

24<sup>th</sup> International Conference on Interactive Collaborative Learning 50<sup>th</sup> IGIP International Conference on Engineering Pedagogy

#### ICL2021

"Mobility for Smart Cities and Regional Development – Challenges for Higher Education"

TU Dresden und HTW Dresden, Germany, 22-24 September 2021

# ICL Special Session Call for Papers

### Title

Transferable skills in Engineering Education at the curriculum design and the module delivery. Using appropriate pedagogies and subject didactics.

## **Acronym**

**TSEE** 

## **Overview**

Institute of Engineering & Technology (IET) Skills and Demands in Industry survey conducted in 2019 reported that 73% of respondents have had problems with candidates for engineering jobs who have academic knowledge, but not the required workplace skills. To be able to develop increasingly complex engineering solutions and products required by the modern society, and to be employable, engineering graduates need both disciplinary competence and transferable skills. Evidently, transferable skills play a vital role in developing a holistic mindset of a graduate, who can think broadly and integrate interdisciplinary knowledge. Since transferable skills are not sufficiently focused in today's engineering education, this special session proposes to explore what transferable skills should be and how the acquisition of these skills can be integrated into the curriculum without losing the sight of the intrinsic value of engineering education. When included as learning outcomes in the curriculum, transferable skills need to be integrated both in the curriculum design and in the module delivery. Appropriate educational approaches, methods and subject specific didactics should be introduced at module level to promote the improvement of the required competencies. This special session will also cover that how the attainment of transferable skills by engineering students can be assessed and how the quality of didactical approaches towards transferable skills can be evaluated.

# **Topics**

Promotion of transferable skills at the curriculum level.

Balancing module content to include both technical skills and transferable competencies. Pedagogical approaches used for the development of transferable skills.

Evaluation of teaching approaches used by imparting professional and transferable skills. Assessment of the improvement of transferable skills of students. Other relevant topics.



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# **Program Committee**

# Chair(s)

Elena Mäkiö, Warwick Manufacturing Group (WMG), University of Warwick, Coventry, UK, E.Makio-Marusik@warwick.ac.uk

Yvonne Sedelmaier, Coburg University of Applied Sciences, Coburg, Germany, yvonne.sedelmaier@hs-coburg.de

Freeha Azmat, Warwick Manufacturing Group (WMG), University of Warwick, Coventry, UK, f.azmat.1@warwick.ac.uk

### **Members**

Jane Andrews, Warwick Manufacturing Group (WMG), University of Warwick, Coventry, UK, jane.andrews@warwick.ac.uk

Robin Clark, Warwick Manufacturing Group (WMG), University of Warwick, Coventry, UK, R.Clark.6@warwick.ac.uk

Carolin Gold-Veerkamp, University of Oldenburg, Oldenburg, Germanycarolin.gold-veerkamp@uni-oldenburg.de

Dieter Landes, Coburg University of Applied Sciences, Coburg, Germany, dieter.landes@hscoburg.de

Juho Mäkiö, University of Applied Sciences Emden/Leer, Emden, Germany, juho.maekioe@hsemden-leer.de

Claudius Terkowsky, Technical University of Dortmund, Dortmund, Germany, claudius.terkowsky@tu-dortmund.de