



GOOD PRACTICES IN STUDENT ENGAGEMENT WITH SOCIETY

RTU DESIGN FACTORY

Fostering Student Engagement through AI-driven Qualitative Quality Assurance Practices

A Project Developed by:



UNIVERSITY OF TWENTE.



MCAST



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Project: Fostering Student Engagement through AI-driven Qualitative Quality Assurance Practices

Consortium Partners

Riga Technical University

University of Twente

Malta College of Arts, Science and Technology (MCAST)

European Consortium for Accreditation in Higher Education (ECA)

Accreditation Council for Entrepreneurial and Engaged Universities (ACEEU)

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General Information

Title: RTU Design Factory

Organization: *Riga Technical University (RTU)*

Country: *Latvia*

Authors: *Deniss Ščeulovs*

One liner – essence of the case study: *RTU Design Factory (DF) is a lively place that brings together research, education and the industry, creating a new hands-on learning culture and opportunities for radical innovation.*

Short Summary: *DF provides access for researchers and students to facilities, tools and services for prototyping that allows creating new and complex solutions. Technologies DF offers range from laser cutting and engraving, 3D printing and scanning to highspeed CNC machining and post-processing.*

DF works with interdisciplinary student and researcher teams to solve real-life challenges from various industries. DF also develops scientific equipment, demonstration models or fully functional prototypes to support the scientists and staff of RTU. The DF team combines a variety of skills in mechanical engineering, robotics, creative thinking and methodologies, electronics, product development, design and business. And the team members speak 10 different languages.

DF is part of the Design Factory Global Network with some partners from Switzerland, Chile, Korea, China and, of course, the very first Design Factory in Aalto University, Finland.

DF works on a wide variety of projects, some of the recent ones including a hockey puck shooter that uses artificial intelligence, a new type of water treatment system, a training device for brass instruments and customized equipment for researchers testing composite materials.

Introduction and Overview

RTU is the largest science-based university in the Baltic States established in 1862. RTU has over 150 years of history as a centre of scientific excellence and has Nobel Prize winners, Presidents and Prime Ministers as former professors and students. Riga Technical University is a modern internationally recognized university. It is the only polytechnic university in Latvia and the largest university in the country. RTU is focused on becoming a third-generation university that not only provides high quality education, but also conducts advanced research and ensures innovation and technology transfer, practically implementing scientific discoveries.

- *14000+ students in 9 faculties*
- *3500+ international students*
- *69 countries where students come from*
- *61 study programs in English at 9 faculties*
- *State university*

RTU Design Factory is an innovation and entrepreneurship platform that has the best equipped prototyping lab in the Baltics as well as a team of highly experienced experts to provide support for entrepreneurs, CEOs and students for creating innovative ideas, products with high added value and various technical solutions. With the help of the DF team the challenges and problems of our clients are transformed into innovative solutions and products with high added value. DF collaborates with businesses, startups, researchers, organizations and students who are willing to become innovators in their field.

- DF provides: Product design, Ideation, Prototyping, R&D, and Entrepreneurship support programs
- Contact: rdf@rtu.lv
- Director of RTU Design Factory Kristens Raščevskis: kristens.rascevskis@rtu.lv

Implementation

theLAB

theLAB is an open workshop for everyone to work on their projects, study work, try different technologies and equipment. You are welcome to work in theLAB during open hours and consult with the experts and interns of theLAB. Opening hours: Monday to Friday 14:30-18:30
For more info about available equipment, opening hours and other inquiries contact: nils.brikers@rtu.lv

Innovation grants for students

Starting with the fall semester of 2019, RTU Design Factory has been the facilitator of a new programme – “Innovation grants for students” within which students can receive monthly scholarships for participating in programmes that promote innovative thinking, cross-disciplinary collaboration and working with real life challenges from the industry. Activities include ideation events, programmes such as Demola Latvia, RTU business pre-incubator ideaLAB, “Vertically integrated project”, commercialization training for PhD students and young scientists and other activities.

More: <https://www.rtu.lv/inovaciju-granti> and <https://www.idejubanka.lv>

RTU IdeaLab: idealab.rtu.lv / @RTUidealab

For more information about the programmes, criteria, scholarships, contact coordinators:

“Innovation grants for students” Project Lead: kristine.steinerte@rtu.lv

Demola Latvia coordinator Signe Adamoviča: signe.adamovica@rtu.lv

Product Development Project: elina.mikelsone@rtu.lv

“Vertically integrated project”: brigita.dalecka@rtu.lv

EIT Hubs

The European Institute of Innovation and Technology (EIT) is an EU body created by the European Union in 2008 to strengthen Europe’s ability to innovate. Together with leading partners, the EIT Community offers a wide range of innovation and entrepreneurship activities: education courses that combine technical and entrepreneurial skills, tailored business creation and acceleration services and innovation driven research projects. This brings new ideas and solutions to the market, turns students into entrepreneurs and, most importantly, delivers innovation. RTU Design factory is the facilitator of three EIT knowledge innovation communities (kic’s) – EIT Climate-KIC Hub Latvia, EIT Food Hub Latvia and EIT Raw Materials Baltic Hub.

For more info on EIT hubs and activities contact: nadina.elekse@rtu.lv

Climate-KIC Hub Latvia

Climate-KIC is Europe's largest public-private innovation partnership focused on climate innovation to mitigate and adapt to climate change. Currently RTU Design Factory facilitates such Climate-KIC programmes: Journey Summer School, Climate-KIC Accelerator Latvia and Climathon.

More: <https://www.climate-kic.org/>

For more information contact: alise.pizika@rtu.lv

EIT Food

EIT Food is Europe's leading food innovation initiative, working to make the food system more sustainable, healthy and trusted. Currently RTU Design Factory facilitates such EIT Food activities: Innovation Prize, RIS Fellowships, Government Executive Academy, Test Farms, TeamUp, ChallengeLabs and others.

For more information contact: nadina.elekse@rtu.lv

EIT Raw Materials Baltic Hub

EIT RawMaterials is the largest consortium in the raw materials sector worldwide. Its vision is to develop raw materials into a major strength for Europe. RTU Design Factory in collaboration with Tallinn University of Technology and Kaunas University of Applied Sciences facilitates a yearly scientific conference, EIT Raw Materials Accelerator and EIT Raw Materials Summer School.

For more information contact: kristine.steinerte@rtu.lv

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