

Contents

Contributions in: Problem-Based Learning, Active Learning, Hands-On Learning, Global Engineer, Student Engagement, Multidisciplinary Learning, Transdisciplinarity, Interdisciplinary Skills, Evidence-Based Education, Motivation, Doctoral Research, Self-efficacy, Conceptual Modelling, Teaching Evaluation, Accreditation, Software Metrics, Software Engineering, Information Systems, Internet of Things, Engineering Design, Global Engineer, Educational Technology, E-Learning, Fluid Mechanics, Heat Exchangers, Stress Analysis, Hydrology, Energy Management

| | | |
|---|-----------|--|
| Ahmad Ibrahim | 1137 | Editorial |
| Prateek Shekhar and Maura Borrego | 1138–1148 | Implementing Project-Based Learning in a Civil Engineering Course: A Practitioner's Perspective |
| Shane Brown, Kacey Beddoes, Devlin Montfort and Anne Baghdadvan | 1149–1162 | Engineering Students' Fluid Mechanics Misconceptions: A Description and Theoretical Explanation |
| Paul Golter, Bernard Van Wie and Laura Coon | 1163–1179 | Capabilities of Desktop Scale Heat Transfer and Fluid Mechanics Equipment for Classroom Instruction |
| Roger Carrick and Aleksander Czekanski | 1180–1188 | A Review of Outcome-Based Education and the Use of Engineering Design Competitions to Improve Underrepresented Attributes |
| Benjamin B. Wheatley, Kristine M. Fischenich, Lisa M. Abrams Sheryl A. Sorby, Harlal Singh Mali, Anil K. Jain and Tammy L. Haut Donahue | 1189–1198 | An International Fellowship Experience for Engineering Undergraduates: Improving Technical, Teamwork, and Cultural Competency |
| Rosa Estriégana-Valdehita, Roberto Barchino Plata and José-Amelio Medina-Merodio | 1199–1212 | Educational Technology in Flipped Course Design |
| Denise R. Simmons, Yincheng Ye, Nathaniel J. Hunsu and Olusola O. Adesope | 1213–1221 | Development of a Survey to Explore Out-of-Class Engagement of Engineering Students |
| Hsiu-Ping Yueh, Yi-Lin Liu and Chaoyun Liang | 1222–1232 | Multidisciplinary Learning: Impact of Internal and External Factors |
| Klavdiya Bochenina, Anna Bilyatdinova, Alexey Dukhanov and Gerassimos Athanassoulis | 1233–1241 | Implementation and Deployment of Transdisciplinary Learning Environments during Short-term Educational Events on Computational Science |
| Atila Ertas, Heather Greenhalgh-Spencer, Utku Gulbulak, Turgut Batuhan Baturalp and Kellilynn M. Frias | 1242–1256 | Transdisciplinary Collaborative Research Exploration for Undergraduate Engineering Students |
| Troy Hicks, Justin Bruner and Tolga Kaya | 1257–1270 | Implementation of Blogging as an Alternative to the Lab Report |
| L. C. Woollacott and J. van der Merwe | 1271–1282 | A Phenomenographic Analysis of Students' Experience of the Mohr Circle: A Case Study in Research-Led Engineering Education |
| Erika A. Mosykowski, Shanna R. Daly and Diane L. Peters | 1283–1296 | Drivers of Research Topic Selection for Engineering Doctoral Students |
| Masoud Ghodrat Abadi, David S. Hurwitz and Shane Brown | 1297–1306 | Influence of Context on Item-Specific Self-Efficacy and Competence of Engineering Students |
| Jean-Luc Martel, Kenjy Demeester, François Brisette, Annie Poulin and Richard Arsenault | 1307–1316 | HMETS—A Simple and Efficient Hydrology Model for Teaching Hydrological Modelling, Flow Forecasting and Climate Change Impacts |
| Keisha A. Villanueva, Shane A. Brown, Nicole P. Pitterson, David S. Hurwitz and Ann Sitomer | 1317–1334 | Teaching Evaluation Practices in Engineering Programs: Current Approaches and Usefulness |
| Lung-Sheng Lee, Hui-Min Ko and Mei-Tyng Wang | 1335–1344 | Quality of Accreditation Services for Engineering Programs |
| Miloš Milić, Siniša Vlajić, Ilija Antović, Dušan Savić, Vojislav Stanojević and Saša Lazarević | 1345–1360 | Software Quality Standards and Lean Approach in Teaching and Learning Programming |
| Fatih Gurcan and Cemal Kose | 1361–1368 | Analysis of Software Engineering Industry Needs and Trends: Implications for Education |

**Branislav Stevanov, Darko Stefanovic,
Andras Anderla, Srdjan Sladojevic and
Nemanja Tasic**

1369–1379

New Approach to Information Systems Engineering Study Program to Meet Industry Expectations

**Wen-Jye Shyr, Chien-Fu Chiou,
Fu-Chun Yang and Po-Chi Li**

1380–1385

Energy Management Competency Development based on the Internet of Things (IOT)

1386

Guide for Authors