



**European Convention for Engineering Deans -
SEFI**

**Leadership for Digitalization in Higher
Engineering Education**

Local organizer: 4TU.CEE

24-26 May 2023, University of Twente



European Society for Engineering Education
Europäische Gesellschaft für Ingenieur-Ausbildung
Société Européenne pour la Formation des Ingénieurs

**4TU. CENTRE FOR
ENGINEERING EDUCATION**

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Programme

May 25, 2023

08.30 - 09.00: Registration – U-Park Hotel at the University of Twente

09.00 - 09.15: Welcome to ECED 2023 and ECED 2023 main topic, U-Park Hotel, room C2

Leadership for Digitalization in Higher Engineering Education

09.15 - 11.15: Visions on (digital) engineering and digital engineering education

11.15 - 11.45: Coffee break

11.45 - 12.40: Examples of digitalization in Higher Engineering Education

12.45 - 13.45: Lunch break at the U-Park Hotel, University of Twente

13.45 - 14.00: Group photo (outside U-Park Hotel if weather permits)

14.00 - 15.15: Symposium at the U-Park Hotel

Digital engineering education and professional development for digital engineering education

- 15.15 – 15.45: Audience propositions about the Symposium and refreshments break**
- 15.45 – 16:30: Discussant panel about Symposium, based on audience propositions**
- 16.30 – 16.45: Preliminary conclusions and end of formal programme of today**
- 16.45 – 17.45: Campus guided tour, start at entrance U-Park Hotel**
- 18.00 - 20:00: Conference dinner at the U-Park Hotel**

May 26, 2023

- 09.00 - 09:15: Walk-in and coffee, U-Park Hotel
- 09.15-11.00: Stimulating sustainable implementation of educational innovation in engineering education**
- 11:00-11:20: Coffee break
- 11.20-11.40: Wrap-up, U-Park Hotel**
- 11.40 - 11.50: Next steps within ECED**
- 11.50 - 13.00: Lunch and farewell

Speakers and panel members

Industry panel members

Industry stakeholder expert Panel, moderated by
Dr. Baláz Vince Nagy, *Budapest University of Technology and
Economics and Vice President
at SEFI*

Panel members

- Francesco Del Giudice, *Associate Professor, Department of
Chemical Engineering at Swansea University, and McGraw
Hill*
- Guido Schwartz, *Strategist Aerospace Innovation
Ecosystems, Airbus Netherlands*
- Johan Soderberg, *Educational Sales Manager, MathWorks*
- Sweitze Roffel, *Senior Publisher Artificial Intelligence and
Computer Science journals programme, Elsevier*
- Xavier Fouger, *Senior Director, Global Academia Programs,
Dassault Systèmes*

Speakers

Aldert Kamp, Former Director of Education at TU Delft Faculty of Aerospace Engineering



Aldert Kamp is the Former Director of Education at *TU Delft* Faculty of Aerospace Engineering and the Author of 'Navigating the Landscape of Engineering Education'

(see: <https://www.alderkamp.nl/references>)

Professor Marcus Specht, Professor for Digital Education – Technical University Delft



Prof. dr. Marcus Specht is Professor for Digital Education at the Technical University of Delft and Director of the Leiden-Delft-Erasmus Center for Education and Learning.

(see: <https://www.wis.ewi.tudelft.nl/specht>)

Dr. Laurent Dairaine, Chief Digital Officer ISAE-SUPAERO



Dr. Laurent Dairaine is currently in charge of the digital transformation of ISAE-SUPAERO as Chief Digital Officer. In 2007, he joined ISAE-SUPAERO - Institut Supérieur de l'Aéronautique et de l'Espace - where he manages the Institute's Information Technology department. Since 2018, he oversees the digital transformation of the Institute and manages the IDEA team: Innovative Digital & Education for Aerospace. More information about Laurent Dairaine:

<https://personnel.isae-supaero.fr/laurent-dairaine>

Dr. Heli Harrikari, director of the Project ECIU University



Dr. Heli Harrikari holds the position of Strategic Lead in ECIU University, one of the 1st generation European Universities. She has extensive experience in strategic innovation in universities. Previously she has worked as Director of continuous learning in Tampere University, Finland, and as Vice President of Education and Dean in Tampere University of Technology. In industry, she has worked as a researcher in speech and language technology. Throughout her career she has been involved with digital innovations.

Professor Pierre Dillenbourg, Professor in learning technologies in the School of Computer @ Communication Sciences



Professor Pierre Dillenbourg has expertise in the areas of Computer-supported collaborative learning & work, Learning technologies, MOOCs, Human-Computer interaction, Educational Robotics, Eye tracking, Tangible Interfaces, AR & VR, and vocational education. More information: <https://people.epfl.ch/pierre.dillenbourg?lang=en>

Myrthe Lubbers MSc, researcher at the department Teacher development, University of Twente and Dr. Dorien Hopster-den Otter, researcher at the department of Teacher Development, University of Twente



As members of the Acceleration Plan for Educational Innovation with IT (Teacher Professional Development zone), Myrthe Lubbers and Dorien Hopster-den Otter investigated the initiation and implementation of nationally developed innovations for teacher professional development in the field of educational innovation with IT: The Acceleration Plan is a collaboration between the Universities of the Netherlands (UNL), the Association of Universities of Applied Sciences, and SURF.



Professor John Mitchell, Professor of Communications systems Engineering, UCL



John E. Mitchell is Professor of Communications Systems Engineering in the UCL Department of Electronic and Electrical Engineering. He also served as Vice-Dean of Education in the UCL Faculty of Engineering Sciences from 2015 to 2022. His research is focused on optical and wireless access systems, considering optical fibre access, millimeter-wave radio access, as well as systems that combine these two areas, specifically to support mobile front/back haul systems. This work has been funded by the UK Engineering and Physical Sciences Research Council (EPSRC) , the European Union (FP7, Marie-Curie), the UK Technology Strategy Board (TSB) and industry (including BT and SELEX ES). Between 2012 and 2016 he was on secondment to the UCL Engineering Sciences Faculty office, where he led the introduction of the Integrated Engineering Programme.

Professor Kim Schildkamp, Professor of Data informed decision making for learning and development, University of Twente



Professor dr. Kim Schildkamp is a full professor in the Faculty of Behavioural, Management, and Social Sciences of the University of Twente in the Netherlands. Her chair is called “Data-informed decision making for learning and development”. Kim is the past president of ICSEI (International Congress on School Effectiveness and Improvement). She has also been the chair of the so-called “Facilitating professional development of lecturers” zone of the Dutch national “Acceleration plan educational innovation with IT”. She has published widely on (leadership and) the use of (assessment) data. She has received numerous of grants from NWO/NRO, the EU (Erasmus plus, Comenius), The Spencer Foundation, The Ministry of Education, STW (Science and Technology fund, the Netherlands), and several school boards. For more information

see <https://people.utwente.nl/k.schildkamp>

Professor Esther Ventura-Medina, Professor of Innovation in STEM Education at Eindhoven University of Technology



Professor Esther Ventura-Medina is a Professor of Innovation in STEM Education at Eindhoven University of Technology (TU/e), Eindhoven School of Education within the Department of Applied Physics and Education Science. She is also the Scientific Director of the Academy for Learning and Teaching (ALT) and the Leader of the Centre for Engineering Education (4TU.CEE) at TU/e. Her main research interests are grounded on questions about how cognitive development and human agency are influenced by the social environment. Her expertise is in the area of skill development in student-centred pedagogies such as Problem- and Project-Based Learning. Esther is a member of the Collaborative Online Learning Network (ONL) and of the Engineering Education Research Special Interest Group at SEFI.

Professor Perry den Brok – 4TU.CEE-leader; and Wageningen University and Research, and Dr. Cindy Poortman 4TU.CEE leader at University of Twente and co-organizer



Perry den Brok is professor in Education and Learning Sciences at WUR and chair of the group with the same name (ELS). His research interests lie in the field of educational innovation, rich and innovative learning environments, teacher learning and professional development (see <https://www.wur.nl/en/persons/perry-prof.dr.-pj-perry-den-brok.htm>)



Cindy Poortman is an associate professor at the University of Twente in the Netherlands. She is the 4TU.CEE (Centre for Engineering Education) leader at the University of Twente.

Her research and teaching focus on teacher and school leader professional development in (doing research in) teams and networks. Leadership and sustainability are examples of themes she focuses on within this area (see

<https://people.utwente.nl/c.i.poortman>)

Co-organizers

Professor Luis Manuel Sánchez Ruiz, SEFI European Engineering Deans Council Co-Chair and Director of the Latin American Affairs Area at the Technical University of Valencia (UPV)



Prof. Luis Manuel Sánchez Ruiz is SEFI European Engineering Deans Council Co-Chair, and Director of the Latin American Affairs Area at Technical University of Valencia (UPV). Former Director of the UPV Programs Office with USA/Canada and Asia/Pacific, Director of the Research and Innovations Programs Area and Associate Dean and Head of International Relations at ETSID (UPV). Lecturing in Aeronautic Engineering at ETSID.

His current research interests include continuous assessment of mathematical competencies in engineering education, digital educational escape rooms and use of ChatGPT in blended learning methodologies.

<http://www.upv.es/en> -> Directory -> Sanchez Ruiz

Professor Gerhard Müller, member of the Board of Directors of the European Society for Engineering Education (SEFI), Senior Vice President for Academic and Student Affairs at TUM



Gerhard Müller (b. 1960) conducts research in structural dynamics and vibroacoustics, in particular dynamic soil-structure-interaction, dynamics of buildings, sound radiation and sound fields generated by vibrations in buildings and vehicles. From 2014 until present he has been Senior Vice President for Academic and Student Affairs at TUM. Since 2007 he has been chairman of the education committee in the Bavarian chamber of engineers, starting from January 2019 of the advisory board for engineering education in the Association of German engineers VDI. From 2009 to 10 he chaired the umbrella organization of the engineering faculty associations 4ING e.V. In 2018 Gerhard Müller became a member of the Board of Directors of the European Society for Engineering Education (SEFI), in 2020 he took over the chairmanship of the board of the Bavarian-French University Center BayFrance and in October 2020 he has been appointed as member of the Bavarian Ethics Council.

www.cee.ed.tum.de/bm

<https://www.professoren.tum.de/en/mueller-gerhard>