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Huom! Tämä on rinnakkaistallenne.

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Figure 2: RiMCE students and alumni at the Campus in April 2022.

TAMK's master programme RiMCE educates circular economy experts

Risk Management and Circular Economy Master's degree programme educates circular economy experts utilizing collaborative learning practices. Master's programmes in Universities of Applied Sciences (UAS) aim to give new knowledge, skills and competences which help students to improve their employability positions in the labor market by renewing professionally.

Need for circular economy change makers

Climate change, the loss of biodiversity, and over-consumption of raw materials require systemic effort to change from linear "take- make – dispose" to circular economy. According to Ellen MacArthur Foundation "A circular economy is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems". In European Union, European Green Deal aims to transform the EU into the first climate neutral continent in 2050. Also, the new Circular economy action plan (CEAP) aims to ensure that waste is prevented, and the resources used are kept in the EU economy for as long as possible. Consequently, the UNs 17 Sustainable Development Goals (SDGs) provides a global framework for implementing these aims.

Systemic change requires professionals of new kind with solution-centric and global change-agent's mindset. These professionals facilitate the process of implementing the sustainable goals with the framework. Closing the material loops requires leaders with thorough managerial, professional, and strategic thinking skills of how to design products, processes and services that are sustainable.

RiMCE at TAMK

Master's degree programme of Risk Management and Circular Economy RiMCE brings together students with diverse educational, professional, and cultural backgrounds to study collaboratively. Eligibility to study the programme requires 2 years

(24 months) of working experience after a Bachelor's (in engineering, in natural resources, in business or some other suitable degree). The first international group of RiMCE students started in 2018 and the fourth starts in September 2023. The RiMCE studies are organized to cater for students who are working in geographically distant locations and so the courses are mainly on-line. The programme is planned to courses include three intensive study weeks in Tampere (4 days per week). Although, it is possible to study while working full-time, it is recommended to take a study-leave especially in the Master's thesis phase.

RiMCE students can graduate as Master of Engineering/Natural Resources (60 ECTS credits) or Master of Business Administration (90 ECTS credits). The degree complies with the criteria set by the Finnish national degree system as well as with the European Qualifications Framework (Level 7) for degrees and competences. The degree gives a qualification for a public appointment where a Master's degree is required.

TAMK as a provider of RiMCE has broad expertise in circular economy, excellent network of business partners, and research, development, and innovation (RDI) activities to promote bio- and circular economy. The RiMCE programme operates as a forerunner in circular economy pedagogy providing circular economy theory, viewpoints, and models from practice.

Learning outcomes of RiMCE

The RiMCE graduates gain specialized knowledge of the circular economy theories, principles, and practices. They can apply up-to-date knowledge of circular economy into their work and professional development. They understand how circular economy and risk management are interconnected and can identify, assess, and prioritize risks in different contexts. The main learning outcomes of RiMCE is presented in Figure 1.

Ilkka Harju, a RiMCE student of the 22RiMCE group:

“It has been extremely great to notice how returning to the school bench after years has forced me to stop and detach myself from everyday business life. When you get to meet fellow students with different backgrounds, it teaches you a lot. It teaches you to reflect your own vision on the prevailing and ongoing trends in the world. The study time has already inspired my way of thinking and given me the opportunity to combine what I learned with working life.”

Next time it is possible to apply for Risk Management and Circular Economy Degree Programme in December 2023.

<https://www.tuni.fi/en/study-with-us/risk-management-and-circular-economy>

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Ilkka Harju

A student

- can develop and innovate circular economy value chains and consumer engagement in circularity actions.
- can apply sustainability measurement tools (e.g. Life Cycle Assessment (LCA)) for the development of more sustainable products and services.
- understand the innovation pipeline process and the roles of stakeholders in business openings in company context.
- can utilize agile and lean development methodologies and design thinking for development in circular economy business and knows the key factors of profitable business.
- are competent to communicate responsibly both in professional and academic environment and with a wider audience and in networks.
- can collaborate and co-create in multidisciplinary and intercultural teams and understand the role of leadership and communication when pursuing sustainability.

Figure 1. Learning outcomes of Risk Management and Circular Economy Master’s Degree Programme (RiMCE)