

EUR-ACE Going Global

Assuring and certifying quality of engineering education programmes worldwide

Virtual Forum

September 23-24, 2021



European Network for
Accreditation of Engineering
Education (ENAAE)

ENAAE Forum 2021 Communiqué

The second ENAAE Forum '**EUR-ACE Going Global**' took place online 23-24 September 2021. The event was originally scheduled to take place in Moscow in September 2020 but the global Covid-19 pandemic restricted travel opportunities to meet in person.

One of the advantages of the pandemic was that we could reach a wider audience online. The event had over 25 speakers from across the globe and provided an insight and lessons learned delivering and ensuring quality assurance of engineering education during the pandemic.

There were many inspiring talks - showing engineers how to raise their game and consider the real role of technology and engineers in the broader geopolitical environment. It is no surprise that we have a Portuguese engineer as secretary general of the United Nations.

Many speakers referred to the International Engineering Alliance and the need for ENAAE to work with other engineering bodies including the World Federation of Engineering Organizations (WFEO). The need of adapting Graduate Attributes and Professional Competences to the UN Sustainable Development Goals was specifically emphasized.

There was a view on the potential looming crisis in overall education which may have stagnated or gone backwards for many during the pandemic.

Many agencies had to switch to online programme evaluation during the pandemic and developed new procedures some of which proved to be useful even for face-to-face evaluations such as virtual workroom for examination of evidences provided by the programme. Bimodal (online and face-to-face) evaluation is expected in the future taking good things from both methods. Regarding evaluation of online programmes, identical processes and criteria are used regardless of the method of delivery. Quality must be the priority and focus must be on the learning outcomes.

An observation by one of the speakers was prescient - the overfocus on exams and assessment instead of learning for life. We must think in a way that machines cannot copy us – or machines will take over. Paradigm shift in engineering education requires primarily:

- Ability to validate data – understand it – work in the cloud.
- Engineering rigour – lean to the broader skills – interdisciplinary skills.
- Technological, human and data literacy are essentials for rigorous engineering.
- Digital literacy must be embedded into the entire curriculum.

Hence, we shall see more let-go-and-grow education such as challenge based learning.

EUR-ACE Going Global

Assuring and certifying quality of engineering education programmes worldwide

Virtual Forum

September 23-24, 2021



Roadmap for future actions to strengthen ENAAE and the dissemination of the EUR-ACE® label

Based on the feedback from the Forum there is much to do:

- A strong theme is closer engagement with the International Association for the Evaluation of Educational Achievement (IEA) to reduce duplication but recognizing that our differences are what make us special.
- Make the accreditation process less complex – or perceived to be less complex. The move to online delivery of programmes may streamline the workload.
- The world is a small place and cooperation is the key – as educators we can see that spreading the benefits of accreditation means crossing borders to teach assessment techniques as well as teach. Transnational accreditation is contentious. This is part of our mission to increase capacity for quality assurance of engineering education and should not be viewed as a commercial transaction.
- Institutional accreditation – programme accreditation is a balancing act. It is also allowing the Higher Education Institution to almost become an authorized agency. Many countries have a state review across the Higher Education Institution – if the programme level evaluation happened at the same time (with different assessors) it might reduce the workload on the Higher Education Institution staff which is often cited by academic staff as a real issue – preparing what they see as the same documents for two types of assessors!
- There is a need for better training for assessors – we need to practice what we teach.
- The EUR-ACE® label – we need to review the model for some authorized agencies – to encourage their Higher Education Institutions to seek the label. This also means bottom up – working with the Higher Education Institutions and perhaps government agencies also.

ENAAE would like to acknowledge AEER President Yuri Pokholkov for the support of AEER in the organization of this event since we started the planning in 2019. Events such as this cannot happen without the incredible efforts of the few – I would like to thank the organizing committee:

- Prof. Bohdan MACUKOW – ENAAE Label Committee Chair; KAUT
- Prof. S. Birgül TANTEKIN-ERSOLMAZ – Vice-President of ENAAE; MÜDEK
- Dr. Kseniya Zaitseva – AEER
- Ann Van Eycken – ENAAE Secretary General

