

ASIIN-FIGURE-EASPA Global Conference 2021 in Paris

Digitalisation – Innovation – Competitiveness in the Post-Covid Era: European and Global Higher (STEM) Education reinventing itself

CONFERENCE DATES	4-5 November 2021
CONFERENCE VENUE	Amphi 25, Sorbonne University 4, place Jussieu, 75005 Paris, France
CONFERENCE HOTLINE	+49-211-900977-44

Higher education and especially STEM education around the world is facing massive challenges from different directions. While the Industry 4.0 development requires HEIs to review their traditional curricula in order to prepare students for an increasingly digitalized economy, IT engineering is trying to deal with its contents sprawling into all other disciplines, technical as well as non-technical. If this was not enough, COVID-19 has clearly demonstrated that higher engineering education has serious deficiencies when it comes to digital learning, online assessments, and virtual practical training.

The European Union has over the past decades been a hotbed of global engineering and manufacturing, setting quality standards and creating expertise highly valued around the world. Following the disruptions of 2020 and 2021, can Europe still serve as a role model or have other regions of the world taken over the lead, educating the engineer of tomorrow?

The traditional engineer is disappearing step-by-step, being replaced by supposedly all-rounders, trained as profoundly in mathematics as in communication skills, IT and creative design thinking, who work in intercultural and multilingual environments. What are successful and competitive profiles for higher education graduates in the future? How can STEM curricula take into account the new requirements and adapt to the changing needs of markets and employers? How can practical work in the laboratories be maintained and successful approaches with regard to e-assessment implemented?

These and related questions and challenges will be raised and tackled during the ASIIN-FIGURE Global Conference 2021. It is dedicated to all stakeholders trying to ensure the future viability of (STEM) higher education and facing the difficult task to determine quality standards in a more and more heterogeneous and complex composition of degree programmes. The invited speakers (to be confirmed) are leading representatives and renowned speakers from the field of politics, higher education, quality assurance and industry.

DAY 1 - 04.11.2021

Challenges for Teaching and Learning in STEM education in a changing world

Time	Presentation	Speaker
10.00 – 10.30	<i>Registration and networking</i>	
10.30	Welcome	Hosts: Dr. Iring Wasser , Managing Director ASIIN (Moderation) Professor Stéphanie Bonneau , Vice-President of the University of Sorbonne Professor Lamine Boubakar , President of Réseau Figure Professor Hans-Joachim Bargstädt , President of the European Alliance of Professional Accreditation and Chair of the German Accreditation Council
11.10	Keynote: How COVID-19 has triggered a long-needed reform process in Higher Education	Professor Johann Kranz , Head of the Master Programme “Management and Digital Technologies” at LMU Munich
11.40	Challenges for teaching and learning in a changing world: A European perspective The perspective of France	Peter van der Hijden , Independent Higher Education Strategy Advisor, Former Head of Sector Higher Education Policy, European Commission Professor Thierry Coulhon , President of Hcéres
12.30	<i>Lunch break</i>	

Teaching and learning in a virtualized world: Is the University of today still the adequate place?		
13.30	An online degree in Engineering – contradiction or a living reality?	<p>Dr. Tomi Kauppinen, Head, Aalto Online Learning, University Network for Innovation, Technology and Engineering, UNITE!</p> <p>Dr. Tim Jackson, Reader in Electrical Engineering at the University of Birmingham</p>
14.20	A Web-based platform for building Problem Based Learning competences (PBL) among students	Professor Thomas Ryberg , Aalborg Centre for Problem Based Learning in Engineering Science and Sustainability
14.45	Lab work without a lab? Hybrid approaches to Engineering Education	Professor Jérôme Randon , University Claude Bernard Lyon I
	Are virtual labs a viable alternative to traditional forms of education?	Professor Andreas Terfort , Speaker of the German Mathematisch-Naturwissenschaftlicher Fakultätentag
15.30	<i>Coffee break</i>	

New digital approaches in the assessment of STEM education		
16.00	Introducing a digital tool for peer-based evaluation and an app for online learning	Professor Jean-François Rees , Louvain Learning Lab, University of Louvain
16.25	World Café	
17.00	<i>End of conference day</i>	
19.30	<i>Social Dinner: La Coupole, 102 Boulevard du Montparnasse, 75014 Paris</i>	

DAY 2 - 05.11.2021

Challenges for the Quality of STEM education in a changing world

Time	Presentation	Speaker
09.30	Keynote: How to save European competitiveness? The EU's e-skills strategy and the future of European education	Vanessa Debiais-Sainton , Head of Higher Education Unit, European Commission
New qualification profiles on level 6-8 of the European Qualification Framework		
10.00	What key skills and competencies are needed by 21 st century engineers?	Ralph Appel , President of the European Federation of National Engineering Associations FEANI
10.30	<i>Photo session and coffee break</i>	
11.00	Challenges for the quality at the education at Bachelor and Master level: digitalization, professionalization, competencies	Professor François Germinet , President of the University of Cergy-Pontoise
11.20	Evaluating the impact and contributions of research laboratories in the context of the Figure accreditation process in engineering MA education	Professor Farid Ouabdeslam , President of Réseau Figure QA+
11.40	The contribution of research in the quality improvement of STEM education: What are the issues doctoral education is facing in Europe?	Dr. Alexander Hasgall , Head EUA Council for Doctoral Education
12.05	STEM disciplines in further education: New approaches to professional training and life-long-learning	Jean-Roch Houllier , Head of Learning and Digital, SAFRAN University
12.30	<i>Lunch break: Zamansky Tower (24th floor of the same building)</i>	

New approaches in Quality Assurance of Higher Education in Europe		
14.00	<p>The European contribution for quality assurance in higher education:</p> <p>European standards and developments for QA</p> <p>The specific case of STEM education</p>	<p>Professor Hans-Joachim Bargstädt, President of the European Alliance of Professional Accreditation (EASPA) and Chair of the German Accreditation Council</p> <p>Damien Owens, President of the European Network for Accreditation of Engineering Education (ENAE)</p> <p>Dr. Jesus Frias, Academic Leader, Environmental Sustainability and Health Institute, Technological University Dublin</p>
15.00	Wrap-up and final remarks	Moderated by Dr. Iring Wasser
15.20	<i>End of the conference</i>	