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ICL2025 Conference in Budapest

The 28th International Conference on Interactive Collaborative Learning, and the 54th IGIP International Conference on Engineering Pedagogy 'Innovation via Collaborative Learning in Engineering Education' will be organized on 01–03 October 2025, in Budapest, Hungary <u>https://icl-conference.org/current/</u>.

History of IGIP and ICL

IGIP – International Society for Engineering Pedagogy

Professor Dr. Adolf Melezinek, who founded the Department of Educational Technology at Klagenfurt University and began his research there in 1971 on the methodology of teaching technology and of engineering. In his doctoral thesis 'The theory and teaching methods of communication engineering', he wrote about the newly developed area of engineering education theory, and a pathway of how the education and training of prospective engineering educators could be revolutionised was shown.

In 1972, the development of the Klagenfurt School of Engineering Pedagogy and the evolution of engineering pedagogy as a branch of professional pedagogy resulted in the creation of IGIP – 'Internationale Gesellschaft für Ingenieurpädagogik'. At the 'First International Symposium on Engineering Pedagogy', which took place in Klagenfurt between 8th and 10th of May 1972, Adolf Melezinek established the "International Society for Engineering Pedagogy" – IGIP – which celebrated its 50th anniversary in 2022. The goal of the association was stated as the promotion of scientific methods of teaching technical disciplines, particularly about pedagogy and methodology.

IGIP is accredited by UNESCO (United Nations Educational, Scientific and Cultural Organization), its Mission is as follows:

- Improving teaching methods in technical subjects
- Developing practice-oriented curricula that correspond to the needs of students and employers
- Encouraging the use of media in technical teaching
- Integrating languages and humanities in engineering education
- Fostering management training for engineers
- Promoting environmental awareness
- Supporting the development of engineering education in developing countries

The official website of IGIP: <u>https://igip.org/</u>.

IGIP maintains a *list of accredited international engineering educators* who were awarded the title *ING.PAED.IGIP*. The title ING.PAED.IGIP certifies a certain educational level for a teacher, trainer or instructor, which is given by the IGIP curriculum. The ING.PAED.IGIP is for all technical teachers who are

- Engineers according to IGIP principles and
- have studied according to the IGIP curriculum at accredited institutes or can present certificates on the individual modules of the curriculum, plus
- have at least one year of teaching experience.

IGIP Prototype Curriculum provides a modular pedagogy-based approach to methodological, didactical, and pedagogical excellence in the field of engineering education *Figure 1*. The acquisition of the title "IGIP International Engineering Educator – ING.PAED.IGIP" represents an advanced form of personal and professional development, which gives each graduate access to the network and experience of the global engineering education community.



Figure 1. IGIP Competency model

Source: https://igip.org/ing-paed-IGIP.php

IGIP also accredits training centres for "International Engineering Educator" Programs. These centres must be re-accredited every five years. IGIP operates independent, peer-reviewed online journals¹, which all deal with engineering pedagogy and appear as follows: International Journal of Engineering Pedagogy (iJEP) <u>https://online-journals.org/index.php/i-jep</u>, Online and Biomedical Engineering (iJOE) <u>https://online-journals.org/index.php/i-jep</u>, Online and Biomedical Engineering (iJOE) <u>https://online-journals.org/index.php/i-jet</u>, International Journal of Emerging Technologies in Learning (iJET) <u>https://online-journals.org/index.php/i-jet</u>, International Journal of Interactive Mobile Technologies (iJIM) <u>https://online-journals.org/index.php/i-jim</u>. The mission of online journals is to contribute to the advancement of science by providing an efficient and cost-effective way for making qualitative scientific results easily accessible to the largest possible audience. Online readers do not have to pay any fee. They serve as an international forum related to engineering education. Teachers, educators and researchers as well as schools and institutions are invited to discuss their research, experiences, ideas and perspectives in the field of engineering pedagogy at a worldwide level.

IGIP has established awards. The highest one, *Nicola Tesla Chain is awarded for international outstanding achievements in the field of Engineering Pedagogy*. It consists of a golden chain with medal, certificate, and an invitation as Keynote Speaker to the IGIP Conference. *In 2017, the Awardee was Andras Benedek* from Hungary *Figure 2*.

¹ Online-Journals.org is a platform provided by the non-profit International Association of Online Engineering (IAOE). Its mission is to contribute to the advancement of science by providing an efficient and cost-effective way for making qualitative scientific results easily accessible to the largest possible audience.



Fig. 2. IGIP Nicola Tesla Chain Awardee Andras Benedek, 2017 Budapest, Hungary

Source: 50th Anniversary Brochure

International Conferences

For more than 50 years, IGIP has been organizing conferences on issues regarding engineering education and engineering studies, research and development. Since the beginning, these have been international conferences organized in different places, mostly at technical universities and universities of applied sciences in several countries. Every year, a lot of materials are published in the *'Conference Proceedings'*. More than 60 volumes have been published over the past years and have helped to present and discuss significant topics of engineering education, like the connection between theoretical and practical experience gained in different countries, the implementation of new technologies, the correlation of innovative approaches or the traditional values of engineering education, to name only few. For several years, Springer has been the publisher of 'Conference Proceedings' in print and electronic format, which has meant an enormous leap in quality for all publishing colleagues.

In the beginning, the yearly conferences were held in Austria, then the first one abroad was in Turin, Italy, in 1977. *In 1985,* IGIP opened to the East of Europe with *the first conference held in Budapest, Hungary*, a city behind the Iron Curtain at that time. Every conference has a title summarizing the idea of presentations *Figure 3*.



Fig. 3. Engineering Pedagogy – solution alternatives in the international context IGIP Conference 1985, Budapest, Hungary

Source: 50th Anniversary Brochure

In 1990, immediately after the fall of the Berlin Wall and the end of the Cold War, the *first shared conference 'Engineering Education 2000'* was held for two days in Vienna and afterwards *two days in Budapest* with ASEE² and IEEE³ as joint organisers. At that time, IGIP set an example of a reunified Europe.

In 1996, Austria and Hungary organized the *second joint conference* 'Education through Communication' *in Vienna and Budapest*. The *Budapest Technical University (BME) organized* these three conferences.

In 2007, there was a *joint IGIP and SEFI*⁴ *conference* 'Joining Forces in Engineering Education towards Excellence' in Miskolc, Hungary, organized by *Technical University Miskolc*.

Since 2012, when the 15th International Conference on Interactive Collaborative Learning – ICL – and the 41st IGIP conference were held together in Villach, Austria, IGIP has *joint conferences with ICL*.

In 2017, the Óbuda University organized the 20th International Conference on Interactive Collaborative Learning and the 46th IGIP International Conference on Engineering Pedagogy 'Teaching and Learning in a Digital World' in Budapest, Hungary again Figure 4. The author of this article was the Conference Chair.

Fig. 4. Teaching and Learning in a Digital World ICL–IGIP Conference 2017, Budapest, Hungary



Hungary is an active IGIP member, we have had the opportunity to organize five conferences so far. Many European countries have hosted the conference, but also other continents were explored. Russia has been the host of the conference several times besides Dubai, UAE, and Thailand in Asia, Brazil in South America.

Budapest will be the host again

In 2025, Budapest University of Technology and Economics (*BME*) *is the organizer* of the 28th International Conference on Interactive Collaborative Learning (ICL2025) and the 54th IGIP International Conference on Engineering Pedagogy *'Innovation via Collaborative Learning in Engineering Education'* in Budapest, Hungary on 01–03 October 2025 <u>http://www.icl-</u>

² American Society for Engineering Education is a nonprofit organization of individuals and institutions committed to furthering education in engineering and engineering technology <u>https://www.asee.org/</u>.

³ IEEE stands for the Institute of Electrical and Electronics Engineers. IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity <u>https://www.ieee.org/</u>.

⁴ The European Society for Engineering Education is an international association: Higher engineering institutions, professional societies, student associations, students, academic staff, engineers and companies within Europe and worldwide https://www.sefi.be/#.

<u>conference.org/icl2025</u>. The Conference Chair of ICL2025 is Péter Tóth Head of Department of Technical Education, Faculty of Economic and Social Sciences. The conference will take place in Building K, which is close to Gellért square.

This interdisciplinary conference aims to focus on the exchange of relevant trends and research results as well as the presentation of practical experiences in Interactive Collaborative Learning and Engineering Pedagogy. The *Call for Papers* can be downloaded from the website just like all the other important information. The *Topics of Interest* are rich, the list contains 33 areas. The applicant can submit not only conference papers, but there are also other ways to participate. Posters/workshops/tutorials, interactive demonstrations and exhibitions can also be proposed. Prospective organizers of other ICL2025 events are encouraged to contact the conference chair. There is the possibility to organize a special session to which – if it is accepted – other authors may later submit research papers. Special Sessions, held in parallel with the general conference, are an integral part of the conference. They provide researchers in focused areas the opportunity to meet and present their work, and to offer a forum for interaction among the broader community of technology-enhanced learning, and online engineering worldwide. Special sessions' papers are required to meet the same standards as papers in the general conference and are published in the same conference proceedings.

Topics of interest are in all areas of

- Technology Enhanced Learning
- Collaborative Learning
- Engineering Pedagogy
- And others like main conference topics.

For authors, there is a separate page with the information. Proposals must be submitted to the <u>ConfTool® Submission Server</u>, and meet the *Important Dates*. Key dates, including submission deadlines, registration periods, and program announcements, are shown in a table. Nevertheless, it is essential to keep an eye on conference organizers' communications to ensure you do not miss any critical information about the conference. The submission process *starts* on **19 April 2025** with submission of: (i) structured abstracts (for full and short papers) for the conference, and (ii) Special Session proposals. It *is closed* on **12 July 2025** with Camera-ready due & Author registration.

We would like to welcome the Opus and Educatio readers on ICL2025 Conference in Budapest, Hungary.

References

- 28th International Conference on Interactive Collaborative Learning, and 54th IGIP International Conference on Engineering Pedagogy 'Innovation via Collaborative Learning in Engineering Education' (2025), https://icl-conference.org/current/
- 50th Anniversary Brochure (2022), IGIP International Society for Engineering Pedagogy, Austria
- ASEE American Society for Engineering Education (2025), <u>https://www.asee.org/</u>
- ICL Clearing House (2025), https://icl-conference.org/clearinghouse/
- IEEE Institute of Electrical and Electronics Engineers (2025), <u>https://www.ieee.org/</u>
- IGIP International Society for Engineering Pedagogy (2025), <u>https://igip.org/</u>
- SEFI European Society for Engineering Education (2025), <u>https://www.sefi.be/#</u>
- Online-Journals.org (2025), <u>https://online-journals.org/</u>.