



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

# SEFI ANNUAL REPORT 2023-2024

## *Engineering Education for Sustainability*



Brussels, August 2024

*Since 1973, SEFI is the largest network of higher engineering education institutions (HEIs) and engineering stakeholders in Europe.*

SEFI contributes to the development and improvement of Higher Engineering Education (HEE) in Europe, promotes information about HEE and improves communication between teachers, researchers and students, reinforces the university-business cooperation and encourages the European dimension in higher engineering education. SEFI is an international forum composed of HEIs, academic staff and teachers, students, related associations and companies in 41 countries.

Our activities: annual conferences, ad hoc seminars/workshops organised by our working groups, councils and ad hoc committees, organisation of the European conventions for engineering deans, scientific publications (including the European journal of engineering education), European cooperation projects, position papers, cooperation with other major European associations and international bodies such as the European Commission, the UNESCO, the Council of Europe or the OECD. SEFI also participated in the creation of several organisations such as ENAEE, IFEEES, EuroPace, IACEE and IIDEA.

#### Annual Report 2023-2024

This publication is the official Annual Report of the European Society for Engineering Education. Reproduction is authorised provided that the source is acknowledged. The invited contributions only reflect the opinion of their authors. SEFI cannot be held responsible for any use which may be made of the information contained therein. The report is also available on [www.sefi.be](http://www.sefi.be)

#### Published by SEFI aisbl

Responsible Editor: Klára Ferdová, Secretary General

Graphic design: Klára Ferdová

Photo credits: TU Dublin, Budapest University of Technology and Economics, vUnsplash

ISSN 1024-7920

## CONTENTS

Board of Directors .....	4
Message of the President .....	5
SEFI 2023 Annual Conference .....	7
SEFI 2023 Awards .....	8
General Assembly 2023 .....	10
SEFI Events in 2023-2024 .....	11
SEFI Publications .....	16
Special Interest Groups .....	20
Diversity, equity and inclusion .....	21
Curriculum development .....	21
Attractiveness .....	21
Ethics .....	22
Mathematics .....	23
Capacity building .....	23
Continuing engineering education & lifelong learning .....	23
Digital learning .....	24
Physics .....	24
Engineering skills .....	24
Sustainability .....	25
Quality assurance and accreditation .....	25
SEFI as a Partner .....	26
SEFI Members 2023-2024 .....	30

SEFI receives the financial support of its corporate partners:



## BOARD OF DIRECTORS 2023-2024

### President 2023-2025

**Balázs Nagy**  
Budapest University of Technology and Economics

### Vice-President 2023-2024

**Greet Langie**  
KU Leuven

### Vice-President 2021-2023

**Emanuela Tilley**  
University College London

**Sonia Gomez Puente**  
Technische Universiteit Eindhoven

**Damien Owens**  
Engineers Ireland

**Wojciech Sitek**  
Silesian University of Technology

**Johanna Naukkarinen**  
Lappeenranta University of Technology

**Antoine Lanthony**  
ISMEP-Supmeca

**Emrah Acar**  
Istanbul Technical University

**Gerhard Mueller**  
Technische Universität München

**Alex Tarchini**  
The Mathworks ltd.

**Euan Lindsay**  
Univeristy of Aalborg

**Zbyněk Škvor**  
Czech Technical University in Prague

**Henning J. Meyer**  
Technische Universität Berlin

**Mihai Ghinea**  
NUST POLITEHNICA Bucharest

**Görkem Külah**  
Middle East Technical University

**Roland Tormey**  
EPFL Lausanne

**Inês Direito**  
Universidade de Aveiro

**Yolande Berbers**  
KU Leuven

**Ramon Vilanova**  
Universitat Autònoma de Barcelona

**Geir Egil Dahle Øien**  
NTNU – Norwegian University of Science and Technology

**Jose Carlos Quadrado**  
European Network for Accreditation of Engineering Education (ENAAE)

**Janusz Szpytko**  
AGH University of Science and Technology Krakow

### Immediate Past President

**Hannu-Matti Järvinen**  
Tampere University

### Treasurer

**Klára Kövesi**  
ENSTA Bretagne

## SEFI OFFICE

Executive Director >> Secretary General  
**Klara Ferdova**

Membership and Administration Officer  
**Alexandra Gliga**

Communication Assistant  
**Denise Pauline Bernardo**

## MESSAGE FROM THE PRESIDENT



The past year has been marked by significant progress and impactful initiatives for SEFI. The SEFI 2023 Annual Conference at TU Dublin was a remarkable success, bringing together over 500 engineering education professionals from around the globe to share insights and foster collaboration. This conference, along with the 2024 Deans' Convention held at the University of Sheffield, reaffirmed our shared vision on core engineering skills, with a special focus on the transversal aspects of collaboration, sustainability, ethics, and diversity. These priorities are reflected in the increasingly active involvement of our members in our Special Interest Groups.

This year, SEFI has expanded its influence through various events and partnerships, emphasising capacity building, continuing engineering education, ethics, and the development of engineering skills. The European Journal of Engineering Education remains a cornerstone of our efforts, showcasing leading research. Additionally, the new SEFI Journal of Engineering Education Advancement has initiated its first year with exciting articles related to the practice of engineering education.

The SEFI Board of Directors, supported by the SEFI Office in Brussels, now operates at full capacity with our new Secretary General and Membership and Administration Officer. However, our achievements are only realised when the members and supporters of SEFI are actively engaged. Our aim is to reach out to all current and future members, as well as market and policy stakeholders, to increase the impact of SEFI's mission in innovating engineering education. The actions of the Special Interest Groups, SEFI@work webinars, and podcasts exemplify the dynamic European landscape within this mission. Our shared commitment to excellence, inclusivity, and sustainability will guide us as we navigate the challenges and opportunities of the coming year. Together, we are shaping the future of engineering education for a better world.

**Balázs Nagy**  
SEFI President 2023-2025

# SEFI ANNUAL CONFERENCE DUBLIN 2023



## ENGINEERING EDUCATION FOR SUSTAINABILITY

11-14 September 2023 – TU Dublin, Ireland



The 2023 SEFI Annual Conference, themed “Engineering Education for Sustainability,” welcomed over 575 participants from 40 countries, creating a vibrant and inclusive environment for educators, researchers, students, and industry professionals. This conference provided an invaluable platform for exchanging knowledge and perspectives on equipping engineering students to tackle complex societal challenges. The opening session highlighted recent trends in engineering education research and emphasised the need to support change and foster inclusive futures. Notably, the event saw the launch of the new open-access International Handbook of Engineering Education Research and the SEFI Journal of Engineering Education Advancement.

In a key plenary session, the question “Which engineering is needed for AI?” was addressed. Panelists discussed how AI is revolutionising various engineering fields, enhancing efficiency, innovation, and creativity. They also highlighted the industry’s challenge of balancing the benefits of generative AI with the potential need for regulation, as 75% of organisations are considering or implementing bans on AI. Panelists stressed the importance of skills such as data science, statistics, and adaptability in preparing students for AI integration in engineering design. The

message was clear: AI expertise is essential across all engineering disciplines.

Anette Kolmos (University of Aalborg) delivered an inspiring keynote on interdisciplinary projects, showcasing research and examples of interdisciplinary approaches in engineering education. She concluded with practical recommendations for curriculum development, emphasising the shift from knowledge transfer to transformative learning. The conference also announced a special issue of the European Journal of Engineering Education (EJEE) dedicated to interdisciplinary learning and the transformation of engineering education. Ed Byrne’s (University College Cork) keynote on sustainability was a stark reminder of the pressing environmental crisis. He urged educators to integrate sustainability into all aspects of engineering education, warning that current efforts are insufficient to address the crisis’s scale. Interactive formats, including hands-on workshops, presentations, Special Inter-

est Group meetings, and poster sessions, allowed participants to engage deeply and constructively. These sessions facilitated meaningful exchanges among attendees from diverse roles and backgrounds. The conference concluded with the EPFL - Swiss Federal Institute of Technology in Lausanne inviting participants to the SEFI 2024 Annual Conference, themed “Educating Responsible Engineers.” The anticipation for next year’s event is high, with hopes of even greater participation and continued progress in shaping the future of engineering education.

The conference was a testament to the power of collaboration and innovation in engineering education, providing attendees with fresh perspectives, novel ideas, and a renewed determination to create a positive impact in the world. The success of the event was a result of the remarkable efforts of the conference chair and the dedicated staff, who worked tirelessly to ensure a memorable and impactful experience for all participants.

## DOCTORAL SYMPOSIUM 2023

Kicking off the SEFI 2023 conference in high gear, the 7th SEFI Doctoral Symposium in Engineering Education Research was held on Sunday, September 10. A record number of 37 PhD students used this opportunity to share and discuss their PhD work and build their professional networks. During an intensive full day with 27 established scholars, the PhD students not only received valuable feedback and new ideas regarding their PhD-studies but could also experience the welcoming atmosphere of the engineering education research community. Although SEFI is a European organization, PhD students and seniors from Africa, Australia, and South and North America also participated.

In the doctoral symposium, different working formats are used to create a rich experience:

- Short pitches of the seniors, to get to know the well-established researchers,
- Small group discussions focusing on each student's PhD project,
- Speed-dating activities to grow each student's network,
- Presenting take-home-messages, to ensure valuable lessons are learnt and shared.

The growing number of participants is not only an indicator of the success of the SEFI Doctoral Symposium but also of



the growing maturity of the engineering education research field.

The organizers were also delighted by the willingness - even eagerness - of the seniors to participate in this event. These well-established researchers reported feeling honored to share their experience and expertise with more junior researchers and appreciated the networking opportunities to spot new talent and strengthen their connections with other seniors.

The happy faces of the participants, and the positive feedback received, strengthen our enthusiasm and resolve to

keep on organizing the Doctoral Symposium in the future.

*The Doctoral Symposium was proudly chaired by:*

**Jonte Bernhard**, Professor Emeritus, Deputy Editor of the European Journal for Engineering Education

**Shannon Chance**, Professor, Deputy Editor of the European Journal for Engineering Education

**Tinne De Laet**, Associate Professor, Chair of the SEFI SIG Engineering Education Research

**Kristina Edström**, Associate Professor, Editor-in-Chief of the European Journal for Engineering Education

## SEFI LEONARDO DA VINCI MEDAL

Professor Anette Kolmos is a distinguished Danish educator who has devoted her career to advancing engineering education and problem-based learning (PBL). Her remarkable career began in 1984 when she earned her Master of Arts degree in social science and psychology at Aalborg University. She continued by getting a Ph.D in technology and gender studies.

Since 2003, Anette Kolmos has held the esteemed position of Professor of Engineering Education and Problem-based Learning at the Department of Planning at Aalborg University. Throughout her illustrious career, Professor Kolmos has dedicated herself to researching and disseminating knowledge about

problem-based learning, a transformative educational approach.

Her contributions extend far beyond the classroom, as she has played pivotal roles in UNESCO projects, including chairing a UNESCO project on problem-based learning in 2007. Subsequently, she became the leader of the Aalborg Center for Problem-Based Learning in Engineering, Science, and Sustainability.

Anette Kolmos has been an active figure within SEFI for nearly two decades, leading our organisation as president from 2009 to 2011. Congratulations, Professor Kolmos, on this well-deserved achievement!



**Professor Anette Kolmos**  
delivering a keynote speech at SEFI 2023

## SEFI FELLOWS 2023



### Yolande Berbers

Yolande Berbers, an esteemed Professor of Computer Science at KU Leuven and a member of the Royal Flemish Academy for Science and the Arts, is being honored with the SEFI Fellowship for her exceptional dedication and contributions to our organization. Yolande's significance within SEFI has been unmistakable; she has served in various vital roles, including as a Special Interest Group (SIG) chair, a longstanding member of the SEFI board, Vice-President, President, and past President. Even after her presidency, Yolande has remained an active past President and has generously taken on some administrative duties. Her commitment extends beyond her SEFI responsibilities; she has a knack for making things happen and her ability to navigate complex situations has been invaluable. We congratulate Yolande on becoming a SEFI Fellow, and we appreciate her continued dedication, humor, and unwavering commitment to the SEFI community.

## SEFI FELLOWS 2023



### Pieter De Vries

Pieter has been awarded the SEFI Fellowship in recognition of his exceptional contributions to education and technology, with a remarkable impact on the field of Engineering Education. His dedication to fostering innovation and educational excellence, particularly through groundbreaking initiatives related to faculty development and research in open and online education, played a significant role in this recognition. Pieter's enduring commitment to SEFI is marked by his leadership of the SEFI SIG on Open and Online Education and his service as SEFI Treasurer. His dedication to the field and exemplary leadership have left an indelible mark on the SEFI community, making him a deserving recipient of the SEFI Fellowship.



### Kristina Edström

The SEFI board of directors conferred the SEFI Fellowship upon Dr. Kristina Edström, recognizing her extensive contributions to the engineering education community. As chief editor of the European Journal for Engineering Education for over five years, Dr. Edström enhanced the journal's scholarly value by fostering a diverse network of reviewers and authors. Her engagement with publishers and SEFI meetings solidified the journal's status, while her co-organization of the SEFI doctoral symposium highlighted her commitment to nurturing future researchers. Globally, she has led the CDIO initiative and chaired the Advisory Board of the Dutch 4TU Center for Engineering Education, driving innovation and research. Dr. Edström's dedication to high-quality education and support for emerging educators make her a true champion in the field.



### Maartje van den Bogaard

An Associate Professor of STEM Education at the University of Texas at El Paso, Dr. Maartje van den Bogaard's unique perspective stems from her MSc in Education Science from the University of Groningen and a PhD in Technology, Policy, and Management from Delft University of Technology. Her involvement with SEFI began in 2007, leading to significant contributions such as co-organizing the 2009 SEFI annual conference in Rotterdam and serving as a guest editor and Deputy Editor for the European Journal of Engineering Education (EJEE). She remains an Associate Editor and actively participates in the Engineering Education Research SIG. As one nominator noted, despite moving to the United States, her dedication to SEFI endures.

## SEFI FRANCESCO MAFFIOLI AWARD

This time, the SEFI Francesco Maffioli Award of Excellence in Teaching of Engineering Education was presented to Prof. Dr. **Tinne De Laet** and her Student Support Services team at KU Leuven Faculty of Engineering Science. Their exemplary commitment to providing comprehensive support for first-year Bachelor's students has been appreciated for helping ease the transition from secondary education to university, promoting student well-being, and ensuring academic success.

Recognising the potential stress and difficulties the first-year Bachelor's

students face, the Faculty of Engineering Science at KU Leuven took proactive steps long ago to establish a Tutorial Service tailored to their needs.

This service continually strives to optimise its offerings and remains adaptable to emerging trends in student counseling. It has gained considerable renown among students, effectively facilitating the transition from secondary school to university. Its accessibility and low threshold ensure that students receive intensive support, significantly contributing to their success during the initial bachelor's phase.



Prof Tinne De Laet – KU Leuven

## BEST PAPERS

- **Best Student Paper Award:**  
**Francisca Trigueiros, Jenni Kaipainen, Frederico Silva, Niklas Geising and Erdem AtaTosum:**  
*“Student perspectives on sustainability in Engineering Education: multiple casestudy of European bachelor's programs in Industrial Engineering and Management” [link](#)*
- **Best Practice Paper Award:**  
**Marius Mailänder, Edward Rullmann, Felix Di Lenarda, Christian Forbrig and JuriRappsilber:**  
*“Keep it simple: Optimized Student Evaluations with Moodle” [link](#)*
- **Best Research Paper Award:**  
**Xiaoqi Feng, Julia Sundman, Hanna Aarnio, Maija Taka, Marko Keskinen and Olli Varis:**  
*“To withdraw, investigate, negotiate or integrate? Students' coping strategies with disorienting dilemmas” [link](#)*
- **Susanne Ihsen Award for Best Paper on Diversity and Inclusiveness:**  
**Samara Omar, Kate Youmans, Aubrey Wigner, Henry Archer and Carrie McClelland:**  
*“Fostering a Sustainable Future through Inclusive Design” [link](#)*

## GENERAL ASSEMBLY 2023

SEFI General Assembly, held on 12 September in Dublin, elected the New President, Vice-Presidents and 9 members of SEFI Board of Directors.

### New President

SEFI Vice-President **Balazs Vince Nagy** from Budapest University of Technology and Economics was elected SEFI President for the period of 2023-2025.

### New Vice-Presidents

**Greet Langie** (KU Leuven) was elected to take over the mandate of Balazs Nagy

from 2023 to 2024 and **Emanuela Tilley** (UCL London) was elected as the new Vice-President from 2023 until 2025.

### New Board of Directors members

The board of directors got six new members: **Ines Direito** (University of Aveiro), **Yolande Berbers** (KU Leuven), **Euan Lindsay** (Aalborg University), **Jose Carlos Quadrado** (ENAAE) **Emrah Acar** (ITU Istanbul) **Geir Egil Dahle Oien** (NTNU Trondheim) and **Mihai Ghinea** (National University of Science and Technology Politehnica Bucharest).

### Re-elected Board members

**Roland Tormey** (EPFL Lausanne), **Ramon Vilanova** (UAB Barcelona), and **Janusz Szpytko** (AGH University Krakow) were re-elected for a second term.

The complete list of board of directors and Special Interest Group chairs and co-chairs is now updated [here](#).

## SEFI PODCAST “EUROPEAN ENGINEERING EDUCATORS”

The European Engineering Educators podcast was launched during the SEFI 2022 conference in Barcelona, hosted by **Natalie Wint and Neil Cooke**. The podcast aims to improve engineering education and its image by featuring interviews with esteemed guests who share their knowledge and expertise. In the past academic year, the podcast completed its third and fourth season, the third celebrating the 50th anniversary of SEFI.

The podcast has grown into a substantial knowledge source for prospective, new, and existing members of the SEFI community. The show has covered various

contemporary topics in engineering education, including ethics, professional identity, digital learning, statistical thinking, teamwork, communication, and empathy.

It was downloaded in 41 countries and the most popular episode remains the very first one featuring Roland Tormey, while some of the more in-depth episodes from season 3 are growing in popularity.

The podcast preparation entails careful planning, scripting, recording, and editing, resulting in a 30-minute to an hour-long show that offers maximum

benefit to the audience.

The next season will introduce a new concept of multiple guests per episode featuring a greater diversity of speakers.

The [SEFI podcast](#) can be accessed on major platforms like Apple, Spotify, and YouTube, with all episodes and show notes available on the SEFI website. The podcast continues to welcome new guests, encouraging contributions from experts to further enrich engineering education.

## SEFI SUSTAINABILITY AND ETHICS SPRING SCHOOL 2024

The SEFI Spring School 2024 on “Democracy in Engineering Education” brought together 52 participants from 30 institutions across 14 countries for three days of interactive workshops, presentations, and thematic sessions. The event was organised by SEFI’s Special Interest Groups on Ethics and Sustainability. It is the first time that the two SEFI Special Interest Groups held a joint spring school, but this experience clearly showed that coming together across dis-

ciplines is worth the effort as it enriches and challenges at the same time.

Thank you to all the participants for their openness and contributions, and to the organisers for facilitating such an enriching educational experience. The SEFI Spring School is a fantastic way to broaden horizons, make new connections, and engage deeply with the themes of democracy, ethics, and sustainability in engineering.



## PTEE CONFERENCE

*Facilitating Student Learning in a Changing World*

Physics Teaching in Engineering Education (PTEE) is an international, scientific conference, that offers an opportunity to meet peer, to gather, to discuss current

issues, to learn from each other, to share experiences and to envision collaboration. A goal is to create and strengthen a European network of contacts in the field.

PTEE is aimed at Physics faculty, staff, teachers, students and PhD-students interested in the field of physics teaching for engineers and educational design, and especially for researchers in the field of Physics Education or close STEM-fields and cognitive science.

80 participants from 14 different countries working for 50 different universities/institutions enjoyed PTEE2024 activities:

→ [Proceedings](#) of the 12th International Conference on Physics Teaching in Engineering Education PTEE 2024 can be downloaded as complete book of proceedings or each of the 15 single peer-reviewed papers.



## SEFI DEANS CONVENTION 2024

*Is higher education still fit for purpose?*

The European Convention for Engineering Deans (ECED) is an annual networking event organized by the European Society for Engineering Education (SEFI). It serves as a platform for higher engineering education leaders to address various issues, foster innovation and governance, share experiences, and promote professionalism in the rapidly evolving landscape of engineering education.

Held from 12-14 June 2024 at The University of Sheffield, the 15th European

Convention for Engineering Deans brought together over 70 participants to engage in stimulating discussions focused on the intricacies of institutional change from the perspective of academic leadership.

The convention featured esteemed keynote speakers **Ruth Graham, Sirin Tekinay, Euan Lindsay, Christian Lermينياux, and Dirk Bochar**, who provided valuable insights into the challenges and opportunities facing higher education today. Their presentations sparked



### University of Sheffield

thought-provoking discussions among the participants, setting the stage for an engaging and productive event.

A key aspect of the SEFI Deans Conventions is the opportunity for networking and interactive sessions. This year was no exception, with numerous interactive sessions and a rich social programme that facilitated meaningful connections and discussions among attendees.

The convention concluded with reflections from the Deans Council chair, **Gerhard Mueller** (TU Munich), who emphasized the importance of practical problem-solving skills combined with sound fundamentals in engineering education. The need for dynamic and adaptable teaching methods was underscored, highlighting the collective effort required to advance educational practices and ensure that higher education remains relevant and effective in a rapidly changing world. See the [key takeaways](#).



## SEFI BROUGHT EXPERT VOICES TO EELISA CONFERENCE

The first EELISA Conference brought together the members of this European University for the first time to Politecnica University of Bucharest from 4 to 6 October 2023. SEFI brought the latest views on Engineering Education in two sessions on Friday 6 October.

The morning session presented views of higher engineering education stakeholders **Ljiljana Kerawi** (student from BEST), **Alex Tachnini** of Mathworks (industry) and **Raffaella Manzini**, dean of Faculty of industrial engineering at LIUC, as well as **Sophie Grivaux**, dean of studies of EELISA and **Timothée Toury**, secretary

general of EUT+. These representatives of SEFI and European University alliances discussed how the alliances can benefit from the new educational models and approaches being developed, researched and disseminated through the SEFI community and how the challenges and opportunities of European Universities could be addressed by SEFI.

The afternoon session was a hands-on workshop moderated by **Roland Tormey** and led by **Sofie Craps** and **Greet Langie** from KU Leuven: *“Engineering competencies development through the prism of Professional Roles*

*and Life-Long Learning.”* During her PhD, and within the PREFER project, Sophie and the team developed a model of engineering professional graduate roles, along with a framework of professional competencies which can be used to guide curriculum reform as well as support decision-making in self-directed and lifelong learning of engineers. A number of self-test tools have also been developed that can be used by universities and industry to better understand role alignment and professional competencies. The workshop participants could try out these tests and discuss the next steps for this research.



## SEFI @ WORK WEBINARS

These online events bring together peers from around the globe and enable thematic discussions about engineering education, while being accessible to all. Last year, we have organised 3 webinars,

related to DEI and Lifelong Learning. This upcoming autumn semester, we will offer more webinars.

You can register for any of our upcoming

SEFI@Work events through [SEFI booking platform](#).

You may see some of the past webinars on the [SEFI YouTube Channel](#).



# SEFI PUBLICATIONS

## 2023-2024



## EUROPEAN JOURNAL OF ENGINEERING EDUCATION

Academic year	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Submitted manuscripts - regular	197	218	212	228	274	285	291	287	354
Submitted manuscripts - to special issues	65	74	56	2	35	43	0	30	80
<b>Total submitted manuscripts</b>	<b>262</b>	<b>292</b>	<b>268</b>	<b>230</b>	<b>309</b>	<b>328</b>	<b>291</b>	<b>317</b>	<b>434</b>

Submissions to the European Journal of Engineering Education (excluding submissions of revised manuscripts).

### Submissions

During the academic year 2023/24, the number of manuscripts submitted to the European Journal of Engineering Education was the highest ever. It was a record year both in terms of regular submissions and contributions for special issues. During the same 12-month period, 65 papers were accepted.

### Special issues

Three special issues are in the pipeline.

- The call for papers addressing “*Emotions in Engineering Education – Widening perspectives in a rapidly growing field of research*” with **Inês Direito** and **Johanna Lönngren** leading a team of guest editors, received 46 initial submissions.
- A new call was also announced for a special issue on “*Interdisciplinary*

*Learning and Transformation of Engineering Education*”, with **Karolina Doulougeri** leading the guest editor team. It attracted 34 submissions.

- In addition, the review process is ongoing for the special issue “*Sustainability in Engineering Education – Integration and Transformation Approaches*”, guest edited by **Anders Rosén**, **Ulrika Lundqvist**, **Ikateko Mathebula** and **Arjen Wals**.

### Citation metrics

#### About the Journal Impact Factor (JIF)

The JIF is calculated by taking the number of times articles from a journal published in 2021 and 2022 were cited during 2023, and then dividing that by the total number of articles published

in those two years. Only citations from sources that also have a JIF are included.

For the European Journal of Engineering Education, the JIF for 2023 is a bit lower than it was in 2022. This is mainly because a highly-cited paper from 2020 is no longer included in the 2023 calculation. That paper alone added around 100 citations to the 2022 JIF:

Chen, J., Kolmos, A., & Du, X. (2020). [Forms of implementation and challenges of PBL in engineering education: a review of literature](#). *European Journal of Engineering Education*, 46(1), 90–115.

	2023	2024
Journal Impact Factor (Clarivate)	2.3	2.0
CiteScore (Scopus)	5.8	7.3

#### News in the editorial team

##### New Deputy Editor

A new Deputy Editor was appointed:  
**Matheus de Andrade**, UCL, UK

##### New Associate Editors

One Associate Editor is finishing her assignment and we sincerely thank her for her dedication over the years:  
**Una Beagon**, TU Dublin, IE

Four new Associate Editors have been appointed:

**Lykke Bertel**, Aalborg University

**Deesha Chadha**, Imperial College London, UK

**John Mitchell**, UCL, UK

**Johannes Strobel**, University of Texas at El Paso, USA

##### Editorial board

As part of the turnover in the Editorial Board, we extend heartfelt thanks to three members for their support and efforts in the past:

**Renata Gorska**, Cracow University of Technology, PL

**Zohra Benlakhdar**, Espirit, TN

**Sivachandran Chandrasekaran**, Swinburne University of Technology, AU

**Natascha van Hattum Janssen**, Saxion Hogeschool, NL

**José Manuel Nunes de Oliveira**, University of Aveiro, PT

Three new members have been appointed:

**Neil Cooke**, University of Birmingham, UK

**Amitava 'Babi' Mitra**, MIT, USA

**Remon Roij**, TU Delft, NL

#### Acknowledgements

On behalf of the journal, we sincerely thank the reviewers, who so generously contribute their expertise to help our decision-making and support the improvement of manuscripts. We thank the authors whose high calibre work is what makes the journal. We also gratefully acknowledge invaluable support from SEFI and Taylor & Francis.

##### EDITOR-IN-CHIEF

**Kristina Edström**, KTH Royal Institute of Technology, SE

##### DEPUTY EDITORS

**Matheus de Andrade**, UCL, UK

**Jonte Bernhard**, Linköping University, SE

**Shannon Chance**, TU Dublin, IE

##### ASSOCIATE EDITORS

**Esat Alpay**, University of Surrey, UK

**Lykke Bertel**, Aalborg University

**Maartje van den Bogaard**, The University of Texas at El Paso, USA

**Rebecca Broadbent**, Aston University, UK

**Jeffrey Buckley**, Technological University of the Shannon, IE

**Deesha Chadha**, Imperial College London, UK

**Jenni Case**, Virginia Tech, USA

**Scott Daniel**, University of Technology Sydney, AUS

**Xiangyun Du**, Aalborg University, DK

**Anette Kolmos**, Aalborg University, DK

**Greet Langie**, KU Leuven, BE

**Diana Martin**, UCL, UK

**John Mitchell**, UCL, UK

**Sasha Nikolic**, University of Wollongong, AU

**Jason Power**, University of Limerick, IE

**Kate Roach**, UCL, UK

**Fiona Saunders**, Manchester Metropolitan University, UK

**Johannes Strobel**, University of Texas at El Paso, USA

**Roland Tormey**, EPFL, CH

**Bill Williams**, CEG-IST, Universidade de Lisboa, PT and TU Dublin, IE

Contact: [eeje.editor@gmail.com](mailto:ejee.editor@gmail.com)

#### New best paper award

For the very first time, the EJEE is giving a Best Paper award for those published in Volume 47 - that is in the 6 issues that we published during 2022.

The Best Paper in EJEE volume 47 is "[\*Gender as structure in the organisational socialisation of newcomer civil engineers\*](#)" by Dr **Kacey Beddoes**. In the paper, she takes a gender perspective on the socialisation of new engineers in the workplace, and addresses issues of power and privilege. The study is superbly conceptualised, and contextualised in literature. Kacey Beddoes demonstrates skillful application of a qualitative approach and methodology, vividly conveying the experiences of new engineers. It is a joy to read.

To celebrate this work with as many readers as possible, the paper has now been made open access until the end of 2024.

## NEW SEFI JOURNAL OF ENGINEERING EDUCATION ADVANCEMENTS

In the autumn of 2023, SEFI proudly launched the [\*SEFI Journal of Engineering Education Advancement\*](#), a peer-reviewed, open-access journal dedicated to advancing the field of engineering education. This official journal of the European Society for Engineering Education serves as a platform for sharing innovative ideas, emerging research, and practical experiences from the global engineering education community.

The journal aims to bridge the gap between innovative classroom practices and the broader academic community, encouraging contributions from educators who may feel constrained by the strict requirements of traditional academic journals. By focusing on the dissemination of creative and forward-thinking approaches, the journal supports the enhancement of engineering education as it is practiced and experienced.

With a global outlook, the SEFI JEEA welcomes high-quality manuscripts from around the world, recognizing that innovation knows no borders. While some contributions may focus on the European context, the journal is eager to publish papers that address developments and challenges in engineering education on an international scale.

Primarily centered on the learning and teaching of engineering in higher education, the journal also invites contributions that explore related areas such as engineering practice, lifelong learning, non-traditional entry routes, and graduate outcomes. The first contributions were published in spring 2024, marking the beginning of a new era in sharing knowledge and fostering excellence in engineering education.

#### Editorial team

##### EDITOR-IN-CHIEF

**Gareth Thomson**, Aston University, UK  
[g.a.thomson@aston.ac.uk](mailto:g.a.thomson@aston.ac.uk)

##### DEPUTY EDITOR

**Paul Hermon**, Queens University Belfast, UK

##### ASSOCIATE EDITOR

**Kristina Edström**, KTH Royal Institute of Technology, SE

The SEFI JEEA sincerely appreciates the work of its new team of editors and reviewers to which you are kindly invited.

**Klara Kovesi**, ENSTA Bretagne, France  
**Abel Nyamapfene**, University College London, UK



**Homero Murzi**, Virginia Tech, USA  
**Robertt Valente**, University de Aviero, PT  
**Siara Isaac**, Lausanne, CH  
**Peter deVries**, Delft / SEFI  
**Matteo Di Benedetti**, University of Sheffield, UK  
**Ann-Kristin Winkens**, Aachen, DE  
**Aristides Carrillo-Fernandez**, Purdue University, USA  
**Ghazi Droubi**, Robert Gordon University, UK  
**Saeed Shaeri**, Charles Sturt University, AU

# SEFI SPECIAL INTEREST GROUPS (SIGs)



## DIVERSITY, EQUITY AND INCLUSION

This year, we have continued to work towards formalising the SIG structure and processes. Thus far this has involved a call for Steering Committee members and project leads and is still ongoing.

Last 11 December 2023, we had one SEFI@Work event on Increasing inclusion at SEFI conferences. The event was well attended, and attendees engaged in meaningful conversation. During the event, a survey was launched and subsequently disseminated to the wider SEFI community. It focused on understanding barriers that the community

had previously experienced in relation to submission to and attendance of SEFI conferences. The findings were used to inform initiatives to increase participation at SEFI 2024. This included childcare, and provision of bursaries. The SIG will be involved in several events at SEFI 2024 such as a workshop on Enacting our Values: Steps Towards a More Sustainable and Inclusive SEFI Community.

Ongoing projects of the SIG include (1) working with the Person of Trust in a task-and-finish group to create a Code of Conduct for SEFI events, (2) focusing on

follow-up actions from the SEFI 2023 DEI Workshop, (3) research on a comparative scientometric analysis of diversity, equity, and inclusion publications in EJEE and JEEA with initial findings to be presented at SEFI2024, (4) and a collaboration between the members of the DEI SIG with the Attractiveness SIG on research projects focused on outreach and increasing inclusion within engineering.

Co-Chairs

**Fiona Truscott**  
**Natalie Wint**

University College London

## CURRICULUM DEVELOPMENT

Over the past year, the Curriculum Development Special Interest Group (SIG) of SEFI has been actively engaged with its members to redefine the scope of the SIG and to develop a

plan of activities. The SIG has developed a plan of activities and network building activities that will aim to build the community of curriculum developers across Europe and worldwide. The

SIG has been developing a communications plan to promote its activities.

Chair

**John Mitchell**

University College London

## ATTRACTIVENESS OF ENGINEERING EDUCATION

The Attractiveness SIG is open to students, educators, researchers and industry professionals to share good practices and insights into the enhancement of engineering (education) attractiveness. The SIG has 16 active members from all four mentioned categories and has focused

on pre-university factors of attractiveness over the last year. We looked at the role of national education systems (SEFI2024 conference paper) and organise two workshops on engineering outreach (ESTIEM-SEFI joint workshop and SEFI2024 conference workshop). A literature review

on the effectiveness of interventions to enhance the attractiveness of engineering for 12-18 year olds is ongoing.

Chair

**Hanne Deprez**

KU Leuven

## ETHICS

In June 2024, the SEFI Ethics SIG elected a new co-chair: Mircea Toboșaru (University Politehnica of Bucharest, Romania). His mandate is for the period autumn 2024-28. The Ethics SIG is thanking Helena Kovacs (EPFL, Switzerland) for her contribution during the last 2 years. Diana Martin (UCL, The United Kingdom)'s co-chair mandate is ongoing until autumn 2026.

In 2024, the Ethics SIG hosted 7 own projects and supported 3 collaborations:

The **Routledge Handbook of Engineering Ethics Education** with a scheduled launch date for November 2024. It comprises 36 chapters authored by >100 engineering ethics education researchers and teachers. The Handbook is expected to be a valuable resource for the global engineering education community.

The joint **SIG Ethics and Sustainability Spring School** taking place between 10-12 April at TU Berlin with the theme Democracy in Engineering Education.

The **editorial series** which aims to publish on the SEFI website editorials on thematic areas of interest by contributors across the world. During the academic year 2023/24, the SIG Ethics published an editorial series on the theme of AI in education, featuring 8 editorials. Several members of the **Policy group**

worked to develop chapters for the Accreditation section of the SEFI Ethics Handbook.

The **Capacity development in Eastern Europe group** was initiated in the autumn of 2022, to respond to the need for a higher representation of engineering education researchers based in or from Eastern Europe in SEFI. After the group presented a cross-country autoethnographic research publication for the 2023 SEFI Annual Conference, in 2024 the group expands the focus to capacity development in Romania. The groups aims to consolidate the status of engineering ethics education research in Eastern Europe, encourage the participation of researchers from Eastern Europe in SEFI activities (the annual conference, the SIG spring school) and the development of joint studies and publications.

A new project on **Epistemic uncertainty and discomfort in engineering education** was launched in 2024. The project focused to build a community interested in researching ways to understand and address uncertainty and discomfort in engineering, which will ultimately lead to joint studies and potentially a special issue submission for EJEE. The first meeting of the project took place during the Spring School. Another new project Enhancing engineering ethics education, launched in

2024, hosted two meetings and works toward investigating the pedagogical methodologies used in ethics classes in engineering courses in Europe, emphasize the interconnection between ethics and technical-scientific content, with a special emphasis on Electrical Engineering. The project aims to serve the basis for a European project proposal.

In addition to the Spring School, The SEFI Ethics SIG was involved in two collaborations: The development of SEFI Code of Conduct initiated by the Diversity and Inclusion SIG and supported by the SEFI Ethics SIG; and collaboration with student association BEST for the BEST Symposia on Education. Vivek Ramachandran gave an online presentation on the topic of [Engineering with Purpose: A Responsible Approach](#) (24 June, Aachen) and the SIG is currently arranging the details for Mircea Tobosaru to give an online presentation on the theme [Bringing Responsible Engineering into the Real World](#) (23 July, Vienna).

Co-Chairs

**Mircea Tobosaru**

University Politehnica of Bucharest

**Diana Martin**

University College London

## MATHEMATICS

In the last year, the main group activities were focused on organisation issues around the strategic plan for 2024/2025, the 22nd SEFI Mathematics Interest Group Seminar (organised by Ostfalia University of Applied Sciences with the MSIG steering committee) that will be held in Germany in June 2025, and a shared

folder to accommodate materials from Mathematics teachers.

On the 1-2 December 2023, the MSIG steering committee had its annual meeting at the Czech Technical University in Prague. The main agenda of the meeting was the organisation of the upcoming

MSIG seminar in Ostfalia University of Applied Sciences. The Mathematics group webpage was continuously updated with new information and is now available at the address: Mathematics – SEFI.

Chair

**Deolinda Dias Rasteiro**

ISEC Coimbra

## CAPACITY BUILDING

The Capacity Building SIG has once again grown in membership, with members focussing on two key areas: pan-Europe research projects to further knowledge of Capacity Building practices, and sharing current Capacity Building practices in Europe. We hope to expand the sharing of practices as part of the SEFI Journal of Engineering Education Advancement. Members are extending earlier work relat-

ed to capacity building practices, and their facilitators and barriers to include focus groups. A protocol for focus groups has been developed, informed by a small pilot, and wider data collection will begin from September 2024. The SIG is also working with the Skills and Lifelong Learning SIGs to investigate university staff, student and industry professionals' understanding and views on Lifelong Learning.

The SIG is in discussions for a further SEFI@work webinar on Capacity Building, and for two SIG members to be on the SEFI podcast.

Co-Chairs

**Jenny Griffiths**

UCL London

**Madeline Polmear**

King's College London

## CONTINUING ENGINEERING EDUCATION & LIFELONG LEARNING

The CEE/LLL SIG focuses on advancing frameworks, policies and practices around Continuing Engineering Education and Lifelong Learning in STEM. Active membership has grown over the last year, as have SIG activities that have allowed a) sharing of practices between members; b) growth in research and scholarship; c) and development of both new and exist-

ing collaborations. The SIG organised their first SEFI@work session on *"Making sense of microcredentials"*. The session was run together with the International Association for Continuing Engineering Education (IACEE) that offered insights into the similarities, differences, and opportunities for microcredentials to support lifelong

learning. Further activity on microcredentials is envisaged in the coming year.

Co-Chairs

**Chris Smith**

Glasgow University

**Anikó Kalman**

Technical University of Budapest

## DIGITAL LEARNING

The Digital Learning SIG was initiated at the SEFI 2023 conference during the Open and Online Education SIG meeting. With new leadership and membership, the SIG has been rebranded and refocused to align with the interests and ambitions of its members. These include Remote Learning, MOOCs,

Open Educational Resources, Learner Analytics, and Artificial Intelligence.

With the gracious support of SEFI HQ's Klara Ferdova and Roland Tormey, the practical aspects of establishing the SIG are now mostly complete. Now, our primary tasks are to grow the SIG

and serve SEFI members and the wider community.

Co-Chairs

**Mikko Nurminen**

Tampere University

**Andrew Garrard**

The University of Sheffield

## PHYSICS

The SEFI Special Interest Group of physics assembles approximately 40 physicists who teach physics to engineering students. Physics teachers encounter similar challenges, irrespective of the country and the educational level. Developments in the field of physics education research and different solutions to and experiences from a variety of educational challenges (both on lecturing as well as on lab work) are

shared among the group members on a regular basis.

The bi-annual Physics Teaching in Engineering Education Conference (PTEE) was organised this year by colleagues from TH Rosenheim in Germany from 15 to 17 May. Over 80 participants from all over Europe and even outside Europe have enjoyed the programme and have strengthened their network (see

www.ptee2024.de ). The next PTEE conference will be held in Warsaw, in 2026.

More info can be found using this [link](#) for the list of members and an overview of our activities.

Chair

**Arjan Lock**

The Hague University of Applied Sciences

## ENGINEERING SKILLS

This year several new members of the SEFI community joined the Engineering Skills SIG to help further its aims to better understand and teach skills through sharing and developing projects, knowledge, and expertise. Lynn Van den Broeck (KU-Leuven) was appointed as co-chair and, together with Gillian Saunders (TU-Delft) and Esther Perea Borobio (Imperial), began scoping out a proposed SEFI handbook on Engineer-

ing Skills for official announcement at the SEFI 2024 conference in Lausanne. To complement this long-term project, another new member Helena Kovacs (Lausanne) led a group to update the SEFI position paper on skills which was published in 2016, bringing it in line with current issues in engineering education. Other projects included developing a case study database with the new SEFI journal of Engineering

Education Advancement editor in chief Gareth Thomson (Aston), as well as monthly episodes the SEFI podcast European Engineering Educators led by Natalie Wint. The SIG meets every month online.s.

Co-Chairs

**Neil Cooke**

Birmingham University

**Lynn Van den Broeck**

KU Leuven

## SUSTAINABILITY

Since the SEFI annual conference 2023 in Dublin Aida Guerra of Aalborg University and André Baier of Technische Universität Berlin are informally running the Sustainability SIG as co-chairs. This has become official in February 2024. In order to establish a broad network, Aida regularly organised online meetings in which students, educators, practicing engineers, and other stakeholders engaged in order to strength-

en sustainability within engineering. Aida and André as well as Helena Kovacs of the Ethics SIG jointly organised a SEFI Spring School in Berlin in April 2024 with the title "Democracy in Engineering Education. Do we need ethics or sustainability in engineering? How to decide on this question?". Over three days, 52 participants from 30 institutions located in 14 countries attended the spring school. 47 participants work as

academic staff but also 2 students and 3 persons from outside of academia joined us to tackle the questions.

Co-Chairs

**Aida Guerra**

Univeristy of Aalborg

**André Baier**

TU Berlin

## QUALITY ASSURANCE AND ACCREDITATION

After engaging with several partner institutions, we submitted a new SIG proposal in January 2024, and the SEFI board approved it in February 2024. This decision highlights the critical role this SIG will play in addressing global challenges and fulfilling the needs of students, society, and employers amid evolving educational and technological trends. The partners selected José Carlos Quadrado as SIG Chair and Raja Toqeer as SIG Co-Chair. The main goal of this SIG is to support and enhance the international accreditation of engineering programmes and to develop a registry for engineering educators through targeted tools and strategies. The aim is to create and share innovative resources that support quality assurance and international accreditation in engineering education, helping educators meet and surpass these standards. The SIG also collaborates with ENAEE to

continually improve and adapt accreditation processes in line with the latest educational and technological trends and also highlight the importance of the EUR - ACE label for engineering programmes to SEFI members.

A dedicated workshop at the SEFI annual conference in Lausanne 2024 was held, titled "Empowering Engineering Education: Tools and Strategies for International Accreditation." The workshop focused on enhancing the international accreditation of engineering programmes and fostering a skilled educators registry. Attendees benefited from access to tools and resources, interactive discussions and hands-on activities. They networked with peers and experts, shared best practices and explored innovative strategies. The ultimate goal of the SIG is to positively impact institutions, programmes,

students and employers by aligning with international quality assurance and accreditation standards. Under José and Raja's leadership, the SIG is set to elevate the institution's engineering programmes international accreditations and skilled educator's international registry. The SIG will be a dynamic network dedicated to continuous improvement in quality assurance and accreditation processes. This will support the programmes to stay ahead of evolving educational and technological trends, meeting the needs of students, society and employers.

Co-Chairs

**Raja Toqeer**

The University of Sheffield

**José Carlos Quadrado**

ENAEE President

# SEFI AS A PARTNER IN 2023-2024



## ENHANCING ENGINEERING EDUCATION THROUGH COLLABORATIONS AND PARTNERSHIPS

In its mission to foster excellence in engineering education across Europe, the European Society for Engineering Education has continued to engage in fruitful partnerships and alliances with various organizations.

SEFI recognizes the significance of empowering and engaging students in the engineering community. SEFI has been working with BEST (Board of European students of Technology) and ESTIEM (European Students of Industrial Engineering and Management) on their and SEFI events. Furthermore, SEFI now collaborates with EYE - European Young Engineers.

SEFI's commitment to cooperation extends beyond student organizations. We actively engages with similar bodies that share its vision for advancing engineering education such as European Network for Accreditation of Engineering Education (ENAE) and Engineers Europe (formerly FEANI).

SEFI also remains actively involved in the umbrella community created by the International Federation of Engineering Education Societies (IFEES), which brings together global engineering education stakeholders. SEFI nominated **Luis Sanchez** has been elected the president of IFEES and will enter the function in the autumn of 2024.

SEFI was a founding member of IACEE (International Association for Continuing Engineering Education) 30 years ago. This spring, we rekindled our relations as an initiative of SEFI Vice-President **Emanuela Tilley**. At the Annual Conference of IACEE in Comillas (photo), there was a strong representation from SEFI members, including **Klara Ferdova**, Secretary General and members from the CEE/LLL SIG: **Anikó Kálmán, Bente Nørgaard, Ellen Sjoer, Hans-Ulrich Hess, Katriina Shrey** and **Chris Smith**. Chris Smith (Co-Chair CEE/LLL SIG) is now SEFI representative on IACEE Council, and was recently elected co-Vice President for Partnerships and will be on the IACEE Executive Council to support bringing the organisation's shared vision of working more closely together.

SEFI's dedication to promoting excellence in engineering education in Europe

is further exemplified by its support as an associate partner in various ERASMUS+ European Universities Initiatives and other alliances. Notable examples include EUROTEQ, ENHANCE, EELISA (European Engineering Learning Innovation and Science Alliance), and In-4-STEM (Innovations in STEM Education). By participating in these initiatives, SEFI actively contributes to shaping the future of engineering education in Europe, ensuring it remains progressive and aligned with contemporary needs.

SEFI's commitment to cooperation and collaboration with various organizations and alliances reflects its commitment to elevating engineering education and nurturing the next generation of engineers across Europe as well as to stay in touch with our overseas partners and continuously work on our common goals.





## INNOVATING ENGINEERING EDUCATION: A YEAR OF GROWTH IN ANSYS

Ansys Academic development team has had a strong year so far. With several well attended events on-site and online, a strengthened [Funded Curriculum programme](#) and an increased number of open teaching resources with engaging academic [webinars](#).

With our beloved [Materials Education-focused annual symposia](#), it has finally felt normal after a challenging time during the pandemic. We are grateful for continued trust and support from the education community! Partly hosted by the Materials Science and Metallurgy Department (University of Cambridge), it was a pleasure to visit its labs and enjoy its building's flexible spatial design.

We are particularly proud of a visit by Professor Mike Ashby, the founder of Granta Design (acquired by Ansys in 2019), who has answered questions about his personal story and development of the first materials selection software, his approach to writing numerous successful textbooks, and indeed, his inspiration of the symposia series themselves.

The first day of International Materials Education Symposium was dedicated to teaching and immersive learning experiences as well as outreach and community, the second day treated the hot topic of Generative AI (Artificial Intelligence), like ChatGPT, in materials teaching and assessment. Last,

but not least, a session on Sustainability in novel materials and design took place.

Future topics, which came up as trends based on the feedback of around 70 international participants include: AI/ML in teaching, sustainability, industry collaboration and skills, students' engagement (gamification), course design and assessments, advances in neurodiversity and how to integrate scientific findings into teaching, multidisciplinary in materials education. Look out for more information on our [Materials Education Symposia](#) website about the upcoming events, including in [North America](#) and Asia.

[The Ansys Funded Curriculum | Teach with Ansys](#) proposals competition for teaching assistance is open until 20th of September 2024 to incorporate developed material in 2025-2026 academic year. Selected projects will receive a grant and relevant

technical guidance for creating or evolving a single course or set of courses (between \$5,000 to \$25,000). Collaborative teaching resources from our first round of funding last year are now being published for the wider community to use: for example, our collaboration with the University of Newcastle, Australia has so far yielded 14 resources across Structural, Thermofluids and Discrete Elements simulations.

We have upcoming series of webinars on [teaching sustainable development concepts](#) illustrated with relevant to engineering practices industrial applications. The benefit of visualizing and understanding both – theoretical fundamentals and their applications will be a common thread in all the sessions. Topics like critical raw materials, fluids dynamic for low tech cooling, or electric motor and wind turbine design are covered.



Attendees of the International Materials Education Symposium, Cambridge 2024.



# Siemens empowers education

Siemens is proud to support engineering educators and students by providing software access, learning content, teaching resources, badges, credentials and student engagement opportunities. With solutions used by over 90% of Fortune 500 companies, Siemens is the global leader in industrial software and is uniquely positioned to help educators and students build a better future.

[siemens.com/workforce-transformation](https://www.siemens.com/workforce-transformation)

**SIEMENS**

## WORKING TOGETHER ON THE SKILL OF WORKING TOGETHER

The planetary magnitude of challenges that current generations of engineering students will have to tackle requires collective socio-technical responses. Point solutions or individual initiatives can serve as examples but will not suffice. This is why collaborative engineering of solutions appear as the relevant method to generate responses that will be both impactful for our planet and acceptable for its inhabitants. This collective mindset starts to be visible in students expectations to their educators, spectacularly sometimes during graduation ceremonies. Preparing students for impact requires academia to provide them with the methods, practices and technologies that facilitate collaborative problem solving. Among them, cross-institutional learning experiences are wonderful instruments, appropriately encouraged by funding programmes and efficiently enabled by technology.

This is why Dassault Systemes, as a provider of digital innovation technologies, has connected the creation and interaction universes of engineers, decision makers and the public into its 3DEXPERIENCE digital platform. This is why also the company associates itself actively in advancing collaborative learning with numerous agency-funded consortia:

- The European University Alliances, whenever they aspire to establish col-



laborative learning experiences across members and distance, enabled by concepts such as instantly shared virtual twins of the reality.

- EU's COVE programme (Centres of Vocational Excellence), to concurrently disseminate methods for data driven harmonization of new industry methods across vocational and higher education, in multi-national European educational consortia.

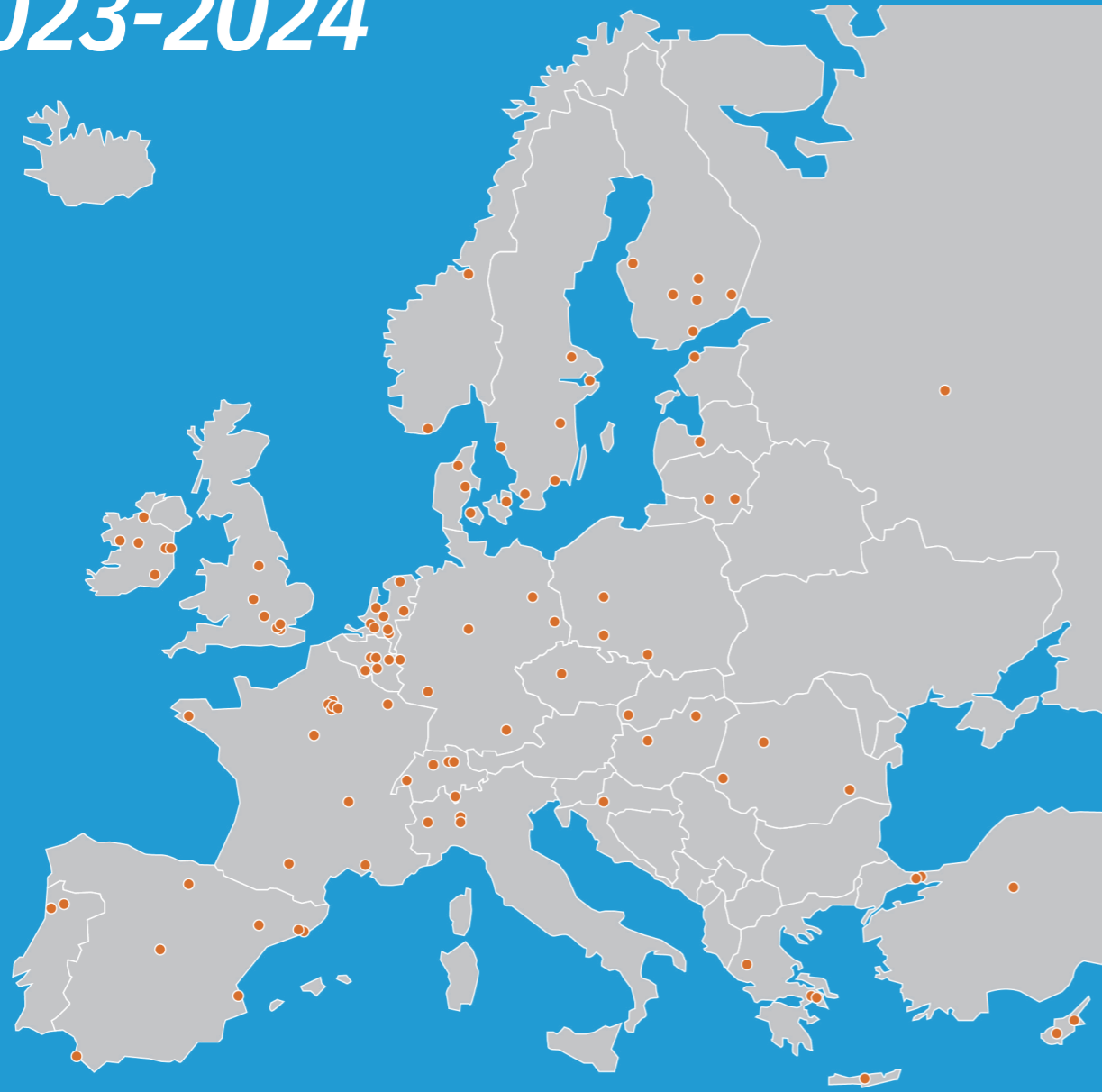
- National programmes, such as the French CMA programme (French acronym for the Skills and Trades of the Future), which funds regional multi-level learning initiative along sectorial priorities such as new nuclear, new space, de-

carbonized aviation or circular economy. Another instance of such collaborative consortium is the German "Engineering Collaboration Network", a partnership proposed by the Fraunhofer Institute to various academic and industry stakeholders to explore new platform-enabled Industry 4.0 methods in a real life context.

Whenever data-driven collaboration promotes collective practices in engineering education, Dassault Systemes is motivated to explore its participation in global, EU or national projects. SEFI is a wonderful forum to facilitate the emergence of such opportunities. Discover more [here](#).



# SEFI MEMBERSHIP 2023-2024



SEFI institutional members 2024

## NEW MEMBERS 2023-2024

**INSTITUTIONAL:** Cyprus International University • École Centrale Méditerranée • Hasselt University • Institut National des Sciences Appliquées de Hauts-de-France • LAB University of Applied Sciences • Oxford University • Technical University of Crete • The Engineering & Design Institute London

**ASSOCIATE:** ABET

**INDIVIDUAL:** Aditi Kothiyal - Indian Institute Of Technology Gandhinag • Ajayshankar Jagadeesh - TU Delft • Alfredo Soeiro - Instituto Para A Construção Sustentável • Bahareh Abdikivanani - TU Delft • Brian Frank - Queen's University Canada • Carmen Leicht - RWTH Aachen University • Elena Mäkiö - Hochschule Emden/Leer • Haldor Jochim - Fachhochschule Aachen • Hanno van Keulen - TU Delft • Johannes Strobel - The University of Texas at El Paso • Jovana Jezdimirovic Ranito - University of Twente • Katja Haijkens - University of Twente • Krista Speicher Sarraf - California Polytechnic State University • Min Jou - National Taiwan Normal University • Pierre Lambert - Université Libre de Bruxelles • Samuel Tensigh - The University of Sydney

## INSTITUTIONAL MEMBERS

**Belgium:** Gembloux Agro-Bio Tech – Université de Liège • Hasselt University • KU Leuven • Université Catholique de Louvain • Université de Mons  
**Croatia:** University of Zagreb **Cyprus:** Cyprus International University • European University Cyprus **Czech Republic:** Czech Technical University of Prague **Denmark:** Aalborg University • Aarhus University • Technical University of Denmark • University of Southern Denmark • VIA University College  
**Estonia:** Tallinn Technical University **Finland:** Aalto University School of Science and Technology • ARCADA • Helsinki Metropolia University of Applied Sciences • Jyväskylä University of Applied Sciences • LAB University of Applied Sciences • Lappeenranta University of Technology • Novia University of Applied Sciences • Lapland University of Applied Sciences • Tampere University • Tampere University of Applied Sciences **France:** CESI Association • Clermont Auvergne INP • CY Cergy Paris Université • Ecole Centrale de Marseille • Ecole Polytechnique de l'Université d'Orléans • ENSTA Bretagne • EPF Ecole d'ingénieurs • INSA Hauts-de-France • Institut Supérieur de Mécanique de Paris – SUPMECA • Toulouse INP - ENSIACET **Germany:** Technical University of Munich • Rheinisch-Westfälische Technische Hochschule Aachen • Technical University of Berlin • Technical University Braunschweig • University of Applied Sciences Mannheim **Greece:** National Technical University of Athens • Technical University of Crete • University of Ioannina **Hungary:** Budapest University of Technology and Economics • University of Miskolc **Ireland:** TAtlantic Technological University - Sligo • Dublin City University • South East Technological University • Technological University Dublin **Italy:** Politecnico di Milano • Politecnico di Torino • Università Carlo Cattaneo - LIUC **Kazakhstan:** Al-Farabi Kazakh National University **Latvia:** Riga Technical University **Lithuania:** Vilnius Gediminas Technical University (VGTU) • Kaunas University of Technology **Norway:** Norwegian University of Science & Technology **Poland:** Silesian University of Technology • AGH University of Science and Technology Krakow **Portugal:** Instituto Superior de Engenharia do Porto ISEP • Universidade do Minho - Escola de Engenharia **Romania:** National University of Science and Technology POLITEHNICA Bucharest • Politehnica University Timisoara • Technical University of Cluj-Napoca **Russia:** People's Friendship University of Russia **Slovakia:** Slovak University of Technology in Bratislava **Spain:** Escola Tecnica Superior d'Enginyeria (ETSE) - Universitat Autònoma de Barcelona (UAB) • Escola Universitaria Salesiana de Sarria EUSS • Escuela Superior de Ingenieria - University of Cádiz (ESI) • Mondragon goi eskola politeknikoa (MGEP) • Polytechnic School - University of Lleida • Universidad Carlos III • Universidad Politécnica de Madrid • Universidad Politécnica de Valencia - School of Design Engineering ETSID • Universitat Politècnica de Catalunya UPC **Sweden:** Blekinge Institute of Technology • Chalmers University of Technology • KTH - Royal Institute of Technology in Stockholm • Linköping Institute of Technology • Lund University – LTH • Uppsala University **Switzerland:** Ecole Polytechnique Fédérale de Lausanne EPLF • ETH Zürich - Swiss Federal Institute of Technology • Fachhochschule

Nordwestschweiz • Scuola Universitaria Professionale Della Svizzera Italia (SUPSI) • ZHAW School of Engineering **The Netherlands:** Delft University of Technology • Fontys Hogenscholen • IHE Delft • Saxion Hogeschool • Technische Universiteit Eindhoven • The Hague University • Universiteit Twente • Utrecht University of Applied Sciences • Wageningen University and Research Concernstaf **Turkey:** Cyprus International University • Istanbul Technical University • Middle East Technical University (METU) **United Kingdom:** Middlesex University - Faculty of Science and Technology • University of Birmingham • The Engineering Design Institute London • The University of Sheffield • University College London • University of Oxford

## INDIVIDUAL MEMBERS

**Australia:** Andrew Valentine - The University of Melbourne • Alexander Kist - University of Southern Queensland • Samuel Tensingh - The University of Sydney **Austria:** Gerhard Hillmer, MCI Management Center Innsbrück **Belgium:** Victor de Kosinsky, formerly Université de Liège • Marc Goossens, SEII • Wim Van Petegem, KU Leuven **Canada:** Brian Frank - Queen's University • Nathalie Frigon - Ecole Polytechnique de Montréal **China:** Hanbing Kong - Zhejiang University **Denmark:** Jens Cramer Alkjaersig, VIA University College • Anette Kolmos, Aalborg University **Estonia:** Tiia Rütütmann, Tallinn University of Technology **Finland:** Katriina Schrey-Niemenmaa – Aalto University • Lotta Saarikoski – Vaasa University of Applied Sciences • Maisa Mielikainen – Lapland University of Applied Sciences **Germany:** APeter Riegler - Ostfalia University of Applied Sciences • Günther Kurz - Hochschule Esslingen • Axel Hunger - University of Duisburg • Christian Kautz - Technische Universität Hamburg • Manfred Hampe - Technische Universität Darmstadt • Fabian Steger • Pavel Gurikov - Technische Universität Hamburg • Thomas Blotevogel • Ann-Kristin Winkens - RWTH Aachen University • Dion Timmermann - Karlsruhe University of Applied Sciences • Inga Beyers • Elena Mäkiö • Haldor Jochim - FH Aachen University of Applied Sciences • Carmen Petra Leicht-Scholten - RWTH Aachen University • Kathrin Thiele - Ostfalia University of Applied Sciences **India:** Aditi Kothiyal - Indian Institute Of Technology Gandhinag **Ireland:** Ken Brown, Letterkenny Institute of Technology • Karsten Menzel, University College Cork **Italy:** Giuliano Augusti • Enrica Caporali - Università degli Studi di Firenze **Portugal:** Deolinda Dias Rasteiro, ISEC Coimbra • Alfredo Soeiro - INSTITUTO PARA A CONSTRUÇÃO SUSTENTAVEL ICS **Romania:** Tassos Natsakis – Technical University of Cluj-Napoca **Slovakia:** Peter Hockicko, University of Zilina **South Africa:** Ann Lourens – Nelson Mandela University **Spain:** AEster Gimenez-Carbo - Universidad Politecnica de Valencia • Jordi Segalas - Universitat Politècnica de Catalunya • Gerardo León-Albert - Universidad Politécnica de Cartagena • Maria Mar Carrió Llach - Universitat Politècnica de Catalunya • Francesc Torres - Universitat Politècnica de Catalunya • Ramon Vilanova Arbos - Escola Tecnica Superior d'Enginyeria - Universitat Autònoma de Barcelona **Sweden:** Maria Berge, Umeå University • Jonte Bernhard, Linköping Institute of Technology • Torbjörn Hedberg, former Luleå University of Technology **Switzerland:** Roland Tormey - Ecole Polytechnique Fédérale de Lausanne **The Netherlands:** Erik De Graaff • Pieter de Vries - Delft University of Technology • Gillian Saunders-Smiths - Delft University of Technology • Erik Folgering - Radboud University, Faculty of Science • Abdi Bahareh - Delft University of Technology • Jovana Jezdimirovic Ranito - Universiteit Twente • Ajayshankar Jagadeesh - Delft University of Technology • Katja Haijkens - Universiteit Twente • Hanno van Keulen - Delft University of Technology **Taiwan:** Min Jou - National Taiwan Normal University **Turkey:** YErkay Savas - Sabanci University **United Kingdom** Robin Clark - Warwick University • Esat Alpay - University of Surrey • Gareth Thomson - Aston University • Mervyn Jones - Imperial College London • Matteo Di Benedetti - The University of Sheffield • Sarah Junaid - Aston University • Christopher Smith • Nicolau Morar - City University of London • Charlotte Foreman - University of Surrey • Ning Yan - Liverpool John Moores University • Madeline Polmear - King's College London **United States of America:** Aikaterini Bagiati - Massachusetts Institute of Technology • John Reisel - University of Wisconsin – Milwaukee • Cynthia Finelli - University of Michigan • Sheryl Sorby - University of Cincinnati • Sirin Tekinay • Corin Bowen - California State University • Maartje Van den Bogaard - Iowa State University • Diana Bairaktarova - Virginia Tech • Nael Barakat - University of Texas at Tyler • Johannes Strobel - University of Texas at El Paso • Krista Speicher Sarraf - California Polytechnic State University

## ASSOCIATE MEMBERS

**Belgium:** Ie-net ingenieursvereniging (VIK) vzw • European Chemistry Network Association • ENAEE - European Network for Accreditation of Engineering Education **Croatia:** College for Information Technologies - VSITE **Finland:** Aalto University Student Union • Academic Engineers and Architects in Finland - TEK • Union of Professional Engineers of Finland • Student Union of Lappeenranta University of Technology • Student Union of Tampere University **France:** Commission des Titres d'Ingénieur • Conférence des Directeurs des Ecoles Françaises d'Ingénieurs - CDEFI **Germany:** 4ING/Fakultätentage der Ingenieurwissenschaften und der Informatik an Universitäten • German Association of Departments of Civil Engineering and Environmental Engineering at Universities of Applied Sciences **Ireland:** Engineers Ireland **Norway:** NITO **Portugal:** Institute for systems and technologies of information, control and communication **Russia:** Russian Association for Engineering Education (RAEE) **United Kingdom:** Engineering Professors' Council • Engineering Council,UK **United States of America:** ABET

## INDUSTRIAL MEMBERS - CORPORATE MEMBERS & PARTNERS

Dassault Systèmes • Ansys • The Mathworks • Siemens • Bentley • AIRBUS

## HONORARY MEMBERS

Josée Ackermans • Robert Gobin, formerly KU Leuven • Günther Heitmann, formerly TU Berlin • Chiara Maffioli • Laszlo Szentirmai, formerly University of Miskolc

## EUROPEAN DEANS COUNCIL

**Belgium** Patrick De Baets, Ghent University • Pierre Dehombreux, Université de Mons **Bulgaria:** Rosen Ivanov, University of Ruse **Denmark:** Conni Simonsen, Aarhus University **France:** Christophe Léger, Polytech Orléans **Germany** Gerhard Müller, Technical University of Munich **Ireland:** Mike Murphy, Technological University Dublin **Italy:** Barbara Betti, Politecnico di Milano **Poland:** Aleksander Sladkowski, Silesian University of Technology **Portugal:** Maria João Viamonte, Instituto Superior de Engenharia de Porto **Slovakia:** Oliver Moravcik, Slovak University of Technology in Bratislava **Spain:** Enrique Ballester Sarrias & Luis Miguel Sanchez Ruiz, Universitat Politècnica de València **Switzerland:** Olivier Naef, HES-SO University of Applied Sciences Western Switzerland **Turkey:** Aykut Hocaban, Eastern Mediterranean University **United Kingdom:** Kamel Hawwash, University of Birmingham

SEFI is based in Brussels.  
For further information please contact:

**SEFI aisbl.**

39, rue des Deux Eglises  
1000 Brussels – Belgium

Tel : + 32 2 502 36 09

[office@sefi.be](mailto:office@sefi.be)

[www.sefi.be](http://www.sefi.be)