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Designing higher Education Curricula for Agility, Resilience &Transformation

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About DECART

The DECART research and innovation project is an international cooperation partnership initiative funded under the European Commission's ERASMUS+ programme (2022-1-FR01-KA220-HED-000087657). The project unites higher education institutions in France, Iceland, Indonesia, Lithuania, and South Africa. The primary project goal is to provide guidelines to design innovative curricula that leverage the transformative capacities of 21st century education systems in engineering and business. The project will also identify leadership models to help educational stakeholders to thrive in an increasingly turbulent socioeconomic context.

The Project Meeting #5 at the University of KwaZulu-Natal



DECART team at the University of KwaZulu-Natal (UKZN). Photo credit: UKZN Corporate Relations

The fifth DECART project meeting was hosted by the University of KwaZulu-Natal (UKZN), South Africa, in January 2025. The meeting was led by UKZN academics: Cecile Gerwel Proches, Macdonald Kanyangale, and Angela James (WP3). The event gathered partners from across Europe and South Africa for three days of collaborative workshops, presentations, and strategy sessions. The meeting was held in hybrid mode, with other DECART project members joining online.

The opening session on 28 January 2025, was opened with a warm welcome by UKZN Executive Leaders. Participants included UKZN academics from Management, STEM and Education, Deputy Vice-Chancellors (DVCs), Deans and other executive leaders. The UKZN team held interactive workshops, based on the third work package in the DECART project, which focuses on curriculum transformation and leadership. Participants explored the ways in which leadership inhibits and enables curriculum transformation.



Project Meeting #5 at UKZN. DECART team at UKZN. Photo credit: UKZN Corporate Relations

The agenda centered on exploring how higher education can adapt its curricula and structures to thrive in a volatile, uncertain, complex, and ambiguous (VUCA) world. Through a blend of theoretical discussion and practical sessions, participants explored emerging challenges in curriculum design, shared institutional experiences, and tested tools to support strategic transformation.

The DECART project members also got to explore the UKZN campuses, meet staff and students, and visit various Schools/Departments. They also had an opportunity to visit the UKZN Graduate School of Business and Leadership, Astrophysics Research Centre, Microscopy and Microanalysis Unit, WASH (Water, Sanitation & Hygiene Research & Development Centre), Mechanical Engineering and the Aerospace group, Maths and Stats, and the Centre for Creative Arts.



DECART team visiting UKZN campuses. Photo credit: Cecile Gerwel Proches

For further info about the meeting, see UKZN Hosts International Visitors for Higher Education DECART Project Meeting

European Collaboration with South Africa

A central highlight of PM5 was the deepening of intercontinental collaboration between European and South African higher educational institutions. Grounded in principles of co-learning and mutual development, the partnership builds on both shared challenges and diverse experiences.

A unique feature of the South African contribution is the concept of **Ubuntu**, often translated as "I am because you are." This humanist philosophy shaped the spirit of the meeting, emphasizing interconnectedness, collective responsibility, and shared humanity in curriculum design. European partners contributed knowledge of systematization, accreditation, and digital integration, while South African institutions offered insights into managing education under systemic inequities, crisis conditions, and social transformation.

This cross-cultural engagement enriched the project's conceptual base and promoted a values-led approach to higher education reform that aligns with both global standards and local realities.

WP1 – Defining the Building Blocks of a Resilient Curriculum

Work Package 1 (WP1) plays a foundational role in the DECART project by developing a robust, theory-informed, and practical framework for resilient curriculum design. Drawing from literature reviews, partner surveys, and institutional analysis, WP1 identified key properties that characterize

resilient curricula, including flexibility, coherence, modularity, adaptability, and a strong quality culture. These findings were compiled into a "curriculum canvas"—a tool that enables institutions to map and self-assess their curriculum structures and their readiness to adapt to external pressures (e.g., policy changes, technological disruption, student diversity). WP1 also documented how different accreditation systems and governance models shape curriculum flexibility across partner countries. The outcomes of WP1 are critical in ensuring a shared language and conceptual foundation across the consortium, guiding the tools and strategies developed in WP2 and WP3.

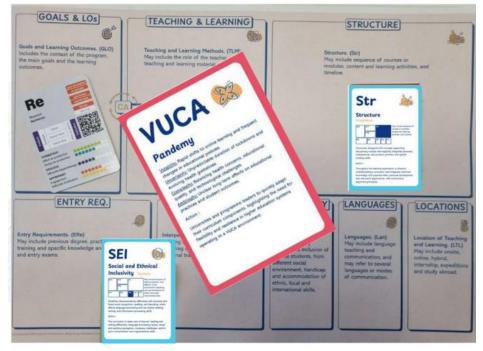


Photo credit: Siegfried Rouvrais, 2025

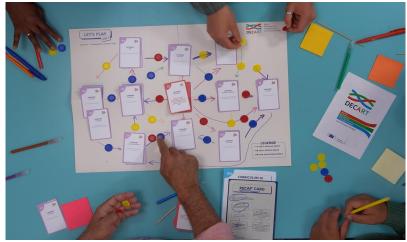
WP2 - From Concept to Practice: Decision Tools and a Resilience Serious Game



R. Waldeck from IMT Atlantique giving a speech on the Resilience Serious Game. Photo credit: Siegfried Rouvrais, 2025

One of the key deliverables is a **two-part decision-support tool**: (1) a self-assessment questionnaire for academic staff, measuring aspects like teaching adaptability, redundancy in content delivery, and responsiveness to change; and (2) a diagnostic framework to interpret results and identify weak spots. Building on this, WP2 is also co-designing an innovative **Serious Game** that simulates real-world challenges —such as AI disruption, pandemic-related closures, or regulatory shifts—used as dynamic learning triggers. Players must analyze impacts, identify vulnerabilities, and develop action plans, thereby experiencing curriculum transformation dynamics in an engaging, low-risk environment. The game is structured using a narrative and decision-card format and is intended as

both a professional development tool and a strategic planning resource. Its iterative development with input from all partners ensures contextual relevance and pedagogical impact.



Playing the Serious game. Photo credit: A. Diaz, IMT Atlantique CARAE, 2025

WP3 – Leadership and Stakeholder Engagement in Curriculum Transformation

Work Package 3 (WP3) focuses on the human and institutional dimensions of curriculum change, particularly leadership, decision-making, and stakeholder involvement. WP3 explores the drivers and barriers to curriculum transformation, such as resource constraints, resistance to change, and fragmented governance structures. It also identifies key internal and external stakeholders—including faculty, students, administrators, employers, and policymakers—whose engagement is essential for successful transformation. WP3 promotes leadership models that emphasize collaboration, emotional intelligence, strategic vision, and systems thinking. One of its goals is to build leadership capacity across institutions to better navigate disruptions, support inclusive reform, and embed long-term change. To this end, WP3 has developed a leadership development framework and initiated a series of workshops designed to empower academic leaders with the skills, mindsets, and tools needed for future-ready governance and curriculum development.

DECART Activities by Partner Universities

Each partner university has actively contributed to the dissemination of the DECART Project, both internally and externally, through targeted programs and initiatives.

IT Del: Sharing Session – DECART Project WP1

The Training of Trainers (ToT) team at IT Del organized a productive sharing session to disseminate key insights from Work Package 1 (WP1) of the DECART Project. This initiative aimed to foster a shared understanding and encourage local engagement in developing future-ready, resilient, and transformative curricula in higher education.

IT Del: Exploring Serious Games by IT Del team

As part of ongoing activities under the DECART Project Work Package 1 (WP1), the IT Del Training of Trainers (ToT) team conducted a follow-up sharing session focused on innovative approaches to curriculum development. The session highlighted SUCRE (SUpporting CUrriculum REsilience), a cooperative serious game aimed at enhancing the resilience of higher education curricula. SUCRE provides an interactive platform where participants collaboratively respond to a variety of triggering events that impact academic programs. Through strategic decision-making, the game fosters critical thinking and encourages long-term adaptability in curriculum planning.



Photo credit: Arlinta Barus, 2025

UKZN: Exploring Curriculum Design in VUCA World

In April 2025, the DECART UKZN team successfully conducted a workshop at the University of KwaZulu-Natal (UKZN) in Durban, South Africa. The event was hosted in collaboration with the UKZN Teaching and Learning Office (UTLO). The interactive workshop was aimed at enabling participants to understand how VUCA-like events impact curricular. was designed to have participants explore key components to construct an agile curriculum canvas that integrates VUCA like events (WP1, WP2).



Participants at the workshop. Photo credit: UKZN Corporate Relations

UKZN: Stakeholder Engagement and Curriculum Transformation Workshop

In May 2025, the DECART UKZN team facilitated a workshop on Stakeholder Engagement and Curriculum Transformation (WP3) at the University of KwaZulu-Natal (UKZN) in Durban, South Africa. The event was organised with the support of the UKZN Teaching and Learning Office (UTLO). Participants engaged in a stakeholder analysis exercise, which involved drawing rich pictures (systems thinking tool), to identify stakeholders, and their interests and concerns.



Participants engaged in the rich pictures. Photo credit: Cecile Gerwel Proches

Insights into Curriculum Resilience: Video from IPHE2 in Aachen

A group *Gender and Diversity in Engineering* at RWTH Aachen University organized a DECART meeting in December 2024. Work on further developing and testing the serious game that simulates the challenges of a VUCA environment for curriculum design across several phases was done. This game-based approach provided partners with practical insights into the transformation of curricula and offered valuable input for our ongoing project activities.

Another key focus of the meeting was the development of a decision-making tool to support universities in systematically assessing and strengthening the resilience of their curricula.

In addition to these activities, a video showcasing the IPHE2 in Aachen, which offers a glimpse into the project's partners work and the main outcomes of this meeting was developed: <u>https://www.youtube.com/watch?v=4Qgl_gE-JIQ&t=1s</u>

Publications

PM5 also addressed dissemination strategies and upcoming publications. Several academic articles and policy briefs are in preparation, focusing on themes such as curriculum resilience, gamification for learning design, and inclusive leadership. Partners also discussed participation in international conferences, stakeholder engagement events, and knowledge-sharing platforms. The consortium aims to reach both academic and practitioner audiences, ensuring that DECART outcomes influence broader educational policy and practice in both Europe and South Africa.

- Waldeck, R., Gosselin, N., Rouvrais, S., Barus, A., Liem, I., Silalahi, S., Sihombing, T., Stepani, E., Gerwel Proches, C., Kanyangale, M., James, A., Audunsson, H., Lemke, C., Winkens, A.-K., Leicht-Scholten, C., Dagienė, V. (2025). A Serious game for University Curriculum REsilience: SUCRE, working paper January 2025.
- James, A., Gerwel Proches, C., Kanyangale, A., Rouvrais, S., Waldeck, R., Audunsson, H., Dolgopolovas, V. & Chelin, N. (2025). Catalyzing Curriculum Transformation to Advance Industry 5.0 Engineering Education. IIEE EDUCON 2025, London, UK, 22-25 April 2025.
- Gerwel Proches, C., Kanyangale, A., James, A., Barus, A., Rouvrais, A., Waldeck, R., Audunsson, H., Matthiasdottir, A., Dagiene, V. & Lemke, C. (2025). Stakeholder analysis for curriculum transformation in higher engineering education. Proceedings of the 21st International CDIO Conference, Melbourne, Australia, June 3-6, 2025.
- Barus A., Rouvrais, S., Audunsson H., Sinambela E. & Silalahi S (2025)., AUSTRALIA-ASIA NOMADIC CURRICULUM CODESIGN, Proceedings of the 21st International CDIO Conference, Melbourne, Australia, June 3-6, 2025.
- Waldeck, R., Rouvrais, Un jeu sérieux pour renforcer la résilience. Plus qu'un jeu sérieux, un processus d'aide à la décision. Rencontres Interdisciplinaires sur les Systèmes Complexes Naturels et Artificiels. 31ème édition des journées de Rochebrune, 2025.

Welcome to the last meeting PM6 and IPHE3 at Vilnius University

Final PM6 is arranged on July 7-8, and IPHE3 after then on July 9-10, 2005



Photo credit: Valentina Dagienė, Vilnius university, 2025





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