



Sunday 12 June CDIO Working Groups
Self-Assessment Rubric of the Curriculum Agility Principles, Group leader Suzanne Brink
CDIO Peer-to-Peer Support, Group leader Juha Kontio
Designing the Format for the CDIO International Fall Meeting, Group leader Daniel Spooner

Sunday 12 June CDIO Council Meeting
CDIO Co-directors Helene Leong and Aldert Kamp

Sunday 12 June 17:00 - 20:00 Registration
Room Solin, Main Hall at Reykjavik University

Sunday 12 June 18:00 - 19:00 Newcomers Reception
Room Solin, Main Hall at Reykjavik University

Sunday 12 June 19:00 - 20:30 Welcome Reception
Room Solin, Main Hall at Reykjavik University

Monday 13 June 9:00 - 10:00 Welcome and Keynote Session
Welcome – Ragnhildur Helgadóttir, President of Reykjavik University
Keynote – Halla Hrund Logadóttir, Director General of the National Energy Authority of Iceland
Rooms M101 & V101
Chair Maria Gudjonsdóttir, Chair of the CDIO 2022 Local Organizing Committee

Monday 13 June 10:00 - 10:30 Break / Refreshments
Room Solin

Monday 13 June 10:30 - 10:45 Poster Teaser Session
Room M101 & V101
Chair Gareth Thomson

Monday 13 June 10:45 - 12:00 Poster Session
Room Solin
Chair Gareth Thomson

Paper 25	Paper 35	Paper 56	Paper 89	Paper 90
Quality Assurance in Electronics-ICT Engineering Education Jo Verhaevert	Curriculum Framework for Project Management Competences – Case TUAS Mari Ketola and Juha Kontio	Integrating Professional Skills in Engineering Education: Project Management as Case Mahmoud Al-Subaihi, Bjarke Nielsen and Samuel Brüning Larsen	Training Laser Engineers through Innovation Practice on Electrical Technology Takanori Kozai, Takaya Ozaki, Tatsuo Hasegawa, Minoru Komatsu and Takashi Matsumoto	Some Implementation Methods of CDIO-Based Projects in Online Engineering Education Quang Ngoc Pham, Quan Ngo Anh Nguyen, Dung Trung Pham, Thanh Chi Vo, Thang Kim Nguyen, Duyen My Ha, Thanh Quang Le, Hoang Thuan Tran and Dong Le Thang Tran
Paper 107	Paper 135	Paper 170	Paper 172	
Faculty Pedagogical and CDIO Training – ENTER ERASMUS+ Project Eduarda Pinto Ferreira, Angelo Martins, Jose Carlos Quadrado and Kseniya Zaitseva	Applying Active Learning in the Electromagnetism Class: A Five-Year Assessment Jairo A. Hurtado, Manuel R. Perez and Juan M. Cruz	Recycling Programs from Engineering for Students and Their Families Jairo A. Hurtado, Flor A. Bravo and Gloria I. Mestre	Using GitHub Classroom in Teaching Programming Jens Bennedsen, Till Böttjer and Daniella Tola	

Monday 13 June 12:00 - 13:00 Lunch
Room Malid – Cafeteria 1 st Floor

Monday 13 June 13:00 - 14:20 Podium Sessions and Workshops								
Session	Podium 1 Pandemic Environment	Podium 2 Challenge Based Learning (CBL)	Podium 3 Accreditation and Regulations	Podium 4 Course Design and Teaching Development		Workshop 1 Room M102 Time 13:00 - 14:15	Workshop 2 Room M106 Time 13:00 - 14:15	Sponsored Workshop Room M108 Time 13:00 - 14:00
Room Chair	V101 Aldert Kamp	V102 Elizabeth Keller	M104 Sarah Junaid	M105 Mikael Enelund				
	Paper 7 Covid-19 Forced Remote Teaching and University Education after It Emiel van Puffelen, Tim Stevens, Kazem Banihashem, Harm Biemans, Omid Noorozi, Nienke Raeven and Perry den Brok	Paper 15 Making Good Challenges Great - Engaging External Parties in CBL Activities Charlotte, A. Norrman, Cia Lundvall, Karl Eldebo, Simon Boiert and Frans G. Stel	Paper 65 CDIO Applied in the Brazilian Engineering Education Law Implementation Andre Luiz Tenorio Rezende and Ricardo Teixeira da Costa Neto	Paper 31 Challenges and Opportunities When Integrating Videos in Course Design Malin Wiger, Henrik Gillström and Uni Sallnäs		Paper 4 Integrating Self-Directed Learning Competency into Engineering Curriculum Sin Moh Cheah and Geok Ling Soo-Ng	Paper 106 Blended Learning: How Do We Build Effective Online Student Communities? Kathryn Fee, Louise Pick, Charles McCartan and Paul Hermon	ITP Metrics Making Teamwork Effective in Engineering Design Using State of the Art Team Diagnostics Tom O'Neill ITP Metrics https://en.ru.is/cdio2022/sponsors/
	Paper 38 Addressing Challenges of Hybrid Capstone Projects in a Pandemic Environment Jerker Bjorkqvist, Anna Sell and Dragos Truscan	Paper 43 How to Make Good Teachers Great in Challenge-Based Learning Karl Eldebo, Cia Lundvall, Charlotte, A. Norrman and Madeleine Larsson	Paper 72 International Professional Skills: Interdisciplinary Project Work Thomas Mejtoft, Helen Cripps and Christopher Blöcker	Paper 54 Learning Mechatronics Using Digital Live Labs Veronica Olesen, Christian Stöhr, Mikael Enelund and Johan Malmqvist				
	Paper 51 Collegial Learning During the Pandemic: Realized Activities and Lessons Learnt Anna Rosengren, Anders Adlemo, Amjad Zaki Khalil Al-Musaed, Patrick Conway, Åsa Hansen, Leif-Magnus Jensen, Jakob Olofsson, Marisol Rico Cortez and Matilda Svensson Duric	Paper 117 Using Challenge Episodes to Identify Social Regulation in Collaborative Groupwork Michael T. O'Connell, Christian Stöhr and Patric Wallin	Paper 86 International Accreditation and CDIO Optional Standards Achievement Levels at UCSC Claudia Martinez-Araneda, Matilde Basso, Marcia Muñoz and Michelle Bizama	Paper 58 7 Year Iterative Improvements in Laboratory Work – Constructive Alignment Asdis Helgadóttir				
	Paper 80 Flipped Learning to Improve Social Presence, Challenges During COVID-19 Period Arooj Mubashara Siddiqui	Paper 147 Coaching Practices in Challenge-Based Learning: Characteristics and Practices in Projects Sonia M. Gomez Puente, Karolina Doulougeri and Miguel Bruns	Paper 136 A Method for Cross-Country Comparison of Engineering Ethics Accreditation Requirements Diana Martin, Alison Gwynne-Evans, Corinne Shaw, Jose Fernando Jimenez Mejia, Helena Kovacs, Johanna Lonngren, Kenichi Natsume, Fumiko Tochinai, Madeline Polmear, Yann Serreau, Mircea Tobosaru and Sarah Junaid	Paper 101 Integration of Learning and Research in a Multi-Perspective Learning Factory Eric Lutters, Janneke Massa, Roy Damgrave, Sebastian Thiede and Lisa Gommer				

Monday 13 June 14:20 - 15:00 Break / Refreshments

Room Solin

Monday 13 June 15:00 - 16:20 Podium Sessions and Workshops

Session	Podium 5 Stakeholders and Internships	Podium 6 Capstone Projects	Podium 7 Curriculum Development	CDIO Introductory Workshop	Workshop 3 Room M102 Time 15:00 - 16:15	Workshop 4 Room M106 Time 15:00 - 16:15	Sponsored Workshop Room V108 Time 15:00 - 16:00
Room Chair	V101 Svante Gunnarsson	M105 Ramon Bragos	M104 Siegfried Rouvrais	V102	Paper 160	Paper 133	MathWorks
	Paper 1	Paper 44	Paper 122				
	Enhancing Interaction with External Stakeholders in Program Management Svante Gunnarsson, Anna Fahlgren and Per Fagrell	Characterisation of Effective Delivery and Supervision of Capstone Projects Tony Topping and Matt Murphy	If You Please, Draw Me a Resilient Curriculum! Siegfried Rouvrais, Inggriani Liem, Haraldur Audunsson and Cecile Gerwel Proches	The CDIO approach – an introduction Kristina Edström and Anders Rosén This session is for newcomers or anyone who wants a quick overview of the CDIO approach to engineering education, developed by this community and expressed in the CDIO Standards. We also explore the new standard for integrating sustainable development in engineering programs.	Active Learning Methodologies: EduScrum plus Peer Instruction Euarda Pinto Ferreira and Dulce Mota	Student Agency and Flexible Learning Trajectories in Engineering Education Kristel Petra Maria Aalbers, Nina Bohm, Anita van Oosten, Remon Rooij and Frits van Loon	Pocket AI and IoT Workshop for Interdisciplinary Education with MATLAB: Turn your Phone into a Smart Fitness Tracker Rohit Agrawal MathWorks https://en.ru.is/cdio2022/sponsors/
	Paper 47	Paper 144	Paper 167				
	Engineering Students' Interaction with Industry Representatives Martina Berglund, Peter Cronemyr, Magdalena Smeds and Promporn Wangwacharakul	Analysis of Students' Performance in Capstone Projects According to the Project Features Ramon Bragos, Guido Charosky, Louay Aoun, Sandra Bermejo and Josep Pegueroles	Nordic Cooperation on Course Development in an Emerging Field of Engineering Bjorn Karlsson, Nils Johansson, Michael Försth, Lars Schiött Sörensen and Anne Simone Dederichs				
	Paper 115	Paper 154	Paper 169				
	Rethinking Engineering Internships in Times of Disruptions N Muhammad Mustafa, T Willems and Sin Moh Cheah	Embracing Failure as an Integral Aspect of Engineering Education Markéta Foley, Joseph Timothy Foley and Marcel Kyas	Supporting Student Learning in Undergraduate Engineering by Transactional Curriculum Inquiry Bob Brennan and Nancy Nelson				
	Paper 137	Paper 157					
	Aligning Stakeholder Needs with Program Requirements Using a Multi-Stakeholder Survey Marta Ormazábal, Nicolás Serrano, Carmen C. Blanco, Fernando Carazo, Javier Aldazábal and Samuel Azasu	Engineering X: Capstone Projects Employing Formalized Design Methods Joseph Timothy Foley and Ágúst Valfell					

Monday 13 June 16:20 End of Program – Optional Excursions at 16:45.



Tuesday 14 June 9:00 - 9:45 Keynote Session
Announcements
Keynote – Geir Egil Dahle Øien, Professor at the Department of Electronic Systems at Norwegian University of Science and Technology (NTNU)
Room M101 & V101
Chair Maria Gudjonsdottir, Chair of the CDIO 2022 Local Organizing Committee

Tuesday 14 June 9:45 - 10:00 Roundtable Teaser Session - See list below
Room M101 & V101
Chair Gareth Thomson

Tuesday 14 June 10:00 - 10:30 Break / Refreshments
Room Solin

Tuesday 14 June 10:30 - 11:50/12:30 Podium Sessions and Roundtables

Session	Podium 8 Design	Podium 9 STEM	Podium 10 Engineering Education Development	Podium 11 Redesigning Engineering Education	Roundtable 1 Room M102 Time 10:30 - 11:30	Roundtable 2 Room M106 Time 10:30 - 11:30	Roundtable 3 Room M108 Time 10:30 - 11:30
Room Chair	V101 Remon Rooij	V102 Heidi M. Niskanen	M104 Olivier M. S. Moschetta	M105 Reidar Lyng			
	Paper 36 Healthy Challenging Design Education for Engineers Remon Rooij and Sylvia Mooij	Paper 29 Simulation-Based Math in the Faculty of Engineering and Business Heidi M. Niskanen and Marko Kortetmäki	Paper 21 Higher Education Thesis Supervision - a New, Hybrid Supervisory Model Anders Adlemo	Paper 112 Redesigning Norwegian Engineering Education 1: Benchmarking and Principles for Development Geir Egil Dahle Øien, Nils Rune Bodsberg and Reidar Lyng	Paper 5 Advancing CDIO Competencies for Technicians - a Professional Development Framework Mark Nivan Singh, Sin Moh Cheah, Chee Whye Lee and Helene Leong	Paper 179 CDIO Academy – What, How and When? Jens Bennedsen	Paper 55 Identification of Hybrid Setups for Teaching and Facilitation Bjarke Nielsen, Samuel Brüning Larsen and Mahmoud Al-Subaihi
	Paper 57 Design Process Reporting Tool for Mapping and Performance Optimization Geza Fischl and Bengt Erland Erlandsson	Paper 61 Discover Calculus through Original 3D Animated Sitcom "Ratventures" Yen Ping Chua, Ling Chen Fu, Eric Goh, Ming Ming Boo and Pei Chin Lim	Paper 28 Systems Thinking in a Mechanical Engineering Program Björn Oskarsson, Jonas Hallström and Maria Huge-Brodin	Paper 155 Redesigning Norwegian Engineering Education 2: SWOT Analysis Enabling Fact-based Decisions Nils Rune Bodsberg, Reidar Lyng and Geir Egil Dahle Øien			
	Paper 93 Maximising the Performance of Multi- Diverse Design Teams Bas Flipsen and Stefan Persaud	Paper 70 Supporting Engineering Students Learning Mathematical Induction with an Online Tutorial Mika Gabel, Vladimir Bar Lukianov and Tamar Margalit	Paper 114 Does a Master's Program in Engineering Require a Final Project? Haraldur Audunsson, Siegfried Rouvrais, Ralph Rudd, Ragnar Kristjansson and Olivier Matthieu S. Moschetta	Paper 116 Redesigning Norwegian Engineering Education 3: Stakeholder Involvement Reidar Lyng, Nils Rune Bodsberg and Geir Egil Dahle Øien			
	Paper 105 Teaching Design: From Dueling to 'Dualing' Threshold Concepts Nancy Nelson and Robert Brennan		Paper 150 Debate as a Tool in Engineering and Sustainability Education Abed Alaswad and Sarah Junaid				
					Roundtable 4 Room V109 Time 11:30 - 12:30	Roundtable 5 Room V108 Time 11:30 - 12:30	Roundtable 6 Room V110 Time 11:30 - 12:30
					Paper 27 Harnessing Co-Creation to Upgrade Mathematics Faculty Teaching Competence Ernest Ampadu and Elizabeth Keller	Paper 14 Innovations in Teaching and Learning: Student Engagement During Online Learning Helene Leong, Sin Moh Cheah, Sally Ng and Shwu Lan Nghoh	Paper 24 Designing the University of the Future Ines Lopez Arteaga, Isabelle Reymen and Chantal Brans

Tuesday 14 June 12:00 - 13:00 Lunch

Room Malid – Cafeteria 1st Floor

Tuesday 14 June 13:00 - 14:20 Podium Sessions and Workshops

Session	Podium 12 Faculty Development	Podium 13 Product Development	Podium 14 Introductory Courses and Students Journey	Podium 15 Assessment and Grading	Workshop 5 Room M102 Time 13:00 - 14:15	Workshop 6 Room M106 Time 13:00 - 14:15	Workshop 7 Room M108 Time 13:00 - 14:15
Room Chair	V101 Pall Jensson	V102 Liviu Gal	M104 Jenni Virtaluoto	M105 Asdis Helgadottir			
	Paper 2	Paper 26	Paper 16	Paper 59	Paper 158	Paper 138	Paper 153
	Continual Improvement in CDIO: Enhancing Faculty Competency in Reflective Practice Sin Moh Cheah	A CDIO-Oriented Technology Product Development Course for Electronic Engineering Students Liviu Gal, Gabriela Dorfman Furman and Zeev Weissman	Introduction to Next-Generation Engineering: Being Human in the Information Society Jenni Virtaluoto, Janne Roslöf, Anne Pitkänen-Huhta and Lauri Kettunen	Grading Homework as Formative Assignments – the Solution to Cheating? Asdis Helgadottir	Global Citizens and Ethical Engineers within Our CDIO Programs Workshop Sarah Junaid, Yann Serreau, Alison Joy Gwynne-Evans, Patric Granholm and Kathryn Fee	The Level of Transfer from Mathematics to Engineering Annoesjka Cabo, Nathalie van der Wal and Renate Klaassen	Integrate Language Learning and Intercultural Communication into Engineering Curricula Ida Pinho, Nathalie Kirchmeyer and Yoko Takau-Drobin
	Paper 32	Paper 34	Paper 87	Paper 156			
	CDIO-Based Syllabus Design in the Context of Teacher Education Bang Nguyen, Phu Hoang, Yen Tran, Vinh Nguyen and Duc Hoang	Just-in-Time Learning Product Design and Development through Gamification Marcus Vinicius Pereira Pessoa	Surviving and Thriving in First Year - Supporting Student Experience Kim Johnston and Robyn Paul	Evaluation of Students' Performance in CDIO Projects through Blended Learning Soumya Kanti Manna, Najah Battikh, Anne Nortcliffe and Joseph Camm			
	Paper 53	Paper 121	Paper 88	Paper 78			
	Do Academic Recruitment Policies under Represent Teaching and Learning Competencies? Gareth Thomson and Klara Kovesi	Peer Review in a Product Development Course – Implementation and Reception Hanna Jonsson, Elsa Täck, Andreas Eriksson and Erik Hulthen	Implementing Active Learning in First Year Engineering – a Leadership Perspective Kim Johnston and Mike Potter	Codex: An Open Source Online Platform to Perform Automated Evaluation Kevin Calderón, Nicolás Serrano Bárcena, Carmen C. Blanco and Iñigo Gutiérrez			
	Paper 145	Paper 9	Paper 146				
	Academic Development Support for Implementing CDIO Kärt Kase, Tiina Kasuk, Tiia Rütmann, Kaimo Sonk, Raivo Sell and Ivar Annus	Sustainable Design and Product Death Ahmed Tamkin Butt	The Meaning of the Generic Skills in Semester Projects Päivi Honka and Mari-Selina Kantanen				

Tuesday 14 June 14:20 - 15:00 Break / Refreshments

Room Solin

Tuesday 14 June 15:00 - 16:20 Podium Sessions and Workshops							
Session	Podium 16 Problem Based Learning (PBL)	Podium 17 Development of CDIO	Podium 18 Learning Environment 1	CDIO Introductory Workshop	Workshop 8 Room M102 Time 15:00 - 16:15	Workshop 9 Room M106 Time 15:00 - 16:15	Sponsored Workshop Room M108 Time 13:00 - 14:00
Room Chair	V101 Lisa Gommer	V102 Ingunn Sæmundsdottir	M105 Carin Rösiö	V108			
	Paper 42	Paper 23	Paper 73		Paper 159	Paper 30	ITP Metrics
	Evaluation of Immersive Project-Based Learning Experiences Tiia Rütümann, Emlyn D. Q. Witt, Theophilus O. O. Olowa, Taija Puolitaival and Marco Bragadin	The CDIO Syllabus 3.0 - An Updated Statement of Goals Johan Malmqvist, Ulrika Lundqvist, Anders Rosen, Kristina Edström, Rajnish Gupta, Helene Leong, Sin Moh Cheah, Jens Bennedsen, Ron Hugo, Aldert Kamp, Ola Leifler, Svante Gunnarsson, Janne Roslöf and Daniel Spooner	Engineering Students' Engagement in a Hybrid Learning Mode: Comparative Study Sami Asaad, Hassan Salti and Mohamad Farhat	An Active Learning exercise with CDIO Standards Matt Murphy and Juha Kontio This session is a follow-up session for "The CDIO approach - an introduction" workshop. The aim of this workshop is that you understand the purpose of the CDIO standards and study five of them in detail. In addition, you will experience three active learning methods.	Constructively Aligning Ethics Teaching within Our CDIO Programs Workshop Sarah Junaid, Yann Serreau, Alison Joy Gwynne-Evans, Patric Granholm and Kathryn Fee	How can STEM Teachers Promote Effective Communication Skills Among Students? Jamie Rinder and Charlotte Hurdelbrink	Making Teamwork Effective in Engineering Design Using State of the Art Team Diagnostics Tom O'Neill ITP Metrics https://en.ru.is/cdio2022/sponsors/
	Paper 100	Paper 82	Paper 85				
	Project Based Learning and Reflection in a Manufacturing Environment Marijn Zwier, Eric Lutters and Lisa Gommer	Comparing the CDIO Standards with the Work-Integrated Learning Certification Thomas Lundqvist, Annabella Loconsole, Ingrid Tano and Andreas de Blanche	Development of Professional Capabilities in a Challenge Based Learning Environment Renate Klaassen and Birgit J.E. de Bruin				
	Paper 131	Paper 84	Paper 174				
	Tracks-Course in Sustainable Transportation - towards Realisation of Structural Batteries Johanna Xu, Leif E. Asp, Kristina Henricson Briggs and Mikael Enelund	Meeting Societal Needs in Engineering Education with Limited Resources Ágúst Valfellis	EDUBOX: A Self-Contained Engineering Learning Environment for Underserved Communities Alberto Martinetti, Peter Chemweno, Eva de Wit, Joëlle Steendam and Ayat Nashwan				
	Paper 22		Paper 177				
	Local Resilience Strategies for COVID19 – a PBL Engineering Case Study Ann-Kristin Winkens and Carmen Leicht-Scholten		University and Continuous Engineering Education - Perspectives on Integrating Students Carin Rösiö, Madelene Zetterlind, Stefan Brolin and Patrik Cannmo				
Tuesday 14 June 16:20 End of Program							
Tuesday 14 June 18:30 Conference Dinner at Hotel Natura							



Wednesday 15 June 9:00 - 9:35 Keynote session
Announcements
Keynote - Carl Wieman, Professor of Physics and Education at Stanford University
Room M101 & V101
Chair Maria Gudjonsdottir, Chair of the CDIO 2022 Local Organizing Committee

Wednesday 15 June 9:35 - 10:00 Working Group Reports
Room M101 & V101
Suzanne Brink, Juha Kontio & Reidar Lyng

Wednesday 15 June 10:00 - 10:30 Break / Refreshments
Room Solin

Wednesday 15 June 10:30 - 11:50/12:30 Podium Sessions, Roundtables and Workshops

Session	Podium 19 Teaching Methods	Podium 20 Diversity and Gender	Podium 21 Computer Science Education	Podium 22 Sustainability Challenges	Roundtable 7 Room M102 Time 10:30 - 11:30	Roundtable 8 Room M106 Time 10:30 - 11:30	Sponsored Workshop Room M108 Time 10:30 - 11:30
Room	V101	V102	M104	M105			
Chair	Dag Hákon Haneberg	Asrun Matthiasdottir	Jacky Mallett	Juha Kontio			
	Paper 48	Paper 8	Paper 3	Paper 6	Paper 64	Paper 99	MathWorks
	Improving Teamwork with a Rotating Leadership Model	Finding Solutions to Digital Inequality in a Blended Learning Environment	Self-Efficacy and Study Burnout among IT Students: Challenges and Potentials	Sustainable Development in Engineering Education	Students Designing Their Own Assessment	Creating an Ecosystem for Complex Design-Implement Projects	Pocket AI and IoT Workshop for Interdisciplinary Education with MATLAB: Turn your Phone into a Smart Fitness Tracker
	Sally Ng and Benjamin Tan	Laura Leslie, Darren Campbell and Rebecca Broadbent	Miitta Järvinen, Janne Roslöf, Joni Lämsä, Raija Hämäläinen and Lauri Kettunen	Taru Konst, Juha Kontio and Piia Nurmi	Mirjam Zijdeveld and Cathy Liem	Dag Raudberget and Patrik Cannmo	Rohit Agrawal MathWorks
	Paper 75	Paper 52	Paper 41	Paper 11			https://en.ru.is/cdio2022/sponsors/
	Dual Use of Time: Framework for Understanding Possibilities and Pitfalls	Do Engineering Students from Vocational and Academic Backgrounds Think Differently ?	Work-Based Learning in Computer Science Education - Opportunities and Limitations	CDIO for Education for Sustainable Development Using Common Core Curriculum			
	Guttorm Sindre	Gareth Thomson and Mark Prince	Daniel Einarson, Fredrik Frisk and Kamilla Klonowska	Sin Moh Cheah, Lee Yee Lim and Yunn Chyi Chao			
	Paper 142	Paper 119	Paper 49	Paper 50	Roundtable 9 Room V108 Time 11:30 - 12:30	Roundtable 10 Room V109 Time: 11:30 - 12:30	Roundtable 11 Room V110 Time: 11:30 - 12:30
	SUPER: Student Active Learning through Wicked Problems	Integrating Gender Equality, Diversity and Equal Conditions in Engineering Education	The Design of Software Engineering Courses for Future Remote Work	Connecting across Differences to Develop Engineering Solutions to Sustainability Challenges	Paper 128	Paper 175	Paper 176
	Dag Hákon Haneberg, Ragnhild Nordeng Fauchald, Sölvi Solvoll, Ingrid Berg Sivertsen, Pasi Aalto, Torstein Bolstad and Ole Andreas Alsos	Marie Magnell, Charlotta Delin, Anders Rosén, Anna Jerbrant, Gunnar Tibert and Carlos Casanueva Perez	Marijana Teljega and Daniel Einarson	Clare Newstead and Yvonne Reinwald	Positioning Curriculum Agility in the CDIO Framework	Innovating Access to Quality Technology Education for Underserved Communities	Engineering Courses for Professionals: Bridging Practice and Theory
		Paper 77	Paper 171	Paper 104	Suzanne Brink, Carl Johan Carlsson, Mikael Enelund, Elizabeth Keller, Reidar Lyng and Charlie McCartan	Alberto Martinetti, Peter Chemweno and Eva de Wit	Madelene Zetterlind, Carin Rösiö and Stefan Brolin
		Gender Differences in Attitudes towards Engineering Studies and in Graduates	Teaching Practical Computer Networking with Limited Resources	Sustainable Entrepreneurship in a CDIO Context			
	Asrun Matthiasdottir and Haraldur Audunsson	Jacky Mallett, Marcel Kyas and Stephan Schiffl	Yoke-Chin Lai and Mette Lindahl Thomassen				

Wednesday 15 June 12:00 - 13:00 Lunch

Room Malid – Cafeteria 1st Floor

Wednesday 15 June 13:00 - 14:20 Podium and Online Sessions, Roundtables and Workshops

Session	Podium 23 Educational Evolution	Podium 24 Learning Environment 2	Podium 25 Advanced Projects	Podium 26 -- Online --	Roundtable 12 Room M102 Time 13:00 - 14:00	Pop-up Roundtables	Pop-up Roundtables
Room Chair	V102 Magnus Andersson	M104 Chow Leong Chia	M105 Paulo Maio	M108 Ralph Rudd			
	Paper 20	Paper 69	Paper 40	Paper 10	Paper 45		
	Improving Teaching of Self-Directed Learning via Teacher Modelling Yunyi Wong and Sin Moh Cheah	A School-wide Ecosystem towards Nurturing Students to Become Self-Directed Learners Ser Khoon Toh, Hua Joo Tan, Safura Anwar and Chow Leong Chia	Continuous Assignment Development on Topology Optimization in Engineering Design Gauti Asbjörnsson and Kanishk Bhadani	Forming 'Ba' for Enhancing Online Communication Skills by CDIO Approach Masaru Kawahara and Yasuhiro Fukuzawa	For Sustainable and International Learning Environment in International Dormitory Katsumi Ichimura, Shigeru Ogawa, Makoto Hirai and Mitsuru Kudo		
	Paper 81	Paper 68	Paper 91	Paper 12			
	Closing the Gap between Classroom and Reality through Virtual Bridges Priscilla Navarro, Linnea Haag, Promporn Wangwacharakul and Jason Martin	Passion and Choices in Engineering Education through Multiple Pathways Ser Khoon Toh, Chow Leong Chia, Chung Meng Lau and Hua Joo Tan	Solving Real-World Problems in Accounting Industry Using CDIO Framework Daryl Aw, Ronnie Hoh, Siew Meng Yew, Germaine Lim and Seow Hui Ho	Developing Students' Generic Skills Based on Objective Evaluation Kuniaki Yajima, Koji Kawasaki, Yoshikatsu Kubota, Akihiro Wakahara, Naohiro Fukumura, Makoto Nanko and Munehiro Kimura			
	Paper 60	Paper 67	Paper 94	Paper 13			
	Principles for Educational Change Management in Higher Education Magnus Andersson	School-wide Strategies for Assessment of Learning Outcomes During COVID-19 Pandemic Ser Khoon Toh, Chow Leong Chia, Safura Anwar, Andy Ngai and Hua Joo Tan	Exploring Advanced Projects as Meeting-Points between Students and Industry Fredrik Frisk, Kamilla Klonowska and Daniel Einarson	Implementing Portfolio Education Using Objective Data of Generic Skills Koji Kawasaki, Kuniaki Yajima, Yasuhiro Kashiwaba, Hisashi Takeshima, Takashi Shirane and Yoshikatsu Kubota			
			Paper 102	Paper 37			
			Enhancing Students' Competencies by Integrating Multiple Course-Units on Semester Projects Paulo Maio, Paulo Sousa, Carlos Ferreira and Elsa Gomes	Improvement of Facilitation and Management Skills by Whole Systems Approach Hiromasa Ohnishi			
				Paper 39			
				Visualizing the Effectiveness of Cross-Course-Typed PBL on Generic Skills Jun Suzuki, Koji Kawasaki, Kuniaki Yajima, Shinji Chiba, Hisashi Takeshima and Yoshikatsu Kubota			

Wednesday 15 June 14:20 - 15:00 Break / Refreshments
Room Solin

Wednesday 15 June 15:00 - 16:00 Regional Meetings

Session	Africa	Asia	Australia & New Zealand	Europe	Latin America	North America	UK/Ireland
Room Chair	M106 Lamjed Bettaieb	M104 Helene Leong, Peihua Gu & Li Changhun	M102 Nicoleta Maynard	M105 Reidar Lyng, Suzanne Brink & Angelo Martins	V110 Claudia Martínez Aranedo & Messias Borges Silva	V109 Daniel Spooner & Ron Hugo	V108 Paul Hermon & Gareth Thomson

Wednesday 15 June 16:00 - 17:00 Closing Ceremony and refreshments.
Room Solin

Wednesday 15 June 17:00 End of Program.

Wednesday 15 June 17:00 CDIO Council Meeting
Room M108