaşi et al.—Knowledge Management Integrated Web Based Information Security Course Tutoring System

**Fang**—An Electronic Classroom Response System for an Engineering Dynamics Course: Student Satisfaction and Learning Outcomes

**Turns** *et al.*—Active and Collaborative Learning in a First Course in Fluid Mechanics: Implementation and Transfer

Law—What Motivates Engineering Students? A Study in Taiwan

Stefanovic et al.—Web-Based Laboratories for Distance Learning

**Gurocak**—Planning and Implementing an Assessment Process with Performance Criteria for ABET Accreditation

Memon and Khoja—Semantic Web Approach towards Academic Program Assessment

Martin et al.—Do Video Games Improve Spatial Abilities of Engineering Students?

**Fernandez** *et al.*—Simucapra: An Educational Software Application for Animal Nutrition Based on MATLAB

**Bakhoum**—Experimental Demonstration of a Fundamental Concept in Electromagnetics

Aliane—Use of Spreadsheets in Control Education

Garmendia et al.—Teaching Part Visualization: An Approach Based on Problem Solving Strategy Knowledge

**Siller and Johnson**—A Management Structure Designed to Facilitate Changing Engineering Curricula

**Mobley**—The South Carolina Merit Scholarship: Strategies Used by Engineering Students to Keep Their Life Scholarships

**Reventós** *et al.*—Teaching Basic Pressurized Water Reactor Core Thermal-Hydraulics Employing Worksheet-Based Exercises