

# CONFERENCE PROGRAM

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**ICEE/ICIT 2014**

**2 – 6 June, 2014**

**Riga, Latvia**



**Joint International Conference  
on Engineering Education &  
International Conference on  
Information Technology**

**ICEE/ICIT-2014 Riga**

**Organized by:**



**Faculty of Computer Science and Information  
Technology, Riga Technical University,**



**International Network for Engineering  
Education & Research**

**Sponsored by:**



Riga City Council



Software Engineering  
Dpt.

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**ICEE/ICIT- 2014 Riga**

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Larissa Zaitseva, *Riga Technical University, Latvia*

### Program Chair

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### Program Co-Chairs

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Larissa Zaitseva, *Riga Technical University, Latvia*

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Gundars Alksnis, *Riga Technical University, Latvia*

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Juha Kontio, *Turku University of Applied Sciences, Finland*

Klaus Wuersig, *University of Pittsburgh at Bradford, USA*

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Elena Smirnova, *Bauman Moscow State University, Russia*

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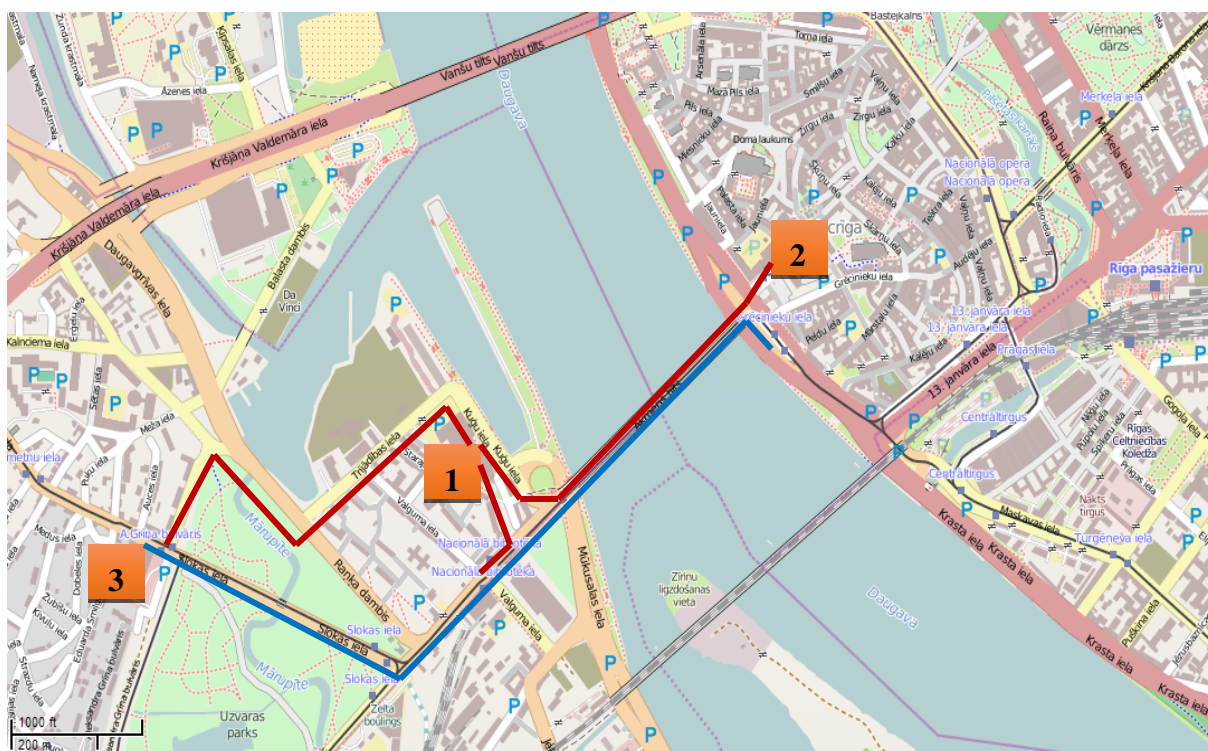
- Vojislav Ilic, *University of Western Sydney, Australia*
- Gints Jekabsons, *Riga Technical University, Latvia*
- Igor Kabashkin, *Transport and Telecommunication Institute, Latvia*
- Liisa Kairisto-Mertanen, *Turku University of Applied Sciences, Finland*
- Juha Kontio, *Turku University of Applied Sciences, Finland*
- Rob Koper, *Open University of the Netherlands, Netherlands*
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- Oksana Nikiforova, *Riga Technical University, Latvia*
- Agris Nikitenko, *Riga Technical University, Latvia*
- Leonid Novitsky, *Riga Technical University, Latvia*
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- Natalja Prokofjeva, *Riga Technical University, Latvia*
- Alwar Ramani, *University of Ulster, Ireland*
- Jamal Rizk, *University of Western Sydney, Australia*
- Pavel Rusakov, *Riga Technical University, Latvia*
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- Luis M. Sánchez Ruiz, *Universitat Politècnica de València, Spain*
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- Asaf Varol, *Firat University, Turkey*
- Carlos Vaz de Carvalho, *Carvalho Instituto Superior de Engenharia do Porto, Portugal*
- Peter Willmot, *Loughborough University, UK*
- Klaus Wuersig, *University of Pittsburgh at Bradford, USA*
- Larissa Zaitseva, *Riga Technical University, Latvia*
- Yassine Zaoui Seghroucheni, *Faculty of sciences-Tetouan, Morocco*
- Alexander Zimin, *Bauman Moscow State Technical University, Russia*

# CONFERENCE PROGRAM

## HOW TO REACH THE CONFERENCE VENUE

- 1** All Conference Sessions, Coffee Breaks and Lunch breaks will be held at **Radisson Blu Daugava Hotel** (24 Kugu Str.)
- 2** **Welcome Party** will be held at **Riga City Town Hall** (1 Ratslaukums). The walking distance is 18 minutes from Conference venue, public transport stop name: Grēcinieku iela or 11. novembra krastmala.
- 3** **Conference Gala Dinner** will be held at **Maritim Park Hotel Riga** (1 Slokas Str.). The walking distance is 14 minutes from Conference venue, public transport stop name: A.Grīna bulvāris or Slokas iela.

**Legend:** conference venues - **X**,  
walking routes - **—**, public transport route - **—** :



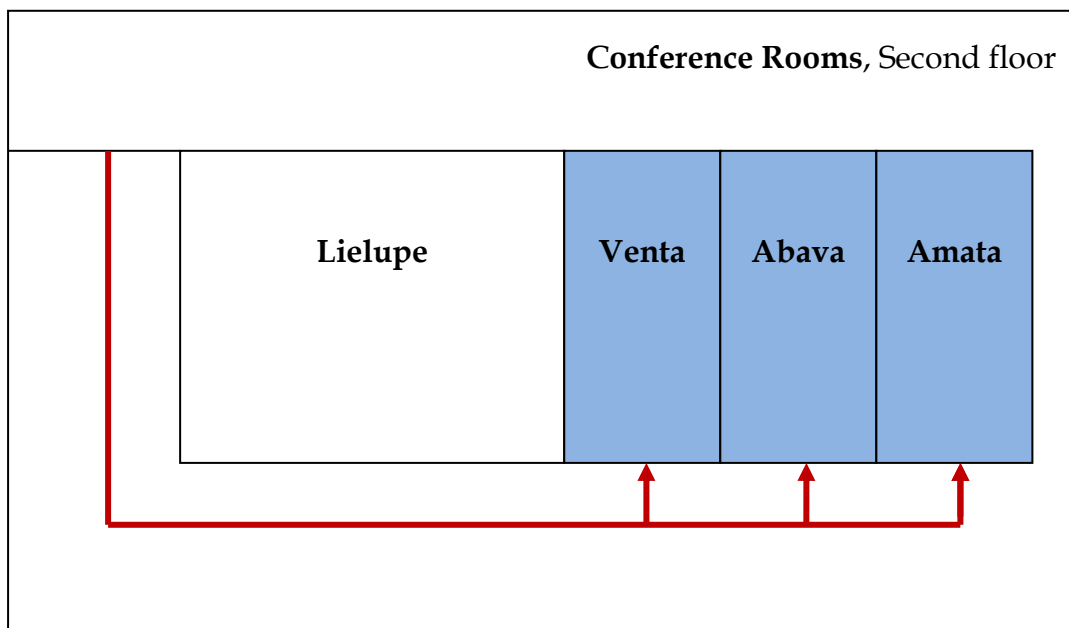
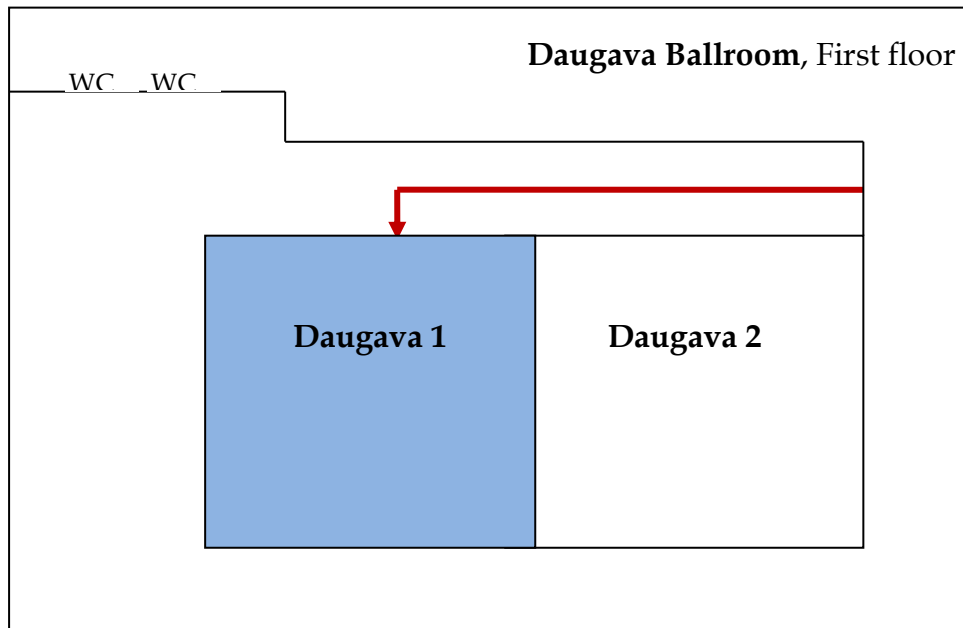
# CONFERENCE PROGRAM

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## CONFERENCE VENUE MAP

Conference **Opening Ceremony, Keynote Presentations** and **Closing Ceremony** will be held in the room **Daugava 1** (First floor).

Conference **Sessions** will be held in rooms **Venta, Abava, Amata** (Second floor).



# CONFERENCE PROGRAM

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## PRESENTATION GUIDELINES

### **Full Papers (F)**

Presentation time for full papers will be 20 minutes plus 5 minutes for questions

### **Short Papers (S)**

Presentation time for short papers will be 15 minutes plus 5 minutes for questions

### **Posters (P)**

The Poster Boards will be 150 cm tall and 100 cm wide.

### **A/V Equipment**

All the equipment needed for the presentations will be provided. The Conference rooms will be equipped with laptops and video projectors. The presentations should be provided on DVD/CD or flash disks.

Conference participants, who plan to use their own laptops, it is strongly recommended to test their presentations in advance with the video projector in the room where their presentation is scheduled.

# CONFERENCE PROGRAM

## ICEE/ICIT 2014 at a Glance

	Monday June 2, 2014	Tuesday June 3, 2014	Wednesday June 4, 2014	Thursday June 5, 2014	Friday June 6, 2014	Saturday June 7, 2014	
8.00-9.00	15.00-17.00 iNEER Board Meeting	Registration	Registration	Registration			
9.00-10.30		9.30 Opening Ceremony	Parallel Sessions	Parallel Sessions	9.30 Keynote Presentation		
10.30-11.00		Coffee Break					
11.00-13.00		Keynote Presentations	Parallel Sessions	Parallel Sessions	Keynote Presentation  Closing Ceremony		
13.00-14.00		Lunch					9-19
14.00-15.30		Parallel Sessions	Parallel Sessions	Parallel Sessions	14.30 Tours	Tour	
15.30-16.00		Coffee Break					
16.00-18.00		Registration	Parallel Sessions	Parallel Sessions		Parallel Sessions	
		18.00-20.00 Get-together Event  (Radisson Blu Daugava Hotel)	19.00-21.00 Welcome Party  (Riga City Town Hall)	Old Riga Tour	19.00-21.00 Conference Gala Dinner  (Maritim Park Hotel Riga)		

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## ICEE/ICIT 2014 Conference Program 3 June, 2014

Room	Daugava 1	Abava	Venta	Amata
Time				
8.00-9.00	Registration			
9.30-10.30	Opening Ceremony			
10.30-11.00	Coffee Break			
11.00-13.00	<p><b>Contemporary Problems of Engineering Education in Europe: How to Follow Globalization</b> Prof. Boriss Misnevs (<i>Latvia</i>)</p> <p><b>Digital Technologies and the Next Internet: The basis for the next Cyber Learning Revolution</b> Dr. Joe Cecil (<i>USA</i>)</p>			
13.00-14.00	Lunch			
14.00-15.30		<p>ICEE Session 1: <b>Accreditation and Quality Assurance</b>  Chair: Masakatsu Matsuishi (<i>Japan</i>)</p>	<p>ICEE Session 2: <b>Curriculum Design and Engineering Economics</b>  Chair: Ilse Baumgartner (<i>Singapore</i>)</p>	<p>ICIT Session 1: <b>Innovations and Best Practice in E-learning I</b>  Chair: Nathalia Peixoto (<i>USA</i>)</p>
15.30-16.00	Coffee Break			
16.00-18.00		<p>Special Session: <b>Capstone Design Course Experience through International and Multidisciplinary Projects</b>  Chair: Sergey Dubikovskiy (<i>USA</i>)</p>	<p>Special Session: <b>Innovation Pedagogy &amp; CDIO</b>  Chairs: Liisa Kairisto-Mertanen &amp; Juha Kontio (<i>Finland</i>)</p>	<p><b>ICEE/ICIT Poster Session</b></p>
19.00-21.00	Welcome Party - Riga City Town Hall			



# CONFERENCE PROGRAM

## ICEE/ICIT 2014 Conference Program 4 - 5 June, 2014

4 June, 2014

5 June, 2014

Room	Abava	Venta	Abava
Time			
8.00-9.00	Registration		
9.00-10.30	ICIT Session 1: <b>Innovations and Best Practice in E-learning II</b> Chair: Jekaterina Bule ( <i>Latvia</i> )	ICEE Session 3: <b>Assessment of Learning Outcomes</b> Chair: Manfred Gruber ( <i>Germany</i> )	ICEE Session 6: <b>Best Practices in Engineering Education and Research</b> Chair: Elena Trotskovsky ( <i>Israel</i> )
10.30-11.00	Coffee Break		
11.00-13.00	ICEE Session 4: <b>Models, Methods and Technologies in Engineering Education</b> Chair: Andrejs Matvejevs ( <i>Latvia</i> )	ICEE Session 5: <b>Global Competences for Engineers and Innovative Technologies</b> Chair: Clara Oliveira ( <i>Brazil</i> )	ICEE Session 7: <b>University-Industry Collaboration</b> Chair: Luis M. Sánchez Ruiz ( <i>Spain</i> )
13.00-14.00	Lunch		
14.00-15.30	Special Session: <b>Basic Engineering Education - Freshmen Engineering Projects</b> Chair: Klaus Wuersig ( <i>USA</i> )	<b>Workshop on East-West Cooperation for the Enhancement of Teaching and Learning in Engineering.</b> Chairs: Peter Willmot ( <i>UK</i> ), Elena Smirnova ( <i>Russia</i> )	ICIT Session 2: <b>IT Systems and Tools II</b> Chair: Ivan Szendiuch ( <i>Czech Republic</i> )
15.30-16.00	Coffee Break		
16.00-18.00	ICIT Session 2: <b>IT Systems and Tools I</b> Chair: Colm O'Sullivan ( <i>Ireland</i> )	Special Session: <b>Modern Trends in Teaching Math to Engineers</b> Chair: Larissa Fradkin ( <i>UK</i> )	ICEE Session 8: <b>Curriculum Design and Engineering Education</b> Chair: Pavel Rusakov ( <i>Latvia</i> )
19.00-21.00	Old Riga Tour		Conference Gala Dinner Maritim Park Hotel Riga

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## ICEE/ICIT 2014 Conference Program 6 - 7 June, 2014

**6 June, 2014**

**7 June, 2014**

Room	Daugava 1	
Time		
9.30-10.30	<b>Development of Intelligent Tutoring and Knowledge Assessment Systems: Lessons Learnt</b> Prof. Janis Grundspenkis ( <i>Latvia</i> )	
10.30-11.00	Coffee Break	
11.00-12.00	<b>The Role of Technology in the Strategic Development of the Quality of Higher Education Institutions in the Context of Globalization and International Competition: A Case Study of Zagreb School of Economics and Management</b> Dr. Djuro Njavro ( <i>Croatia</i> )	9-19 Tour
12.00-13.00	Closing Ceremony	
13.00-14.00	Lunch	
14.30-17.00	Tour	

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## Tuesday June 3, 2014

9:30-10:30	Daugava 1	<b>Opening Ceremony</b> <b>General Chairs:</b> <i>Uldis Sukovskis and Larissa Zaitseva, Riga Technical University, Latvia</i> <b>iNEER:</b> <i>Win Aung, Secretary-General, Olli Mertanen, Turku University of Applied Sciences</i> <b>RTU:</b> <i>Leonids Ribickis, rector of Riga Technical University</i> <b>Riga City Council:</b> <i>Nil Ushakov, mayor of Riga (or his representative)</i>	
10:30-11:00		<b>Coffee Break</b>	
11:00-12:00	Daugava 1		<b>Keynote Speaker: Prof. Boriss Misnevs, Transport and Telecommunication Institute, Latvia</b> <b>Chair: Uldis Sukovskis, Riga Technical University, Latvia</b>
			<i>Contemporary Problems of Engineering Education in Europe: How to Follow Globalization</i>
12:00-13:00	Daugava 1		<b>Keynote Speaker: Prof. Joe Cecil, Center for Information Centric Engineering (CICE) Oklahoma State University, USA</b> <b>Chair: Uldis Sukovskis, Riga Technical University, Latvia</b>
			<i>Digital Technologies and the Next Internet: The basis for the next Cyber Learning Revolution</i>
13:00-14:00		<b>Lunch Break</b>	
14:00-15:30	Abava	Papers ID	<b>ICEE Session 1: Accreditation and Quality Assurance</b> <b>Chair: Masakatsu Matsuishi, Kanazawa Institute of Technology, Japan</b>
		35 F	<b>Effect of Accreditation on Employment Rates in the Same Field as Their Majors at the University of Seoul</b> <i>Young-Wook Kim, Hak-Jin Kim and Na-Ri Son (Korea)</i>
		40 F	<b>EU Research Programs - the Way to the Quality Increase of PhD Study</b> <i>Ivan Szendiuch, Edita Hejátková, Alexandr Otáhal and Boleslav Psota (Czech Republic)</i>
		133 F	<b>Advanced Therapy Medicinal Products for human use - a new multidisciplinary technical and educational challenge in engineering and quality assurance</b> <i>Ewa Olender, Artur Kaminski, Jerzy Cibis, Izabela Uhrynowska-Tyszkiewicz (Poland)</i>
		131 F	<b>Enhancing learning through better understanding of feedback on assessment perspectives of students and tutors in the built environment disciplines</b> <i>Tim McLernon and John McCord (N Ireland)</i>
	Venta	Papers ID	<b>ICEE Session 2: Curriculum Design and Engineering Economics</b> <b>Chair: Ilse Baumgartner, Singapore Management University, Singapore</b>
		48 F	<b>Teaching and Learning Architecture - students' opinions towards the course of achitectural design</b> <i>Joanna Serdyńska (Poland)</i>
		152 F	<b>Making learning outcomes and competencies truly relevant for the practical course design and delivery: insights for university-level computing program educators</b>

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			Ilse Baumgartner (Singapore)
		16 F	<b>Selection of suitable economic analysis method for the engineering education and research</b>
			Yoo Ilgeon ( <i>Korea</i> )
		130 F	<b>Capital budgeting for renewable energy plants</b>
			L. Guaita-Pradas, L.M. Sánchez Ruiz, B. Mari Soucase ( <i>Spain</i> )
	Amata	Papers ID	<b>ICIT Session 1: Innovations and Best Practice in E-learning I</b> Chair: Nathalia Peixoto, Georg Mason University, USA
		60 F	<b>Design and Implementation of Serious Games in Computer Curriculum for Self-regulated Learning</b>
			Juhyun Jeon and Jaeung Lee ( <i>Korea</i> )
		104 F	<b>Game Development Projects - From Idea Generation to Startup Activities</b>
			Mika Luimula and Kalliopi Skarli ( <i>Finland</i> )
		101 F	<b>Telecommunications Markets and Engineering: a Serious Games Approach</b>
			A. Manuel de Oliveira Duarte, António Manuel Cerqueira Alves, Inês Direito ( <i>Portugal</i> )
		115 F	<b>Sentiment Analysis and E-Learning: a Proposal</b>
			F. Colace, M. De Santo, L. Greco and G. Guerriero ( <i>Italy</i> )
15:30-16:00			<b>Coffee Break</b>
16:00-18:00	Abava	Papers ID	<b>Special Session: Capstone Design Course Experience through International and Multidisciplinary Projects</b> Chair: Sergey Dubikovsky, Purdue University, USA
		9 F	<b>Mindset Changes in Aviation Technology Freshman and Senior Capstone Design Students</b>
			Daniel Ferguson, Sergey Dubikovsky and Brian Dillman ( <i>USA</i> )
		20 F	<b>Practical Senior Design Considerations</b>
			Barry Benedict ( <i>USA</i> )
		54 F	<b>Multidisciplinary capstone design experiences: reviewing through systemic approach for further development</b>
			Jong Won Jung and Cheol-Keun Ha ( <i>Korea</i> )
90 F	<b>Global Capstone Design Experience in Engineering Education</b>		
	Yiming Rong, Dan Wu, Haiyan Zhao, Xuekun Li, Bill Goodwine and Gretar Tryggvanson ( <i>China, USA</i> )		
	10 S	<b>Does Experience with Collaborative Problem-Based Projects Alter Student's Tolerance for Ambiguity?</b>	
		Sergey Dubikovsky ( <i>USA</i> )	

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	Venta	Papers ID	Special Session: <b>Innovation Pedagogy &amp; CDIO</b> Chair: Liisa Kairisto-Mertanen & Juha Kontio, Turku University of Applied Sciences, Finland	
		3 F	<b>Implementing cross-disciplinary learning environment - benefits and challenges in engineering education</b> Taru Penttilä, Liisa Kairisto-Mertanen, and Matti Väänänen ( <i>Finland</i> )	
		62 F	<b>Using Design Thinking Tools to Promote Innovation in Engineering Students</b> Jennifer Suh, Nathalia Peixoto, Padmanabhan Seshaiyer, Kwan Hong Lee, Daniel Suh and Yunsuk Jung ( <i>USA, Korea</i> )	
		77 F	<b>Meeting the challenge of educating the digitally engaged student at a University of Technology in South Africa</b> Errol Francke and Bennett Alexander ( <i>South Africa</i> )	
		125 F	<b>Integrating innovation pedagogy and CDIO (Conceive - Design – Implement – Operate) approach - towards shared expressions in engineering education</b> Taru Penttilä and Juha Kontio ( <i>Finland</i> )	
		66 F	<b>Retrospective Review for Students' Experiences Regarding University-Industry project: Case Panoste</b> Sakari Koivunen, Tero Reunanen, Riitta Windahl ( <i>Finland</i> )	
		Papers ID	<b>ICEE-ICIT Poster Session</b>	
	Amata	55	<b>Strategy to Carry Out Design Project Classes Smoothly</b> Kazuya Takemata, Akiyuki Minamide, Arihiro Kodaka and Sumio Nakamura ( <i>Japan</i> )	
		129	<b>Introduction of Design Project to Enhance Student Motivation in Engineering Education</b> A. Minamide, K. Takemata, Arihiro Kodaka and Sumio Nakamura ( <i>Japan</i> )	
		147	<b>Teaching engineering mathematics with the help of real experiments and relevant videos</b> Dong Sik Jang, Kwang Ho Song, Jae-Chul Lee, Bo Kyung Son and Ji Hyun Choi ( <i>Korea</i> )	
	19.00-21.00			Welcome Party - Riga City Town Hall

# CONFERENCE PROGRAM

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## Wednesday June 4, 2014

9:00-10:30	Abava	Papers ID	ICIT Session 1: Innovations and Best Practice in E-learning II Chair: Jekaterina Bule, Riga Technical University, Latvia	
		36 F	Usage of Semantics of Links as the Basis for Learner's Knowledge Structure Assessment. The Pros and Cons Maija Strautmāne ( <i>Latvia</i> )	
		64 F	Teaching Real-Time, Multi-Site, Collaborative Course Using Videoconferencing System: From the Experiences of GECE Hyun Joung No, Seung-Yeop Kwak and Myoung Souk Yeo ( <i>Korea</i> )	
		146 F	Correlation Between the Activities in the Online Course for Education and Online Course for Educational Support Karmela Aleksic-Maslac, Djuro Njavro and Emilija Budimir ( <i>Croatia</i> )	
		57 F	Blended Learning Paradigm Vojislav Ilic, Kimberley Vincent and Rebecca Wood ( <i>Australia</i> )	
	Venta	Papers ID	ICEE Session 3: Assessment of Learning Outcomes Chair: Manfred Gruber, University of Applied Sciences Munich, Germany	
		13 F	Introducing Learning Outcomes Based Engineering Curricula: National and Institutional Perspective Andrzej Krasniewski ( <i>Poland</i> )	
		5 F	Developing Female Engineers by Hands-on and Experiential Learning Masakatsu Matsuishi ( <i>Japan</i> )	
		105 F	An Intelligent System-based Teaching Tool for Electrical Engineering Subjects Michael Negnevitsky ( <i>Australia</i> )	
		142 S	Training of IT professionals as a factor of information society development in Russia Tatiana Shulga and Inna Rudnikova ( <i>Russia</i> )	
	10:30-11:00	Coffee Break		
	11:00-13:00	Abava	Papers ID	ICEE Session 4: Models, Methods and Technologies in Engineering Education Chair: Andrejs Matvejevs, Riga Technical University, Latvia
			70 S	Teaching User-Centered Design to Senior Engineering Students Vasiliki Ikonomidou, Caitlin Laurence and Nathalia Peixoto ( <i>USA</i> )
			79 F	Smartphone acceleration sensors in undergraduate Physics experiments J.A. Monsoriu, M.H. Giménez, E. Ballester, L.M. Sánchez Ruiz, J.C. Castro-Palacio, and L. Velázquez-Abad ( <i>Spain</i> )
145 F			Capstone Design Project: Developing the Smart Arm Chair for Handicapped People Kwang Sun Kim, Jun Young Kim, Kyung Min Chang and Kang Woo Joo ( <i>Korea</i> )	

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		63 F	<b>Multi-media assisted Teaching Method for Building Construction Quantity Takeoff</b> Junbok Lee, Hyo-Seok Lee, Chang-Hoon Choi and Young-Jin Park ( <i>Korea</i> )	
		136 S	<b>Comparative analysis of CIGS thin film and Multilayer Solar cells</b> Hanif Ullah, Bernabé Marí Soucase and Luis M. Sánchez Ruiz ( <i>Spain</i> )	
	Venta	Papers ID	<b>ICEE Session 5: Global Competences for Engineers and Innovative Technologies</b> Chair: Clara Oliveira, INE-CTC-UFSC, Brazil	
		7 F	<b>Matching Instructional Strategies to Learning Styles: Does it Contribute to Students' Achievements?</b> Nissim Sabag and Elena Trotskovsky ( <i>Israel</i> )	
		31 F	<b>Students' Misconception of Accuracy</b> Elena Trotskovsky and Nissim Sabag ( <i>Israel</i> )	
			<b>Manufacturability of Parts with 3D-Annotated Model Generated by 3D-CAD</b> Tatsuya Mochizuki ( <i>Japan</i> )	
		15 F	<b>Power generator mechanical faults effects on electric power quality</b> Marina Griščenko ( <i>Latvia</i> )	
			<b>The organization of academic process with the production through technological and pre-diploma practice</b> Alexander Kartoshkin, Sergey Shirokov and Irina Belinskaya ( <i>Russia</i> )	
		59 S		
		71 S		
	13:00-14:00	<b>Lunch Break</b>		
	14:00-15:30	Abava	Papers ID	<b>Special Session: Basic Engineering Education - Freshmen Engineering Projects</b> Chair: Klaus Wuersig, University of Pittsburgh at Bradford, USA
			98 S	<b>Adherence to internationally agreed nomenclature in service courses for engineering majors</b> Colm O'Sullivan ( <i>Ireland</i> )
				<b>Project Planning and Management for First Year Engineering Students</b> Lise Busk Kofoed and Marian Stachowicz ( <i>Danmark, USA, Poland</i> )
148 F			<b>How to manage Freshmen Projects and how to know its Pros and Cons and how to avoid its Pitfalls</b> Klaus Wuersig ( <i>USA</i> )	
			<b>Industry and research: in situ-based learning for engineering education</b> Gabriel Luna-Sandoval, Eusebio Jiménez López, Martín Santacruz-Tirado, Víctor Hugo Yaurima-Basaldúa, Marco A. Maciel-Monteon and Raquel Cibrian-Valle ( <i>Mexico</i> )	
89 S				
Venta		Papers ID	<b>Workshop on East-West Cooperation for the Enhancement of Teaching and Learning in Engineering</b> Chair: Peter Willmot, Loughborough University, UK and Elena Smirnova, Bauman Moscow State University, Russia	
	128 F	<b>Possibilities of using Problem Based Learning when Teaching IT Specialists at Russian Universities (Example of Saratov State University)</b>		

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			R. Amelin, L.B. Kofoed and L. Bessonov ( <i>Russia, Denmark</i> )
		132 F	<b>World Wide Student Laboratory: Global Educational Infrastructure for Remote Experimentation</b> Anatoli Arodzero, Alexander Bolozdynya, Richard C. Lanza, Alexander Murokh, Vincent Palermo, Alexander Pudikov, James Rosenzweig, Sergey Ulin, Sergey Vinogradov and Alexander Zimin ( <i>USA, Russia</i> )
		165 F	<b>East-West cooperation for the enhancement of teaching and learning engineering</b> Peter Willmot and Elena Smirnova ( <i>UK, Russia</i> )
15:30-16:00			<b>Coffee Break</b>
16:00-18:00	Abava	Papers ID	ICIT Session 2: IT Systems and Tools I <b>Chair:</b> Colm O'Sullivan, National University of Ireland Cork, Ireland
		151 F	<b>Question Answering Systems in education and their classifications</b> Olga Lebedeva and Larissa Zaitseva ( <i>Latvia</i> )
		32 F	<b>The new scheme of a Formalization of Expert System in Teaching</b> Natalia Serdyukova and Vladimir Serdyukov ( <i>Russia</i> )
		12 F	<b>Interactive Distance Lab Solution for Robotic Arm</b> Kadri Umbleja, Martin Jaanus, Vello Kukk and Andres Udal ( <i>Estonia</i> )
		25 F	<b>Innovation in Electric Engineering Education through the Introduction of the Hybrid Integration in the Experimental Lessons</b> Edita Hejátková and Ivan Szendiuch ( <i>Czech Republic</i> )
		143 F	<b>Evaluation of agility in software development company</b> Gusts Linkevics ( <i>Latvia</i> )
		Papers ID	Special Session: <b>Modern Trends in Teaching Math to Engineers</b> <b>Chair:</b> Larissa Fradkin, Brunel University, UK
	Venta	117 F	<b>On MOOCs for Engineering Maths</b> Larissa Fradkin ( <i>UK</i> )
		138 F	<b>The Medialogy as an example of interdisciplinary studies in the IT sphere for adaptation experiences into Saratov State Universities learning process</b> Leonid Bessonov, Lise Kofoed and Roman Amelin ( <i>Russia, Denmark</i> )
		150 F	<b>Training of Financial Technology Specialists with RTU Bachelor Program in "Financial Engineering"</b> Andrejs Matvejevs and Oksana Pavlenko ( <i>Latvia</i> )
		137 S	<b>Mathematics Lab Classes within the First Year of Aerospace Engineering curricula</b> Luis M. Sánchez Ruiz, Santiago Moll, José-A. Moraño and M.-Dolores Roselló ( <i>Spain</i> )
		149 F	<b>Learning by Doing: An Educational Framework for Teaching Combinatorics for Engineers Using Programming Tasks</b> Doina Logofatu and Manfred Gruber ( <i>Germany</i> )
	19.00-21.00		



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## Thursday June 5, 2014

9:00-10:30	Abava	Papers ID	ICEE Session 6: Best Practices in Engineering Education and Research Chair: Elena Trotskovsky, ORT Braude College, Israel
		135 S	Teachers' Training in Engineering and Computer Sciences Courses under Integrative Approach Clara Amelia de Oliveira (Brazil)
		38 S	The introduction of Professional Responsibility in the Civil Engineering Degree Ester Gimenez Carbo, Lourdes Soriano Martinez and M. Esther Gómez-Martín (Spain)
		88 F	Teaching software architecture quality using ATAM Renato Manzan de Andrade, Reginaldo Arakaki and José Carlos Cordeiro (Brazil)
		39 S	Application of Augmented Reality for teaching Descriptive Geometry and Engineering Graphics Course to First-Year Students Zoja Veide, Veronika Strozeva and Modris Dobelis (Latvia)
		10:30-11:00	
11:00-13:00	Abava	Papers ID	ICEE Session7: University-Industry Collaboration Chair: Luis M. Sánchez Ruiz, Universitat Politècnica de València, Spain
		113 F	NEW networks between industry and Polish universities Jerzy Cibis (Poland)
		156 F	E Wastes - A Valuable Source of Components for Sustainable Designs in Engineering Education Santaram Venkannah and Dharamanand Kant Singh Boodan (Mauritius)
		139 F	Enhancement of technology transfer between university and industry - tools and proposals elaborated in a joint project between the Polish Ministry of Science and Higher Education and University of California, Berkeley Ewa Olender, Krzysztof Churski, Jerzy Cibis, Marcin Malesa, Anna Moniuszko-Malinowska, Anna Nikodym-Bilska, Joanna Ortyl, Robert Rusinek (Poland)
		26 S	Integration of Imagination, Creativity, Design, Innovation and Entrepreneurship into Engineering Education Mahbub Uddin (USA)
		28 F	An International Collaboration to Cultivate Global Innovators Nathalia Peixoto, Jennifer Suh, Padhmanabhan Seshaiyer, Kwan Hong Lee, Yunsuk Jung and Daniel Suh (USA, Korea)
13:00-14:00		Lunch Break	
14:00-15:30	Abava	Papers ID	ICIT Session 2: IT Systems and Tools II Chair: Ivan Szendiuch, Brno University of Technology, Czech Republic
		107 F	Comparative study of routing protocols in MANET

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			Mohamed Otmani, Mohammed Fihri and Abdellah Ezzati ( <i>Marocco</i> )
		96 F	<b>Proposal for a cloud computing solution and application in pedagogical virtual organisations</b> Amadou Dahirou Gueye, Ibrahima Sanogo, Samuel Ouya, Hamadou Saliah-Hassane and Claude Lishou ( <i>Senegal, Canada</i> )
		141 F	<b>DSLs should be Online Applications</b> Dominykas Barisas, Adam Duracz and Walid Taha ( <i>Lithuania, Sweden, USA</i> )
		124 F	<b>Design and Development of an Integrated Research Information System</b> Jānis Eiduks, Ainārs Auziņš, Gunārs Lācis and Inga Moročko-Bičevska ( <i>Latvia</i> )
15:30-16:00			<b>Coffee Break</b>
16:00-18:00	Abava	Papers ID	<b>ICEE Session 8: Curriculum Design and Engineering Education</b> Chair: Pavel Rusakov, Riga Technical University, Latvia
		47 F	<b>Workshop methodology in the curriculum of architectural education</b> Tamás Molnár ( <i>Hungary</i> )
		6 F	<b>Introductory Mechatronics Creative Decision and Design Tools – the Design and Realization of a Mechatronics Course</b> Youmin Hu, William Singhose, Bo Wu, Rhett Mayor and Jeffrey Donnell ( <i>China, USA</i> )
		164 F	<b>Integrating structural research activities and field experience with engineering education</b> Tamas Balogh and Zoltan Orban ( <i>Hungary</i> )
19.00-21.00			<b>Conference Gala Dinner - Maritim Park Hotel Riga</b>

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## Friday June 6, 2014

9:30-10:30	Daugava 1	<b>Keynote Speaker: Prof. Janis Grundspenkis, Riga Technical University, Latvia Dr. Chair: Vojislav Ilic, University of Western Sydney, Australia</b> <i>Development of Intelligent Tutoring and Knowledge Assessment Systems: Lessons Learnt</i>
10:30-11:00		<b>Coffee Break</b>
11:00-13:00	Daugava 1	<b>Keynote Speaker: Djuro Njavro, Zagreb School of Economics and Management, Croatia</b> <b>Chair: Vojislav Ilic, University of Western Sydney, Australia</b> <i>The Role of Technology in the Strategic Development of the Quality of Higher Education Institutions in the Context of Globalization and International Competition: A Case Study of Zagreb School of Economics and Management</i> <b>Closing Ceremony</b>
13:00-14:00		<b>Lunch Break</b>
14:30		<b>Tours</b>