

Conference Agenda

Session Overview

Date: Sunday, 15/Sep/2019

10:00am - 4:00pm	Doctoral Symposium in Engineering Education Location: K195 Chair: Kristina Edström Chair: Jonte Bernhard Chair: Tinne De Laet
3:30pm - 4:00pm	Registration opens and welcome coffee/tea break Location: First floor building K
5:00pm - 6:00pm	Board Of Directors Meeting Location: K197 Chair: Michael Noel Murphy on invitation only
6:00pm - 8:00pm	Get together Location: Ceremony Hall

Date: Monday, 16/Sep/2019

8:00am - 9:00am	Registration desk opens and welcome coffee/tea - Monday Location: First floor building K							
9:00am - 9:50am	Conference Opening Location: Building K aula Chair: Balázs Vince Nagy							
9:50am - 10:05am	Coffee/tea break 16 Sep morning Location: First floor building K							
10:05am - 11:45am	<p>Oral presentations: Diversity in Engineering Education? Location: K I 34 Chair: Krisztina László</p> <p>Closing the feedback circle in the transition from secondary to higher education De Laet, Tinne; Broos, Tom; Pinxten, Maarten; Langie, Greet; Van Soom, Carolien KU Leuven, Belgium</p> <p>Retaining students at Aalborg University. What are we doing, when we are good at retaining students? Case: Interaction design 2014 - 2019 Routhe, Henrik Worm; Bøgelund, Pia Aalborg University, Denmark</p> <p>Military Veterans' Pathways from High School to Postsecondary Engineering Education Main, Joyce¹; Lord, Susan²; Mobley, Catherine³; Brawner, Catherine⁴; Camacho, Michelle²; Pantoja, Christina¹ 1: Purdue University, United States of America; 2: University of San Diego, USA; 3: Clemson University, USA; 4: Research Triangle Educational Consultants</p> <p>Are they going to succeed? - Novel prediction test for freshmen at BME, Faculty of</p>	<p>Oral presentations: Integrated learning environments for the digital native learners Location: K I 50 Chair: Zoltán Hell</p> <p>E-learning on the lab - deeper learning & more efficiency Vreman - de Olde, Cornelise; Rouwenhorst, Chris; Alers, Janneke; van der Veen, Jan University of Twente, Netherlands, The</p> <p>Combining Flipped Ideas and Online Learning Järvinen, Hannu-Matti; Niemelä, Pia; Virta, Ulla-Talvikki Tampere University, Finland</p> <p>Integration of Courses and Projects - disrupting the traditional PBL semester structure Busk Kofeod, Lise; Birch Andreassen, Lars; Bruun Pedersen, Jon Ram; Svarre Kristensen, Nanna Aalborg University Copenhagen, Denmark</p> <p>Laboratory learning: influence of the perceived laboratory mode on learning outcomes Steger, Fabian^{1,2}; Arbesmeier, Alexander³; Nitsche, Alexander²; Brade, Katja²; Schweiger, Hans-Georg²; Belski, Iouri¹ 1: Royal Melbourne Institute of Technology / Australia; 2: Technische Hochschule Ingolstadt / Germany; 3: University of Vienna / Austria</p> <p>From Drawings to Digital Devices - Additives to the History of Content and Methodological Development of</p>	<p>Oral presentations: Lifelong Learning Location: K I 55 Chair: Anikó Kálmán</p> <p>Preparing engineering students for a lifetime of learning: a case study of curricular redesign De Keyser, Jozefien; Lievens, Jeroen; Baeten, Johan; Braeken, Leen KU Leuven (Technologiecampus Diepenbeek, Belgium)</p> <p>What elements of engineering curricula do graduates really value? - A reflective survey Thomson, Gareth Aston University, United Kingdom</p> <p>Engineering Graduates' Development of Expertise and Skills - Views from Academic Stakeholders Pyrhonen, Veli-Pekka; Niiranen, Sonja; Pajarre, Eila Tampere University, Finland</p> <p>Engineer to Manager Work-Role Transition: A Single Case Narrative Nittala, Swetha; Jesiek, Brent Purdue University, United States of America</p> <p>Lifelong Learning in a (self)complex :monitor;reflect;dericted learning situation Tun Zaw, Tun Zaw¹; Kálmán, Anikó² 1: Budapest University of Technology and Economics, Hungary 2; 2: Doctoral School of Education, University of Szeged 1</p>	<p>Oral presentations: Sustainability reflecting the complexity of modern society Location: K I 72 Chair: Gyula Zilahy</p> <p>Integrating SDGs into the Bachelor's Degree in Civil Engineering Gimenez-Carbo, Ester; Gómez-Martin, Maria Esther; Andrés-Doménech, Ignacio Universitat Politècnica de Valencia, Spain</p> <p>Innovative methods of teaching Sustainable Development Zilahy, Gyula¹; Zsoka, Agnes² 1: Budapest University of Technology and Economics; 2: Corvinus University of Budapest</p> <p>Living labs: dealing with uncertainty in solving complex problems Wehrmann, Caroline; Van den Bogaard, Maartje Delft University of Technology, Netherlands, The</p> <p>Critical media literacy in the Engineering Education Nagy, Krisztina Budapest University of Technology and Economics, Hungary</p> <p>Examining Exemplarity in Problem-Based Engineering Education for Sustainability Servant-Miklos, Virginia; Guerra, Aida Aalborg University, Denmark</p>	<p>Workshop: Digital Testing Location: K I 95 Chair: Marloes Gertrude Luttikhuis</p> <p>Exploring the future of digital testing: How can multiple-choice and closed questions play a role in engineering education? Lochner, Alisa Jeanne; Luttikhuis, Marloes University of Twente, The Netherlands</p>	<p>Workshop: Green Logistics Location: K I 97 Chair: Araceli Queiruga-Dios</p> <p>Green logistics: another engineering is possible Queiruga-Dios, Araceli; Santos Sánchez, Maria Jesús; Hernández Encinas, Ascensión University of Salamanca, Spain</p>	<p>Workshop: Medvematek Project Location: K F 73 Chair: Péter Kovács</p> <p>The Medvematek Project and the Smart Trails application Kovács, Péter^{1,2,3} 1: Budapest University of Technology and Economics, Hungary; 2: A Matematika Összeköt Egyesület, Hungary; 3: MTA-BME Information Systems Research Group</p>	<p>Workshop: Physical Computing Location: K F 72 Chair: Shannon Massie Chance</p> <p>Physical Computing: A low-cost project-based approach to engineering education Hannon, Paula Kelly¹; Berry, Damon¹; Chance, Shannon^{1,2}; Core, Mick¹; Duignan, Frank¹ 1: TU Dublin; 2: UCL</p>

	<p>Chemical Technology and Biotechnology Szilágyi, Brigitta¹; Hornyánszky, Gábor²; Berezvai, Szabolcs³; Hives, Áron⁴; Horváth, Dániel⁴ 1: Department of Geometry, Budapest University of Technology and Economics, Budapest, Hungary; 2: Department of Organic Chemistry and Technology, Budapest University of Technology and Economics; 3: Department of Applied Mechanics, Budapest University of Technology and Economics, Budapest, Hungary; 4: EduBase Educational Services LLC, Budapest, Hungary</p>	<p>Engineer Training in Hungary Molnár, György; Szűts, Zoltán; Orosz, Beáta Budapest University of Technology and Economics, Hungary</p>						
	<p>Enriching learning experiences for students to enhance their engineering competences across cultures and nations Van Petegem, Wim¹; Lang, Dena² 1: KU Leuven, Belgium; 2: Penn State University, US</p>							
11:45am - 12:55pm	<p>Lunch 16 Sep Location: First floor building K</p>			<p>Lunch for SEFI newcomers Location: Ceremony Hall</p>				
1:00pm - 2:00pm	<p>Keynote lecture: Tibor Navracsics Location: Building K aula Chair: Michael Noel Murphy</p>							
2:00pm - 2:15pm	<p>Special interest groups (Working Groups) pitches Location: Building K aula Chair: Yolande Berbers</p>							
2:15pm - 3:55pm	<p>Working Group Workshop: Attractiveness in Engineering Education Location: K I 50 Chair: Klara Kövesi Chair: Katriina Schrey-Niemenmaa</p> <p>Attractiveness of engineering schools in Europe Schrey-Niemenmaa, Katriina¹; Kövesi, Klara² 1: Aalto University, Finland; 2: Ensta-Bretagne, France</p>	<p>Working Group Workshop: Engineering Education Research Location: K I 55 Chair: Tinne De Laet</p> <p>Recent References in Engineering Education Research De Laet, Tinne KU Leuven, Belgium</p>	<p>Working Group Workshop: Physics Location: K F 72 Chair: Juho Tiili</p> <p>Sharing Good Practices for Enhancing Introductory Physics Learning Tiili, Juho Tampere University of Applied Sciences, Finland</p>	<p>Workshop: Circular Economy Location: K I 97 Chair: Kirsten Schmidt</p> <p>KATCH UP! Integrating circular economy in engineering education through playing a board game Schmidt, Kirsten¹; Afonso, Ana²; Sampaio, Joao²; Mulet, Elena³; Kalleitner-Huber, Maria⁴ 1: Aalborg University, Denmark; 2: University of Aveiro; 3: University Jaume I; 4: Austrian Institute of Ecology</p>	<p>Workshop: Design Thinking Education Location: K I 95 Chair: Lueny Morell</p> <p>Design Thinking – the Way to Teach Design in Engineering Education Morell, Lueny¹; Vendrell-Vidal, Eduardo² 1: InnovaHiEd; 2: Universidad Politécnic de Valencia</p>	<p>Workshop: Ethics in Engineering Education Location: K I 34 Chair: Gunter Bombaerts</p> <p>Developing Case Studies for Engineering Ethics Instruction Bombaerts, Gunter¹; Martin, Diana Adela² 1: Technische Universiteit Eindhoven; 2: Technological University Dublin</p>	<p>Workshop: New Teaching Location: K F 73 Chair: Gabriella Tarján</p> <p>Participants can take part in our workshop only if they bring their own devices (laptops are preferred).</p> <p>Gathering and sharing new methods and techniques to apply 21st century pedagogy in engineering education Tarján, Gabriella¹; Pluzsik, Anikó² 1: Department of Structural Engineering, Budapest University of</p>	<p>Workshop: Phenomenography Location: K F 79 Chair: Mike Mimirinis</p> <p>Understanding qualitatively different experiences of learning in Engineering: Variation as a learning tool Mimirinis, Mike¹; Chance, Shannon M.^{2,3}; Direito, Inês² 1: Anglia Ruskin University; 2: UCL Centre for Engineering Education; 3: TU Dublin</p>

							Technology and Economics, Hungary; 2: Department of Mechanics, Materials & Structures, Budapest University of Technology and Economics, Hungary	
3:55pm - 4:15pm	Coffee/tea break 16 Sep afternoon Location: First floor building K							
4:15pm - 5:15pm	<p>Discussions: Diversity in Engineering Education? Location: K F 72 Chair: Gillian Nicola Saunders-Smits</p> <p>Dealing with Diversity – Co-designing a Game-based Learning Scenario in Engineering Studies Seidel, Anna; Weidle, Franziska; Boerner, Claudia; Flagmeier, Lukas; Vossler, Jonas Brandenburg University of Technology Cottbus-Senfenberg, Germany</p> <p>Diversifying Indigenous Narratives in Design Education; A Decolonising Design Critique of Affordance-Based Design Brook, Alastair Stuart James University College Cork, Ireland</p> <p>Complex Thinking for Diversity, Attractiveness, and Sustainability Tabas, Brad; Kövesi, Klara ENSTA BRETAGNE, France</p>	<p>Do it in practice - Discussions Location: K F 73 Chair: Peter Toth</p> <p>Making Engineering students think about their study approaches Oude Alink, Charlotte; Schretlen, Jolanthe¹; Thomas, Tom¹; Stobbelaar, Thelma² 1: University of Twente, Netherlands, The; 2: Didactus advies & ontwikkeling</p> <p>Application of continuing engineering education talent training model and mixed learning model based on the construction of "Intelligent Chinese Academy of Sciences" in lifelong education Zhang, Sisi; Zhao, Yixia; Wang, Runqiang; Tao, Yiyuan; Zhang, Qi Computer Network Information Center, Chinese Academy of Sciences, China, People's Republic of</p> <p>A new model of entrepreneurship education for engineering students Sucala, Voicu Ion; Carroll, Sean; Cory, Corrina Zoey University of Exeter, United Kingdom</p>	<p>Oral presentations: 4th Industrial Revolution Location: K I 50 Chair: Aida Olivia Guerra</p> <p>Integrating industry seminars into a professional practice module to prepare students for future engineering challenges Collins, Graham UCL, United Kingdom</p> <p>The development of a Gold Standard Project Based Learning (GSPBL) engineering curriculum to improve Entrepreneurial Competence for success in the 4th industrial revolution Cory, Corrina Zoey; Sucala, Voicu Ion; Carroll, Sean University of Exeter, United Kingdom</p> <p>Importance assigned by students and teachers to soft skills: The case of a two-year technical college Gero, Aharon; Mano-Israeli, Shai Technion – Israel Institute of Technology, Israel</p>	<p>Oral presentations: New complexity quest in engineering sciences Location: K I 55 Chair: John Mitchell</p> <p>The creative transdisciplinary design process in a Problem Based Learning environment Hansen, Ellen Kathrine; Bruun-Pedersen, Jon Ram; Kofeod, Lise Busk Aalborg University, Denmark</p> <p>Mission-framed Project-based Learning: Integrating an Electric Powertrain into a Motor Glider Pourtoulidou, Despoina¹; Steger, Fabian^{1,2}; Burger, Uli³; Göllinger, Harald³; König, Ludwig³; Obermeier, Erwin¹; Schweiger, Hans-Georg¹; Frey, Andreas¹ 1: Faculty of Electrical Engineering and Computer Science, Technische Hochschule Ingolstadt (THI), Ingolstadt, 85049, Germany; 2: School of Engineering, Royal Melbourne Institute of Technology (RMIT), Melbourne, VIC 3000, Australia; 3: Faculty of Mechanical Engineering, Technische Hochschule Ingolstadt (THI), Ingolstadt, 85049, Germany</p>	<p>Orals presentations: Integrated learning environments for the digital native learners Location: K I 34 Chair: Greet Langie</p> <p>Performing engineering digital literacies in context Drysedale, Timothy David; Scoles, Jenny The University of Edinburgh, United Kingdom</p> <p>Learning of complex concepts – engineering students' developing epistemic fluency in an electric circuit theory course Bernhard, Jonte¹; Carstensen, Anna-Karin² 1: Linköping University, Sweden; 2: Jönköping University, Sweden</p> <p>Case Study: Visualizing Computer System Programming Concepts for Education Schmidt, Florian; Ohlemacher, Johannes; Hennig, Vincent; Kao, Odej; Nordholz, Jan TU Berlin, Germany</p>	<p>Oral presentations: New notions of interdisciplinarity in engineering education Location: K I 95 Chair: Tamás Kozma</p> <p>Cross overs in technology-related jobs Sjoer, Ellen¹; Beelen-Slijper, van Jeany²; Biemans, Petra²; Jacobs, Frans¹ 1: The Hague University of Applied Sciences, The Netherlands; 2: Inholland University of Applied Sciences, The Netherlands</p> <p>Interdisciplinary education: a case study at the University of Twente Aagten, Daniëlle; Slotman, Karen; MacLeod, Miles University of Twente, Netherlands, The</p> <p>Smart collaboration for skills and competitiveness in Engineering Education Kakko, Anneli JAMK University of Applied Sciences, Finland</p>	<p>Oral presentations: Fundaments of Engineering Education: Mathematics and Physics Location: K I 97 Chair: Daniela Veitchová</p> <p>Innovative monitoring of study time and performance and its efficiency in first semester Calculus course for engineers Berezvai, Szabolcs¹; Pálya, Zsófia²; Hives, Áron³; Horváth, Dániel³; Szlágyi, Brigitta² 1: Department of Applied Mechanics, Budapest University of Technology and Economics, Budapest, Hungary; 2: Department of Geometry, Budapest University of Technology and Economics, Budapest, Hungary; 3: EduBase Educational Services LLC, Budapest, Hungary</p> <p>EOLES Course, 4 years and going...results and experiences. Fidalgo, André¹; Gericota, Manuel¹; Ferreira, Paulo¹; Andrieu, Guillaume²; Fredon, Thomas² 1: ISEP/IPP, Portugal; 2: Université de Limoges</p> <p>Effectiveness of Active-learning Methodologies in Math Courses for Engineering Students Mendonça, Jorge^{1,2}; Pinto,</p>	<p>Oral presentations Talent Management Location: K I 72 Chair: Marco Santambrogio</p> <p>Children's University at Budapest University of Technology and Economics Dallos, Györgyi; Farkas, László; Hornýánszky, Gábor; Láng Lázi, Márta; Lukács, Mónika BME, Hungary</p> <p>Science Camp, BME Simon, Ferenc; Láng Lázi, Márta; Pokol, Gergő; Módos, Dávid BME, Hungary</p> <p>Recruiting international talent: The importance of language skills for career perspectives of foreign engineering students in Germany Strenger, Natascha Ruhr-Universität Bochum, Germany</p>

							Carla^{1,3}; Nicola, Susana^{1,2} 1: School of Engineering, Polytechnic of Porto; 2: Interdisciplinary Research Center [ISRC]; 3: Centre for Mathematics, University of Porto	
5:15pm - 5:30pm	Break							
5:30pm - 6:15pm	Special interest meeting: Open and online education Location: K I 34 Chair: Calvin David Rans open to all participants	Special interest meeting: Engineering Education Research Location: K I 97 Chair: Tinne De Laet open to all participants	Special interest meeting: Gender and diversity Location: K I 55 Chair: Ines Direito open to all participants	Special interest meeting: Attractiveness Location: K I 95 Chair: Katrina Schrey-Niemenmaa open to all participants	Special interest meeting: Curriculum development Location: K F 76 Chair: Carlos Rioja open to all participants	Special interest meetings: Sustainability Location: K F 79 Chair: André Baier open to all participants	Special interest meeting: Engineering skills Location: K I 72 Chair: Kamel Hawwash open to all participants	Special interest meeting: Physics Location: K I 96 Chair: Juho Tiili open to all participants
	Special interest meeting: Mathematics Location: K I 50 Chair: Daniela Velichová open to all participants	Special interest meeting: Continuing engineering education - lifelong learning Location: K F 73 Chair: Bente Nørgaard open to all participants	Special interest meeting: Ethics Location: K I 21 Chair: Roland Tormey open to all participants					
6:15pm - 6:30pm	Break							
6:30pm - 9:00pm	SEFI Welcome Reception & Award Ceremony Location: Building K aula							

Date: Tuesday, 17/Sep/2019

8:00am - 9:00am	Registration desk opens and welcome coffee/tea - Tuesday Location: First floor building K
9:00am - 9:45am	Keynote lecture: Valeria Csepe Location: Building K aula Chair: Michael Noel Murphy
9:45am - 10:00am	Poster pitches Location: Building K aula Chair: Linda Citterio
10:00am - 11:00am	Coffee/tea break and posters view Location: Ceremony Hall
	Python for Engineers Concept Inventory (PECI): Contextualized assessment of programming skills for engineering undergraduates Cooke, Neil ; Hawwash, Kamel ; Smith, Bradney University of Birmingham, United Kingdom
	Student activation in curriculum „Physics for engineers“ Mittelstädt, Alexander ; Schliwa, Andrei Technische Universität Berlin, Germany
	Project-induced individualized acquisition of competences Di Nardo, Silvio ; Wagner, Claas ; Raschke, Markus ; Schwarz, Jürg Lucerne University of Applied Sciences and Arts, Switzerland
	A Systematic Literature Review of China New Engineering Education Li, Tuoyu ¹ ; Wang, Yujie ¹ ; Li, Chen ² ; Wu, Wei ³ 1: College of Public Affairs, Zhejiang University, China; 2: College of Electrical Engineering, Zhejiang University, China; 3: Institute of China's Science, Technology and Education Policy, Zhejiang University, China
	Understanding how students learn in project-based courses Larsen, Samuel Brünig ; Kjærsgaard, Niels Christian ; Bigum, Per Valentin ; Jacobsen, Peter Technical University of Denmark, Denmark
	Hands-on work in a web-based Basic Electronics course Naukkarinen, Johanna ; Kuisma, Mikko ; Järvisalo, Heikki Lappeenranta University of Technology, Finland
	“Washington Accord” graduate attributes and its implication for the engineers’ development in China’s local universities and colleges Qi, Shuyu Beijing University of Technology, China, People's Republic of
	Analysis of services for the project activity under the blended learning setting Yustyk, Iryna The Bohdan Khmelnytsky National University of Cherkasy, Ukraine
	Innovating exam designs in lifelong learning Keller-Andreasen, Isa ¹ ; Helth, Poula ^{1,2} 1: DTU Diplom, Denmark; 2: PoulaHelth.dk
	Take the way of excellence! What makes French engineering schools so attractive for talented students? Moullignier, Romain ; Gille, Maryse ; Kovesi, Klara ENSTA Bretagne, France
	Industry-oriented Fluid Mechanics Project Laboratory (WiSpr) as part of the MINTgrün orientation studies at TU Berlin Strauch, Carsten ¹ ; Sabrowski, Pierre ² ; Przybilla, Sabine ⁴ ; Heller, Claudia ⁵ ; Oertel, Christian ³ ; Thamsen, Paul Uwe ¹ 1: Technische Universität Berlin, Germany; 2: dive solutions GmbH; 3: BSH Hausgeräte GmbH; 4: Beuth Hochschule für Technik Berlin; 5: Hochschule für Technik und Wirtschaft Berlin
	Developing Innovative Interdisciplinary Engineering Education with IoT Technologies Tsai, Hsiao-Ping ; Wen, Chin-Yu Department of Electrical Engineering, National Chung Hsing University, Taiwan
	Future engineering education – where are we heading? Kolmos, Anette ² ; Gumaelius, Lena ¹ 1: KTH, Sweden; 2: Aalborg University, Denmark
	Student Assessed Impact of Active Learning Methods and Androgogy Pavlova, Irina Viktorovna ² ; SANGER, PHILLIP Albert ¹ 1: Purdue University, United States of America; 2: Kazan National Research Technological University, Kazan, Russian Federation
	Umbrella Courses at a BEng programme in Civil Engineering Schelling, Adriaan Herman ; Molin, Jesper Technical University of Denmark, Denmark
	Comparison of the effects of the integrated learning environments between the social science and the mathematics Ito, Takao ; Ishii, Kazuyoshi ; Nishi, Makoto ; Shin, Masako ; Miyazaki, Keisuke Kanazawa Institute of Technology, Japan
	Balancing a change management process - A case study of how to approach curriculum change in higher education Svarre Kristensen, Nanna ; Andreasen, Lars Birch ; Kofoed, Lise Busk ; Bruun- Pedersen, Jon Ram Aalborg Universitet, Denmark

Project in Mechanical Engineering, an Experience in the Involvement of students in the Development of Biomechanical Devices in Partnership with Paralympic Athletes

Roseiro, Luis Manuel

Coimbra Polytechnic - ISEC, Portugal

Understanding and Evaluating a Business Case and Improving Interdisciplinary Competences among Bachelor of Engineering Students

Stisen Flyger, Charlotte; Kjaersgaard, Niels

DTU Diplom, Denmark

<p>11:00am - 12:00pm</p>	<p>Discussions mixed topics Location: K F 72 Chair: Anne-Marie Jolly</p> <p>Implementing an e-learning mindset and e-learning skills among the teachers of a department Bojesen, Katrine Brixen; Goltermann, Per DTU, Denmark</p>	<p>Oral presentations: 4th Industrial Revolution Location: K I 50 Chair: Bente Nørgaard</p> <p>Sustainable Industry 4.0 Guerra, Aida; Nørgaard, Bente Aalborg University, Denmark</p>	<p>Oral presentations: New complexity quest in engineering sciences Location: K I 55 Chair: Valéria Csépe</p>	<p>Oral presentations: Diversity in Engineering Education? Location: K I 34 Chair: Anne Patricia Gardner</p>	<p>Oral presentations: Integrated learning environments for the digital native learners Location: K I 72 Chair: Károly Veszprémi</p>	<p>Oral presentations: New notions of interdisciplinarity in engineering education Location: K I 95 Chair: Maarten Pinxten</p>	<p>Oral presentations: Lifelong Learning Location: K I 97 Chair: Tom Goldfinch</p>	<p>Oral presentations: Fundamentals of Engineering Education: Mathematics and Physics Location: K F 76 Chair: Carla M.A. Pinto</p>
	<p>Renewing Mechanical and Mechatronics programs Hadgraft, Roger G; Francis, Beata; Halkon, Ben; Fitch, Robert University of Technology Sydney, Australia</p>	<p>Preparing technicians for the 4th industrial revolution Peters, Sjoerd; Corporaal, Stephan; Wolffgramm, Milan; McGovern, Kristy Saxion University of Applied Sciences, Netherlands, The</p>	<p>Systemic approach to address complexity in the training of engineers in innovation and creativity: Modelling the process of implementing innovative projects Zergout, Imane¹; Ajana, Souad¹; Bakkali, Soumia¹; Adam, Catherine² 1: University of Hassan II-ENSEM, Casablanca, Morocco; 2: ENSTA Bretagne, Centre de Recherche sur la Formation, Cnam Paris (EA 1410), Brest, France</p>	<p>Student entrance knowledge, expectations, and motivation within introductory programming courses in Portugal and Serbia Alves, Luis¹; Gajić, Dušan²; Rangel Henriques, Pedro³; Ivančević, Vladimir²; Lalić, Maksim²; Luković, Ivan²; Varanda Pereira, Maria João¹; Popov, Srđan²; Correia Tavares, Paula⁴ 1: Instituto Politécnico de Bragança, Escola Superior de Tecnologia e Gestão, Departamento de Informática e Comunicações, Portugal; 2: University of Novi Sad, Faculty of Technical Sciences, Department of Computing and Control Engineering, Serbia; 3: Universidade do Minho, Escola de Engenharia, Departamento de Informática, Portugal; 4: Instituto Superior de Engenharia do Porto, Departamento de Engenharia Informática, Portugal</p>	<p>Collective Intelligence in Robotics Labs: Mapping the Flows of Information Braga, Marco; Schettini, Carlos CEFET-RJ Federal Centre for Technological Education of Rio de Janeiro, Brazil</p>	<p>Fit for Purpose? Engineering Educators', Teacher Training & Engineering Scholarship. Clark, Robin¹; Andrews, Jane¹; Penlington, Roger²; Knowles, Graeme¹ 1: University of Warwick, United Kingdom; 2: University of Northumbria, United Kingdom</p>	<p>Was It Worth It? Results of an Engineering Educator Capacity Building Program Morell, Lueny¹; Cukierman, Uriel²; Vendrell-Vidal, Eduardo³; Buxeda, Rosa⁴; Rivera-Gallego, Wilson⁴; Sjursen, Harold⁵; Correa, Laureano²; Guzmán, María⁶; Palmieri, Juan²; Saliceti, Lorenzo⁴ 1: InnovaHied; 2: Universidad Tecnológica Nacional - Argentina; 3: Universidad Politécnica de Valencia; 4: Universidad de Puerto Rico - Mayagüez; 5: New York University; 6: Universidad Nacional de Tucumán</p>	<p>Application of Data Analytics on Improvements in Standardized Visualization Test Scores Rodriguez, Jorge¹; Bairaktarova, Diana² 1: Western Michigan University, United States of America; 2: Virginia Tech, United States of America</p>
	<p>Looking backwards to the evolution of the recommendations emitted by an accreditation agency. JOLLY, Anne-Marie^{1,2}; Freyermuth, Christine¹ 1: CTI; 2: Polytech Orleans</p>	<p>From Customer Projects to ECTS Mielikäinen, Maisa Tuulikki; Angelva, Juhani; Tepsa, Tauno Lapland University of Applied Sciences, Finland</p>	<p>Short-term field study programmes for developing interdisciplinary skills in engineering education Gonçalves Martin, Johanna; Graezer Bideau, Florence; Hoesli, Eric; Laperrouza, Marc; Tormey, Roland Ecole polytechnique fédérale de Lausanne, Switzerland</p>	<p>Complexity for heterogeneous classes: teaching embedded systems using an open project approach Huening, Felix FH Aachen, Germany</p>	<p>Enhancing Laboratory Learning Experience: A New Experimental Set-Up For Power Electronics and Electrical Drive Education Duijsen, Peter van¹; Zuidervliet, Diëgo²; Dirksen, Michael² 1: Simulation Research, The Netherlands; 2: The Hague University of Applied Sciences, The Netherlands</p>	<p>What Is the Difference between a Group of Musicians and a Team of Engineering Students? A Philosophical Approach to the Problem-Based Nature of Engineering Frimodt-Møller, Søren Rosenlund Aalborg University, Denmark</p>	<p>Progression in engineering learning competences Holgaard, Jette Egelund; Kolmos, Anette Aalborg Centre for Problem Based Learning in Engineering Science and Sustainability, Aalborg University, Denmark</p>	<p>Analysis of the significantly improved results after the implementation of a major pedagogic reform in an engineering degree programme Valmu, Heikki Tapani; Kupila, Eero; Kallio, Raisa Metropolia University of Applied Sciences, Finland</p>
			<p>Complexity for heterogeneous classes: teaching embedded systems using an open project approach Huening, Felix FH Aachen, Germany</p>	<p>Rural Locations Modify Socioeconomic Status Differences in Spatial Visualisation Panther, Grace¹; Sorby, Sheryl²; Loney, Norman² 1: University of Nebraska-Lincoln; 2: University of Cincinnati, United States of America</p>	<p>Designing a program on Data Science while supporting faculty capacity building in Latin America Salazar-Gomez, Andres F.; Bagiati, Aikaterini; Sive, Hazel L. Massachusetts Institute of Technology, United States of America</p>	<p>The Ethical Culture of a U.S. Research University in Transition: Understanding, and Working with, Undergraduate Curriculum Change in a Complex Pedagogical Community Staley, Thomas William; Bairaktarova, Diana; Biscotte, Stephen; Snyder, Samuel Virginia Tech, United States of America</p>	<p>Towards Mechanical Engineers' Expertise with Problem Based Learning Kantanen, Mari-Selina; Ruottu, Martta Lapland University of Applied Sciences, Finland</p>	<p>Impact of a learning analytics dashboard on the practice of students and teachers Hardebolle, Cécile; Jermann, Patrick; Pinto, Francisco; Tormey, Roland Ecole Polytechnique Fédérale de Lausanne, Switzerland</p>
				<p>Engineering Education, Split Between Two Cultures:</p>				

				An Examination into Patterns of Implementation of Ethics Education in Engineering Programmes in Ireland Martin, Diana Adela; Conlon, Eddie; Bowe, Brian Technological University Dublin			
	SEFI meets ESTIEM Location: K I 96 Chair: Klara Kövesi on invitation only						
12:00pm - 1:00pm	European Engineering Deans Council Location: Ceremony Hall Chair: Luis M. Sánchez Ruiz Chair: Gerhard Müller on invitation only	Internal editors' meeting Location: K I 94 on invitation only		Liaison Meeting with Working Group Chairs Location: Ceremony Hall Chair: Yolande Berbers on invitation only		Lunch 17 Sep Location: First floor building K	
1:00pm - 2:30pm	Plenary session: Should Engineering Students be treated as engineers? Location: Building K aula Chair: Antonia Ioana Nanau Chair: Senne Meuseen Chair: Michael Noel Murphy Students challenge the industries						
2:00pm - 4:00pm	Motivation of students in STEM Education Location: K I 21 Chair: Joao Miguel Moita Chair: Silvia Marogel BEST workshop for students only limited participants						
2:30pm - 3:00pm	Coffee/tea break 17 Sep afternoon Location: First floor building K						
3:00pm - 4:00pm	Discussions: New complexity quest in engineering sciences Location: K I 97 Chair: Jonte Bernhard Student Perceptions of Complexity in Engineering Education Goldfinch, Tom; Vulic, John; Leigh, Elysebeth; Willey, Keith University of Sydney, Australia Curricular Network Analysis Riedel, Uta; Jakobtorweihen, Sven; Bornhöft, Sara University of Technology Hamburg, Germany Lack of environmental education in the training of environmental engineers in Colombia. Acosta Castellanos, Pedro Mauricio¹; Queiruga Dios, Araceli²; Castro Ortégón, Alejandra³ 1: Universidad Santo Tomás, Colombia; 2: Universidad de Salamanca, España; 3: Universidad Santo Tomás, Colombia	Discussions: Diversity in Engineering Education? Location: K I 34 Chair: Gareth Thomson Attracting female adolescents into STEM studies – where's the beef? Suviniitty, Jaana; Clavert, Maria Aalto University, Finland Addressing gender as part of a Multifactorial Model of Professional Identity Formation in a PoPBL engineering learning environment BADETS, Alexandra CESI, France MINTgrün Robotics Lab: Hands-on Programming Course as Part of a University Orientation Program Golovko, Darya Technical University of Berlin, Germany	Oral presentations: Integrated learning environments for the digital native learners Location: K I 72 Chair: Carlos Rioja Adaptation of teaching and assessment to students' ambition levels Staffas, Kjell Erik Reinhold; Knorn, Steffi Uppsala University, Sweden The relationship between ICT based formative assessment and academic achievement in a Mechanics of Materials course Meijers, Michael; Verkoeljen, Peter Avans University of Applied Sciences, Netherlands, The The future of universities in a digitalized world from a STEM students' perspective Kovaleva, Tatiana¹; Bosten, Armin²; Brandão, Maria³; Forgacs, Boglarka Timea⁴ 1: BEST-Board of European Students of Technology, Russian Federation; 2: BEST-Board of European Students of Technology, Belgium; 3: BEST-Board of European Students of Technology, Portugal; 4: BEST-Board of European Students of Technology, Hungary	Oral presentations: New notions of interdisciplinarity in engineering education Location: K I 95 Chair: Marc Maurice Goossens Design methods for ICT-Supported Courses: A Literature Review Ylinen, Hannu Johannes¹; Juuti, Tero² 1: Seinäjoki University of Applied Sciences, Finland; 2: Tampere University, Finland Software Engineering Education Beyond the Technical: A Systematic Literature Review Groeneveld, Wouter; Vennekens, Joost; Aerts, Kris KU Leuven, Department of Computer Science, OVI Set Sail from the Old Sea? Naval Architecture Education in the Wave of New Generation Learning Wang, Jr-Ping; Hong, Wen-Ling National Kaohsiung University of Science and	Oral presentations: Mixed topics Location: K I 50 Chair: Pia Bagelund Mind Games: An Investigation into the Response of Irish Engineering Students to a Mindset Intervention Ó Sioradain, Domhnall¹; Carr, Michael¹; Van den Broeck, Lynn² 1: TU Dublin, Ireland; 2: KU Leuven What can be recommended to engineering teachers from the analysis of 16 European teaching and learning best practices? Mesquita, Diana¹; Salimova, Tatiana²; Soldatova, Elena²; Atoev, Shohrukh³; Lima, Rui M.¹ 1: University of Minho, Portugal; 2: Ogarev Mordovia State University; 3: Technological University of Tajikistan First-year engineering students' perception of 'what is a good study-day? In	Oral presentations: Open and online teaching and learning Location: K I 55 Chair: Csaba János Hős Online Course for Mechanical CAD Education Jaakma, Kaur; Kiviluoma, Panu Aalto University, Finland An Automatic Assessment System for CAD Education Tiainen, Tuomas Kullervo; Jaakma, Kaur; Kiviluoma, Panu Juhani; Viitala, Raine Aimo Aleks; Kuosmanen, Petri Olavi Aalto University, Finland Post—humanistic 'practices of community' for non-traditional laboratory work Drysdale, Timothy David¹; Scoles, Jenny¹; Scott, Anne-Marie¹; Dishon, Victoria¹; Kelley, Simon¹; Lewis, Richard James²; Watts, Stephen²; Weightman, Andrew³ 1: The University of Edinburgh, United Kingdom; 2: Cardiff University, United Kingdom; 3: The University of	

			Technology, Taiwan	the tension field between having fun and being productive Bogelund, Pia; Nørgaard, Bente Aalborg University, Denmark	Manchester, United Kingdom			
3:00pm - 4:30pm	SEFI Project Workshop 1: EBCC - Sustainable partnership Location: K F 72 Chair: Ilmars Viksne							
	EBCC Model: The Sustainable Partnership Model among Universities, Communities and Industry Viksne, Ilmars ¹ ; Puskarjova, Santa ¹ ; Lanthony, Antoine ² ; El Idrissi, Mohamed ² ; Mihailidis, Athanassios ³ ; Côme, Françoise ⁴ ; Dunez-Simon, Mireille ⁵ ; Jouanlanne, Thomas ⁵ 1: Riga Technical University, Latvia; 2: Institut Supérieur de Mécanique de Paris – Supméca, Saint-Ouen, France; 3: Aristotle University of Thessaloniki, Greece; 4: European Society for Engineering Education, Belgium; 5: Établissement public territorial Plaine Commune, Saint-Ouen, France							
4:00pm - 4:30pm	Break							
4:30pm - 6:00pm	MathWorks Workshop: MATLAB in Teaching and Research Location: K I 50 Chair: Alessandro Tarchini MathWorks Workshop Tarchini, Alessandro MathWorks, Italy	SEFI General Assembly Location: K F 76 on invitation only	SEFI Project Workshop 2: EBCC - Product Design Location: K F 72 Chair: Ilmars Viksne EBCC Model: Rapid Prototyping Role for Acquiring Practical Skills in Product Design Engineering Viksne, Ilmars ¹ ; Puskarjova, Santa ¹ ; Lanthony, Antoine ² ; El Idrissi, Mohamed ² ; Mihailidis, Athanassios ³ ; Côme, Françoise ⁴ ; Dunez-Simon, Mireille ⁵ ; Jouanlanne, Thomas ⁵ 1: Riga Technical University, Latvia; 2: Institut Supérieur de Mécanique de Paris – Supméca, Saint-Ouen, France; 3: Aristotle University of Thessaloniki, Greece; 4: European Society for Engineering Education, Belgium; 5: Établissement public territorial Plaine Commune, Saint-Ouen, France	Workshop: Group Formation Location: K I 97 Chair: Sara Grex Chair: Hanne Løje Group formation processes in large classes with focus on student motivation and ownership Grex, Sara; Løje, Hanne DTU, Denmark	Workshop: Inclusiveness Location: K I 95 Chair: Gillian Nicola Saunders-Smits Inclusiveness of Neurodiverse Students in Engineering Education Curriculum Design and Delivery Saunders-Smits, Gillian N.; van den Bogaard, Maartje E.D. Delft University of Technology, Netherlands, The	Workshop: K-12 Learning Location: K I 55 Chair: Joe Diaz Developing hands-on learning approaches to math and physics in K-12 level learning Diaz, Joe; Urrea, Claudia; Bagiati, Aikaterini MIT, United States of America	Granta-Ansys Workshop: Life cycle engineering Location: K I 96 Chair: Claes Fredriksson Participants need to bring laptops with windows and permission to install Software. Max 15 participants. Title: Life-Cycle Engineering and Sustainability in the Classroom: Tackling the Issue of Plastic Waste Fredriksson, Claes; Fung, Abbie Granta Design, United Kingdom	JMP Workshop: Problem solving Location: K I 34 Chair: Volker Kraft TEACHING PROBLEM SOLVING TO ENGINEERS IN THE ERA OF BIG DATA AND INDUSTRY 4.0 Kraft, Volker JMP, Germany

Date: Wednesday, 18/Sep/2019

8:00am - 9:00am	Registration desk opens and welcome coffee/tea - Wednesday Location: First floor building K							
9:00am - 9:45am	Keynote lecture: Jian Lin Location: Building K aula Chair: Balázs Vince Nagy							
9:45am - 10:00am	SEFI 2019 Group Picture							
10:00am - 10:15am	Coffee/tea break 18 Sep morning Location: First floor building K							
10:00am - 11:00am	SEFI meets ASEE Location: K I 96 on invitation only							
10:15am - 11:55am	<p>Hungarian National Instruments - showcases of industry and academia Location: K I 95 Chair: Laszlo Csaba Abraham</p> <p>Hungarian industry-university showcases Abraham, Laszlo Csaba NI Hungary Kft., Hungary</p>	<p>Oral presentations: Diversity in Engineering Education? Location: K I 34 Chair: Sirin Tekinay</p> <p>STEM4GirlsUC3M: reducing gender gap in engineering Campo, Celeste; Segovia-Vargas, Daniel; Ruiz-Navas, E.M. Carlos III University of Madrid, Spain</p> <p>A Demographic Picture of Academics Teaching on Engineering Programmes in Ireland and their Approaches To Teaching. Beagon, Una; Bowe, Brian TU Dublin, Ireland</p> <p>Enhancing group work learning with the Individual Peer Assessed Contribution (IPAC) Seatwo, Alan University College London, United Kingdom</p> <p>She VS She: are female Mexican engineering students "real women"? Gómez Anguiano, Giovanna Leticia; Mendoza Cantú, Maria Fernanda Gima, Mexico</p> <p>Exploring the relationship between spatial ability, individual characteristics and academic performance of first-year students in a French engineering school Charles, Sophie¹; Jaillet, Alain¹; Peyret, Nicolas²; Jeannin, Laurent¹; Rivière, Alain² 1: Université de Cergy-Pontoise, France; 2: Institut Supérieur de Mécanique de Paris</p>	<p>Oral presentations: New notions of interdisciplinarity in engineering education Location: K I 50 Chair: Jui Jen Chou</p> <p>Studying innovation with patents and machine learning algorithms: a laboratory for engineering students Manzini, Raffaella¹; Oneto, Luca²; Ponta, Linda¹; Puliga, Gloria¹; Noè, Carlo¹ 1: LIUC Università Cattaneo, Italy; 2: Università di Pisa, Italy</p> <p>Developing tolerance for ambiguity and uncertainty by interdisciplinary intensive courses Saarikoski, Lotta¹; Rybushkina, Svetlana² 1: VAMK, Finland; 2: TPU, Russia</p> <p>Startup Garage_ The Way to Apply Knowledge Citraro, Mauro¹; Cometta, Silvano²; Carcano, Cristina³; Sommaruga, Lorenzo⁴; Righetti, Alan⁵; Cataldo, Tatiana⁶ 1: University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland; 2: University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland; 3: University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland; 4: University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland; 5: University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland; 6: University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland</p> <p>Simulation of Research-Grade Physics, Chemistry, and</p>	<p>Oral presentations: Fundaments of Engineering Education: Mathematics and Physics Location: K I 55 Chair: Juho Tili</p> <p>Peer learning and concept tests in physics Korpás, Guri Sivertsen; Kahrs, Magnus Strøm; Andersen, Trine Højberg Department of Physics, NTNU, Norway</p> <p>Introductory Engineering Physics as Learning Environment for Engineering Skills Tili, Juho Tampere University of Applied Sciences, Finland</p> <p>An Investigation of First Year Physics Students' Ability and Anxiety The relationship between physics conceptual understanding, geometric thought, spatial reasoning ability and mathematics and spatial anxiety Harding, Rachel; Duffy, Gavin; Bowe, Brian Technological University Dublin, Ireland</p> <p>Interactive Online Modules For Civil Engineering Students – Impacting The Individual Learning Success In Engineering Mechanics? Pelz, Marcel¹; Lang, Martin¹; Özmen, Yasemin¹; Schröder, Jörg¹;</p>	<p>Oral presentations: Open and online teaching and learning Location: K F 73 Chair: Gerhard Müller</p> <p>Experiences from collaborative online education for degree and further education on circular economy Leppänen, Minna Maarit; Kuula, Pirjo Helena Tampere University, Finland</p> <p>Peer review procedures in higher education applied to engineering studies Englert, Hannes; Schmaußer, Corinna; Müller, Gerhard Chair of Structural Mechanics / Technical University of Munich, Germany</p> <p>Next, next, accept, run – the difficulties of university software licences Bör, Dorina; Galbács, Márton; Etzler, Éva; Lógó, Emma BME, Hungary</p> <p>Scrumban learning – agile, lean and transparent framework for practical learning experience Sten, Harri; Ahtee, Tero; Virta, Ulla-Talviki Tampere University, Finland</p>	<p>Workshop: Climate action Location: K F 72 Chair: Jussi-Pekka Teini</p> <p>Empowering Teachers to Climate Action Teini, Jussi-Pekka¹; Heikkilä, Ellen² 1: Academic Engineers and Architects in Finland TEK, Finland; 2: Aalto University Student Union (AAY), Finland</p>	<p>Workshop: PREFER Location: K I 72 Chair: Mariana Leandro Cruz</p> <p>Teaching other Communication Skills than Writing and Presenting – A Take Home Workshop created as part of the PREFER Project Leandro Cruz, Mariana; Saunders-Smits, Gillian N. Delft University of Technology, The Netherlands</p>	<p>Workshop: Reviewing for Engineering Education Journals Location: K I 97 Chair: Kristina Edström</p> <p>Reviewing for Engineering Education Journals Edström, Kristina¹; Benson, Lisa²; Mitchell, John³; Bernhard, Jonte⁴; van den Bogaard, Maartje⁵; Carberry, Adam⁶; Chance, Shannon^{3,7} 1: KTH Royal Institute of Technology, Sweden; 2: Clemson University, USA; 3: University College London, UK; 4: Linköping University, Sweden; 5: TU Delft, The Netherlands; 6: Arizona State University, USA; 7: TU Dublin, Ireland</p>

			<p>Engineering Experiments in LabVIEW as a Flexible Template for Remote Laboratories Lewis, Richard James¹; Drysdale, Timothy David² 1: Cardiff University, United Kingdom; 2: University of Edinburgh, United Kingdom</p> <p>Making writing meaningful for future engineers Ozkan, Desen¹; Bairakatrova, Diana¹; Eodice, Michele² 1: Virginia Tech; 2: University of Oklahoma</p>	<p>Walker, Felix²; Müller, Ralf² 1: University of Duisburg-Essen, Germany; 2: Technical University of Kaiserslautern, Germany</p> <p>EduScrum Method in Teaching Mathematics to Engineering Students Velichová, Daniela; Gabková, Jana Slovak University of Technology in Bratislava, Slovak Republic</p>			
11:00am - 12:00pm	SEFI meets BEST Location: K I 96						
12:00pm - 1:00pm	Lunch 18 Sep Location: First floor building K			Lunch with SEFI Corporate Partners Location: Ceremony Hall on invitation only			
1:00pm - 2:40pm	<p>IACEE Workshop Location: K I 95 Chair: Soma Chakrabarti</p> <p>Engineering Our Way to a Sustainable Future Together la Grange, Errol¹; Smith, Anthony²; Chakrabarti, Soma³ 1: Cahoot Learning; 2: University of Tasmania; 3: ANSYS Granta, United Kingdom</p>	<p>Oral presentations: Diversity in Engineering Education? Location: K I 34 Chair: Ines Direito</p> <p>A phenomenographic study to investigate what we mean by the term "Professional Skills" – preliminary findings Beagon, Una; Bowe, Brian TU Dublin, Ireland</p> <p>The Career Pathways of Engineering PhDs Main, Joyce; Wang, Yanbing Purdue University, United States of America</p> <p>'Quo Vadis' Engineering Education? Schrey-Niemenmaa, Katriina¹; Jones, Mervyn² 1: Aalto University, Finland; 2: Imperial College London, Great Britain</p> <p>Understanding international students' barriers in their first-year at a U.S. university Murzi, Homero; Greene-Havas, Maia; Woods, Johnny Virginia Tech, United States of America</p> <p>Predictors of study success for students of civil engineering at the beginning of their studies Dammann, Elmar¹; Waldeyer, Julia³; Fleischer, Jens²; Wirth, Joachim³; Leutner, Detlev²; Lang, Martin²</p>	<p>Oral presentations: Lifelong Learning Location: K I 97 Chair: Sara Grex</p> <p>Development of learner autonomy in student-centred learning environments in chemical engineering Reyes-Viviescas, Diogenes¹; Ventura-Medina, Esther¹; Anderson, Anthony¹; Mio, Cristina² 1: University of Strathclyde, United Kingdom; 2: University of Glasgow, United Kingdom</p> <p>An exploration of the second year students' "engineering way of thinking" Agrawal, Ashish¹; Blackie, Margaret²; Smit, Renee¹ 1: University of Cape Town, South Africa; 2: Stellenbosch University, South Africa</p> <p>Developing MIT LASER: Leadership Academy for Scientists, Engineers, and Researchers Haldi, Patricia; Crawley, Edward; Baglatti, Aikaterini MIT, United States of America</p> <p>How students and companies learned sustainability in mutual Problem Based Learning loops Schmidt, Kirsten; Mosgaard, Mette Alberg Aalborg University, Denmark</p> <p>On the illusion of knowledge</p>	<p>Oral presentations: Mixed topics Location: K I 50 Chair: Klara Kövesi</p> <p>Changes in Perceptions of Ethical Climate Among Undergraduate Engineering Students Nittala, Swetha¹; Howland, Shiloh James²; Jesiek, Brent K¹ 1: Purdue University, United States of America; 2: Brigham Young University</p> <p>Combined project-based learning and teacher-practical demonstrations to help acquire global engineering skills Peyret, Nicolas¹; Courtois, Sylvain²; Chevallier, Gael³ 1: Laboratoire Quartz SUPMECA EA7393, France; 2: SUPMECA, France; 3: FEMTO-ST Institute UMR6174, France</p> <p>Industry Advisory Board Members' Contributions to Engineering Education Program Development - A Case Study Kullberg, Susanne; Paulin, Dan Chalmers University of Technology, Sweden</p> <p>Peer Reflection Using an E-</p>	<p>Oral presentations Talent Management Location: K I 55 Chair: Greet Langie</p> <p>Exploring Congruency between Engineering students' Professional Role Preference, Competences and Career Choice Craps, Sofie; Pinxten, Maarten; Knipprath, Heidi; Langie, Greet KU Leuven, Belgium</p> <p>Industry validation of a Professional Roles Model to promote engineering employability Craps, Sofie; Pinxten, Maarten; Langie, Greet KU Leuven, Belgium</p> <p>Reconceptualising studies of engineering professional skills: Moving the field on Carthy, Darren; Bowe, Brian; Gaughan, Kevin Technological University Dublin, Ireland</p> <p>Communication Activity Implementation over 3 Engineering Universities: Values and Challenges Leandro Cruz, Mariana¹; Carthy, Darren²; Craps, Sofie³ 1: Delft University of Technology, The Netherlands; 2: Technological University Dublin, Ireland; 3: KU Leuven, Belgium</p>	<p>Workshop: Diverse class Curriculum Location: K F 72 Chair: Becky Bergman</p> <p>Making the culturally diverse classroom work: activities for successful groups Bergman, Becky; Norman, Anthony Chalmers University of Technology, Sweden</p> <p>Workshop: Engineering Curriculum Location: K I 72 Chair: Natascha van Hattum-Janssen</p> <p>An engineering curriculum or a curriculum to shape engineers? van Hattum-Janssen, Natascha¹; Endedijk, Maaike² 1: Saxion University of Applied Sciences, the Netherlands; 2: University of Twente, the Netherlands</p>	<p>Workshop: Research in (Inter) Action Location: K F 73 Chair: Jeroen Lievens</p> <p>Research in (Inter)Action. Collaboratively Exploring the Potential of the "Action Research" Framework for Engineering Education Lievens, Jeroen University of Leuven, Belgium</p>

	1: Hochschule Furtwangen, Germany; 2: Universität Duisburg-Essen, Germany; 3: Ruhr-Universität Bochum, Germany	Thorseth, Trond Morten¹ ; Kahrs, Magnus Strøm ² 1: Norwegian University of Science and Technology, Norway; 2: Norwegian University of Science and Technology, Norway	portfolio Improves Students' Leadership Behavior Maruyama, Tomoko¹ ; Inoue, Masahiro ² 1: Ehime University, Japan; 2: Shibaura Institute of Technology, Japan	Graduate Engineering Skills: A Literature Review - A call for rigorous methodological approaches Beagon, Una; Carthy, Darren; Bowe, Brian TU Dublin, Ireland			
			Global Competence of Chinese engineers in Belt & Road initiative --An Exploratory Study Based On Grounded Theory Yao, Wei^{1,2} ; Chu, Zhaowei ^{1,2} ; Hu, Shunshun ^{1,2} 1: Institute of China's Science, Technology and Education Policy, Zhejiang University, China; 2: School of Public Affairs, Zhejiang University, China				
2:40pm - 3:00pm	Coffee/tea break 18 Sep afternoon Location: First floor building K						
3:00pm - 4:20pm	Maffioli Session Location: K I 96 Chair: Alexis FRANCOIS						
	Blue Engineering - Engineers with Social and Ecological Responsibility Baier, André Technische Universität Berlin, Germany						
	Design, implementation and evaluation of the Flipped Classroom model in a mandatory Linear Algebra course Deparis, Simone; Hardebolle, Cécile; Tormey, Roland; Verma, Himanshu EPFL, Switzerland						
	Development of Online Learning for Life Long Learners in Aerospace Engineering van de Watering, Renée; Rans, Calvin; Saunders-Smits, Gillian Nicola Delft University of Technology, Netherlands, The						
	Umbrella course in Civil Engineering Schelling, Adriaan Herman Technical University of Denmark, Denmark						
3:00pm - 5:00pm	Discussions mixed topics Location: K I 97 Chair: Jan van der Veen	Do it in practice - Oral presentations Location: K F 73 Chair: Hanne Løje	Oral presentations: Strong demand for democratic involvement in educational processes Location: K I 50 Chair: Tamas Kramer	Oral presentations: New notions of interdisciplinarity in engineering education Location: K I 55 Chair: Roland Tormey	Workshop: BEST Location: K I 72 Chair: Joao Miguel Moita	Workshop: Cross collaboration Location: K F 79 Chair: Marc Laperrouza	Workshop: Digital learning Location: K I 95 Chair: Albert Aslan
	Rediscovering visualization – Towards an up-to-date conceptual framework for promoting learning of mathematics in engineering education Kulcsár, Nárcisz¹ ; Feketéné Szakos, Éva ² 1: Széchenyi István University, Hungary; 2: Budapest University of Technology and Economics	Engineer students as actors in health care innovation: Suggestion for an operational model Keiding, Villads DTU, Denmark	New Framework for Professional Qualifications in Civil Engineering Programs in Germany Gigla, Birger^{1,2} ; Weinig, Johannes^{2,3} 1: Technische Hochschule Lübeck; 2: German Association of Departments of Civil Engineering and Environmental Engineering at Universities of Applied Sciences (GADCEE); 3: Fachhochschule Bielefeld, Campus Minden	Collaborative teaching as a tool in university development Kähkönen, Elina; Airo, Kalle Aalto University, Finland	Students' involvement in Engineering Education development Moita, Joao Miguel BEST, Portugal	Finding common ground in cross-boundary collaboration Laperrouza, Marc EPFL, Switzerland	Digital learning management systems to raise engineering students' active participation and understanding: Use cases of Socratic, Matlab Grader, and Kahoot Software in Mechatronics education Aslan, Albert Fontys University of Applied Sciences, Netherlands,
	Utilizing student feedback for improving learning	Open Content Development in Engineering Education and Teacher Training Benedek, András; Horváth Cz., János; Sik, David Budapest University of Technology and Economics, Hungary	A Comparison and Classification of Grading Approaches Used	Mission (im)possible? Teaching social sciences to engineering students Sucala, Voicu Ion University of Exeter, United Kingdom			The Future Engineer Gumaelius, Lena¹ ; Kolmos, Anette² 1: Kth, Sweden; 2: Aalborg University, Denmark

<p>outcomes. Examples from a master course on ship vibrations</p> <p>Bornhöft, Sara; von Bock und Polach, R. U. Franz; Thon-Gairola, Caroline; Hoth, Julian Technische Universität Hamburg, Germany</p>	<p>Universitat Politècnica de València, Spain</p> <p>A Software Tool for Lifelong Learning in Engineering Education</p> <p>Fredriksson, Claes; Dwek, Mauricio Granta Education Division, Ansys, Inc. Cambridge, United Kingdom</p>	<p>in Engineering Education</p> <p>Carberry, Adam R¹; Atwood, Sara A²; Siniawski, Matthew T³; Diefes-Dux, Heidi A⁴ 1: Arizona State University, Mesa, AZ, USA; 2: Elizabethtown College, Elizabethtown, PA, USA; 3: Loyola Marymount University, Los Angeles, CA, USA; 4: University of Nebraska, Lincoln, NE, USA</p>	<p>undergraduate engineering double degree students – the good, the bad and the ugly</p> <p>Dini, Kourosh; Levin, Elizabeth Swinburne University of Technology, Australia</p>			
<p>Transitioning an engineering classroom from traditional lectures to a partially-flipped format</p> <p>Buskes, Gavin¹; Shnai, Iuliana² 1: The University of Melbourne, Australia; 2: Lappeenranta University of Technology</p>	<p>Linking HE and the Labour Market in Mozambique: The contribution of Engineering, Social Sciences and Humanities</p> <p>Uetela, Pedro Joao University of Western Cape, Mozambique</p>	<p>Internationalization process in Central-Eastern European Countries' higher educational institutions</p> <p>Füzesi, Adrienn Budapest University of Technology and Economics, Hungary</p>	<p>Interdisciplinary project-led engineering education: the coaching role of the tutor</p> <p>Visscher-Voerman, Irene; Woudt-Mittendorff, Kariene; van Harmelen, Erwin Saxion University of Applied Sciences, Netherlands, The</p>			
<p>Teaching the limits of functions using The Theory of Didactical Situations and Problem-Based Learning</p> <p>Abou-Hayt, Imad¹; Dahl, Bettina¹; Østerberg Rump, Camilla² 1: Aalborg University, Denmark; 2: University of Copenhagen, Denmark</p>	<p>Quality of Ethics Education in Engineering Programs using Goodlad's curriculum typology</p> <p>Bombaerts, Gunter¹; Doulougeri, Karolina¹; Nieveen, Nienke² 1: TU Eindhoven, Netherlands, The; 2: University of Twente, Netherlands, The</p>	<p>Peer assessment of individual contribution in group work: a student perspective</p> <p>Grammenos, Ryan; Garcia Souto, Pilar; Chester, Isobel; Albelda Gimeno, Lucia University College London, United Kingdom</p>	<p>Introducing Professional Ethics as a Soft Skill. An Exemple In The Civil Engineering Bachelor Degree Program in Valencia.</p> <p>Gimenez-Carbo, Ester; Roig Flores, Marta; Pelufó Carbonell, María José; Serna Ros, Pedro Universitat Politècnica de Valencia, Spain</p>			
<p>Practical Research on the Lifelong Learning Model of the Largest Scientific Research Institution in China</p> <p>Zhao, Yixia^{1,3,4}; Tao, Yiyuan⁴; Jin, Kun²; Wang, Runqiang⁴ 1: National Science Library, Chinese Academy of Sciences, China; 2: Chinese Academy of Sciences, China; 3: University of Chinese Academy of Sciences, China; 4: Computer Network Information Center, Chinese Academy of Sciences, China</p>		<p>Herding Cats? Innovation and Change Management in Engineering Education</p> <p>Knowles, Graeme; Clark, Robin; Andrews, Jane University of Warwick, United Kingdom</p>	<p>Stretched Too Much? A Case Study of Engineering Exam-Related Predicted Performance, Electrodermal Activity, and Heart Rate</p> <p>Christensen, Darcie¹; Khan, Tarique¹; Villanueva, Idalis¹; Husman, Jenefer² 1: Utah State University, United States of America; 2: University of Oregon, United States of America</p>			
<p>Agile Learning - Needs Oriented Learning Structures and Materials</p> <p>Longmuss, Joerg¹; Hoehne, Benjamin² 1: Sustainum Institute Berlin, Germany; 2: Fernstudieninstitut,</p>		<p>A sustainable approach to multicampus collaboration for Master's Theses</p> <p>Blanckaert, Isabelle KU Leuven, Belgium</p>				

	Beuth Hochschule für Technik Berlin, Germany						
5:00pm -	Editorial Board meeting for EJEE						
6:00pm	Location: K I 95 Chair: Kristina Edström on invitation only						
5:00pm -	Break						
7:00pm							
7:00pm -	Gala Dinner & Award Ceremony						
11:00pm	Location: Europa ship						

7:30am - 9:00am	Registration desk opens and welcome coffee/tea - Thursday Location: First floor building K							
8:00am - 11:00am	PREFER meeting Location: K I 21 Chair: Maarten Pinxten on invitation only							
9:00am - 9:45am	Keynote lecture: Xavier Kestelyn Location: Building K aula Chair: Balázs Vince Nagy							
9:45am - 10:00am	Coffee/tea break 19 Sep Location: First floor building K							
10:00am - 11:00am	<p>Discussions Interdisciplinary Location: K I 96 Chair: Rita Kiss</p> <p>Developing interdisciplinary engineering education: The role of educational leadership Visscher-Voerman, Irene¹; Brouwer-Truijten, Karin¹; Poortman, Cindy² 1: Saxion University of Applied Sciences, Netherlands, The; 2: University of Twente, Netherlands, The</p> <p>Expert views on interdisciplinarity in engineering education for design of a new modern University Stanko, Tanya¹; Chernyshkova, Elena^{2,3}; Zhirosh, Oksana⁴ 1: Kazan National Research Technical University named after A.N. Tupolev, Russian Federation; 2: University of Navarra, Spain; 3: Ural State University, Russian Federation; 4: Innopolis University, Russian Federation</p> <p>Use of team contracts as a reflexive tool in an interdisciplinary project-based learning context Laperrouza, Marc EPFL, Switzerland</p>	<p>Oral presentations: New complexity quest in engineering sciences Location: K I 55 Chair: Gorkem Kulah</p> <p>A case of project type education in Kosen Tanaka, Mikiko Sode International college of technology</p> <p>Analysis of Estimated Useful and Mandatory Engineering Skills for Innovative Product Design Viksne, Ilmars¹; Niedritis, Janis Eriks¹; Puskarjova, Santa¹; Lanthon, Antoine²; El Idrissi, Mohamed²; Mihailidis, Athanassios³; Côme, Françoise⁴; Dunez-Simon, Mireille⁵; Jouanne, Thomas⁵ 1: Riga Technical University, Latvia; 2: Institut Supérieur de Mécanique de Paris – Supméca, Saint-Ouen, France; 3: Aristotle University of Thessaloniki, Greece; 4: European Society for Engineering Education, Belgium; 5: Établissement public territorial Plaine Commune, Saint-Ouen, France</p> <p>Barriers and facilitating factors for research-based learning in engineering. A multi-perspective approach Bulmann, Ulrike; Bornhöft,</p>	<p>Oral presentations: Diversity in Engineering Education? Location: K I 34 Chair: Gergely Vigh</p> <p>Sparking Action: How Emotions Fuel or Inhibit Advocacy around Hidden Curriculum in Engineering Gelles, Laura; Youmans, Kate; Villanueva, Idalis Utah State University, United States of America</p> <p>Internationalisation and complexity: dialogues for diversity or eradicating difference? Foss, Holly Jane University of Birmingham, United Kingdom</p> <p>The Standardization Approach of “Objectives” and “Model Syllabus” of Engineering Ethics Education in Japan — Based on the Text Interpretation of Two Consulting Research Reports Li, Heng^{1,2}; Xie, Yanjie^{1,2} 1: Research Institute of China's Science, Technology, and Education Policy, Zhejiang University, China.; 2: School of Public Affairs, Zhejiang University, China</p>	<p>Oral presentations: Integrated learning environments for the digital native learners Location: K I 72 Chair: Seweryn Spalek</p> <p>Enhancing interdisciplinary skills in engineering by storytelling's cognitive tools Caratozzolo, Patricia¹; Alvarez-Delgado, Alvaro²; Hosseini, Samira^{3,4} 1: School of Engineering and Sciences, Tecnológico de Monterrey, CDMX, Mexico; 2: School of Social Sciences, Tecnológico de Monterrey, CDMX, Mexico; 3: Writing Lab, TecLabs, Tecnológico de Monterrey, Mexico; 4: School of Engineering and Sciences, Tecnológico de Monterrey, Monterrey, NL, Mexico</p> <p>Using Moodle data for early warning of dropping out Suhonen, Sami; Kinnari-Korpela, Hanna Tampere University of Applied Sciences, Finland</p> <p>Combining the flipped classroom and simulation games in engineering education: a methodological survey Algayres, Muriel; Triantafyllou, Evangelia Department of Architecture Design and Media Technology, Aalborg University, Copenhagen, Denmark</p>	<p>Oral presentations: Lifelong Learning Location: K I 97 Chair: Ellen Sjoer</p> <p>Mapping the Curricular Changes in European Engineering Education Brink, Suzanne Hallenga¹; Georgsson, Fredrik²; Thomson, Gareth³; de Hei, Miranda¹; Sjoer, Ellen¹; Admiraal, Wilfried⁴ 1: The Hague University of Applied Sciences, Netherlands, The; 2: Umeå University, Sweden; 3: Aston University, UK; 4: Leiden University, Netherlands, The</p> <p>Preferred competences by the labor market in the opinion of higher education students Kálmán, Anikó¹; Nyeki, Emöke² 1: Budapest University of Technology and Economics, Hungary; 2: Budapest University of Technology and Economics, Hungary</p> <p>Implementing 21 century skills in education at NTNU and DTU Sortland, Bjørn¹; Løje, Hanne² 1: NTNU, Norwegian University of Science and Technology; 2: DTU, Technical University of Denmark</p>	<p>Oral presentations: Fundamentals of Engineering Education: Mathematics and Physics Location: K I 50 Chair: Calvin David Rans</p> <p>An Innovative Course to Motivate STEM Students in their Mathematics Studies Forrai, Benedek; Sipos, Bence; Brigitta, Szilágyi Budapest University of Technology and Economics, Hungary</p> <p>Development of Nuclear Power Plant Basic Principle Simulators as Tools for Nuclear Engineering Education Fehér, Sándor; Czifrus, Szabolcs; Lőrincz, János; Varju, Tamás; Aszódi, Attila; Csom, Gyula Budapest University of Technology and Economics, Hungary</p>	<p>Oral presentations: Mixed topics Location: K I 95 Chair: Tamás Koltai</p> <p>Developing an instrument to monitor educational quality culture Vermeersch, Julie KU Leuven, Belgium</p> <p>Performance evaluation of university students participating in a simulation game with data envelopment analysis (DEA) Tamás, Alexandra; Koltai, Tamás Budapest University of Technology and Economics, Hungary</p> <p>A web application for predicting academic performance and identifying the contributing factors Nagy, Marcell; Molontay, Roland; Szabó, Mihály Budapest University of Technology and Economics, Hungary</p>	<p>Oral presentations: Mixed topics Location: K F 76 Chair: Katriina Schrey-Niemenmaa</p> <p>A Comparative Curriculum Analysis of two PBL Engineering Programs Boelt, Anders Melbye; Clausen, Nicolaj Riise; Bertel, Lykke Brogaard UNESCO Centre for Problem Based Learning, Aalborg University, Denmark</p> <p>Individual peer assessment of contribution to group work (IPAC): Key points and recommendations Garcia Souto, Maria del Pilar¹; Azma, Yassine¹; Ryan, Grammenos¹; Thomas, Kador¹; Cicely, Striolo¹; Matt, Whyndham¹; Mira, Vogel^{1,2}; Mary, Richardson¹; Adam, Gibson¹; Jane, Britton¹; Tristan, Robinson¹; Gwyneth, Hughes¹ 1: University College London, United Kingdom; 2: Kings College London, United Kingdom</p> <p>Interventions to develop growth mindsets in engineering students: Work-in-progress on a systematic literature review Campbell, Anita¹; Direito, Ines²; Mokhithi, Mashudu¹ 1: University of Cape Town, South Africa; 2: Centre for Engineering Education, University College London, United Kingdom</p>

	Sara; Ellinger, Dorothea Hamburg University of Technology, Germany						
11:00am - 12:00pm	Conference Closing Ceremony Location: Building K aula						
12:00pm - 1:00pm	Information session on SEFI ambassadors - open to all				Lunch 19 Sep Location: First floor building K		
1:00pm - 3:00pm	Board Of Directors Meeting Location: K I 97 Chair: Michael Noel Murphy on invitation only						
2:00pm - 5:30pm	IACEE Council meeting Thursday Location: K I 96						
2:15pm - 3:45pm	Coffee/tea break for SEFI and IACEE conferences Location: First floor building K						

Date: Friday, 20/Sep/2019

9:00am - 12:30pm	IACEE Council meeting Friday Location: K 1 96
10:00am - 12:00pm	City tour Location: Budapest city centre János Klaniczay Hungarian Contemporary Architecture Centre
