

Date: January 16 of 2018

Time: 12:00-13:30

Language: English

Place: Kipsalas street 6-115, Faculty of Architecture,
Riga Technical University, Riga

Registration: Free of charge
<https://goo.gl/forms/PLjGIJXcGY3bfoiE2>



**RIGA TECHNICAL
UNIVERSITY**

RIGA TECHNICAL UNIVERSITY

Faculty of Computer Science and Information Technology

in cooperation with

Study Department

present a lecture

“Improving students’ learning experience in higher education”

Jani Romanoff, Ville Kivimäki and Joonas Pesonen (Aalto University, Finland)

Keywords: problem-based learning, student’s portfolio, mind maps, learning analytics, concept maps

✓ **Program Leading Example: Work-life Skills Integration for Marine Technology M.Sc. Studies** (*Plan* the teaching events, *Do* them, *Check* the performance/ gaps, *Act* to fill them).

Engineering education of complex systems, such as passenger ships, in static university curriculum with fixed course contents is a challenge. The key issue is the synthesis of various individual lectures in individual courses and how do these contribute to the program level objectives without adding additional courses to the curriculum. In Aalto University, problem-based learning approach is adopted where the assignments are the same from year to year, but the application cases are changed. This means that the methods and theories used in engineering work need to be understood deeply and applied in the student projects by the students with help of teachers. Each lecture with associated exercises will contribute the design portfolio, where a ship concept is defined. The student can use the portfolio as self-reflecting CV-type documentation of the engineering skills showing strengths and weaknesses and their development during studies. Along with this each assignment is reflected to the existing theories and approaches and gaps on these and student’s own knowledge are identified. This paves the way to life-long-learning. Mind maps are used as weekly submitted dynamic feedback to guide the students to see the relations between lectures and gaps in their knowledge. Teachers receive the mind maps to adjust their education based on the current class competences. Program leaders receive information related to program level gaps, prerequisites and their realization. The concept is perceived extremely positively by all these groups.

✓ **Putting Learning Analytics into Practice Utilizing Concept Mapping: From Learning Assignment to a Portfolio Illustrating Student’s Personal Study Plans**

Concept mapping is a part of university’s learning analytics infrastructure in learning, teaching and advising. The lecture will present the current status and (near) future vision of their usage for supporting study process

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