Contents

Section I
Special Issue

Current Trends of E-Learning in Engineering Education

Guest Editor

Wei-Fan Chen—The Pennsylvania State University, USA

Ahmad Ibrahim 451 Editorial
Wei-Fan Chen 452–453 Guest Editorial
Yu-Hung Chiang and Hei Chia Wang 454–460 Effects of the In-flipped Classroom on the Learning Environment of Database Engineering
Gillian M. Nicholls and Sherri L. Restauri 461–475 Instituting and Assessing the Effectiveness of Focused e-learning Modules in Engineering Education
Kyungsun Park 476–485 Instructional Design Models for Blended Learning in Engineering Education
Dorina Gnaur and Johan Clausen 486–494 Teaching Smart with Podcasts
Po-Hsin Huang, Ming-Chuan Chiu, Sheue-Ling Hwang and Jan-Li Wang 495–504 Investigating E-Learning Accessibility for Visually-Impaired Students: An Experimental Study
Reidar Kvadsheim, Hárek Haugerud, Hugo L. Hammer, Alfred Bratterud and Laurence Habib 505–520 Does Clicker Use Improve Exam Scores? A Controlled Randomized Experiment in a Bachelor-Level Course in Software Engineering
Yücel Ugurlu 521–528 User Attention Analysis for E-learning Systems—Towards Intelligent Tutoring
Enosha Hettiarachchi, M. Antonia Huertas and Enric Mor 529–540 E-Assessment System for Skill and Knowledge Assessment in Computer Engineering Education
Sonja Pamplona, Nelson Medinilla and Pamela Flores 541–552 Assessment for Learning: A Case Study of an Online Course in Operating Systems
Ang Liu, Yun Dai and Stephen Lu 553–566 Effectiveness of E-learning 2.0 Tools and Services to Support Learner–Learner Virtual Interactions in a Global Engineering Class
Wen-Hsiung Wu, Wen-Cheng Yan, Wei-Yang Wang, Sung-Lin Li and Hao-Yun Kao 567–573 Comparison of Varied Social Media in Assisting Student Learning
Noemí Merayo, Patricia Prieto, Ramón J. Durán, Juan C. Agudo, Patricia Fernández, Ignacio de Miguel, Rubén M. Lorenzo and Evaristo J. Abril 574–588 M-learning and E-learning Interactive Applications to Enhance the Teaching–Learning Process in Optical Communications Courses
Mengping Tsuei and Ri-Teng Lai 589–596 Development of an Online Engineering Drawing System to Enhance Junior High School Students’ Learning in an Engineering Graphics Course

Section II
Contributions in: Active Learning, Technology Assessment, Wiki System, Team Work, Motivation, Creativity, Entrepreneurship, Engineering Education Research

Prateek Shekhar, Matt Demonbrun, Maura Borrego, Cynthia Finelli, Michael Prince, Charles Henderson and Cynthia Waters 597–609 Development of an Observation Protocol to Study Undergraduate Engineering Student Resistance to Active Learning
Sara Blanc, José Vicente Benlloch-Dualde and Gínes Benet 610–618 Engaging Students in an Undergraduate Computer Technology Course: An Active-Learning Approach
Pao-Nan Chou, Wei-Fan Chen and Hsin-Ting Lin 619–626 Investigation of Using Wiki to Facilitate Group Composition in Learning Engineering Knowledge: A Quasi-Experimental Study
Deepti Mishra, Sofiya Ostrovska and Tuna Hacaloglu 627–634 Assessing Team Work in Engineering Projects
Patricia L. Hardré, Zahed Siddique and Warren F. Smith 635–647 Modeling the Motivation of Mechanical Engineering Students: Productive Perceptions for Present and Future Success
Chih-Chao Chung, Wei-Yuan Dzan, Ru-Chu Shih and Shi-Jer Lou 648–660 Study on BOPPPS Application for Creativity Learning Effectiveness