

CHARM-EU Educational Principles 2024 Update

What are the CHARM-EU educational principles?

The CHARM-EU educational principles represent the guiding or organising concepts that underpin the design of a CHARM-EU educational experience. Some of these principles relate to ‘how’ we teach, others to ‘what’ we teach, and some intersect across ‘how’ and ‘what’ we teach. It is important to note that not every CHARM-EU educational experience must integrate every principle, but that they are considered in some way in its design and implementation.

How do CHARM-EU use their educational principles?

We use educational principles in CHARM-EU to:

- Scaffold and guide our teaching and learning
- Support CHARM-EU teachers to align how they teach with the principles of CHARM-EU
- Make sure our teaching and learning approaches are consistent
- Address current innovations and best practices in teaching

Our educational principles:

Sustainability

CHARM-EU aims to educate its students to create solutions “to secure a sustainable, peaceful, prosperous and equitable life on Earth for everyone now and in the future” (UNESCO, 2017). CHARM-EU research and education supports the United Nations Sustainable Development Goals and key European missions including those in the Horizon Europe Framework Programme and the European Green Deal. Its programmes support the development of UNESCO’s Education for Sustainable Development competencies.

Example: The CHARM-EU [MSc in Global Challenges for Sustainability](#) incorporates sustainability theory and practice across all modules in an integrated transdisciplinary manner.

Transversal skills

CHARM-EU educational programs are designed to consistently offer students the opportunity to develop essential transversal skills required to tackle global challenges. Transversal skills are those typically considered as not specifically related to a particular job, task, academic discipline, or area of knowledge that can be used in a wide variety of situations and work settings. These skills include critical and innovative thinking, hybrid communication and collaboration, self-management skills, information and data literacy, analytical thinking, ethical sensitivity, adaptability, entrepreneurship, as well as leadership and project management.

Example: Our MSc students are taught and assessed in terms of Programme Learning Outcomes, many of which are directly related to transversal skills such as Communication and Collaboration.

Transdisciplinarity

Global challenges are complex problems that require input from equally complex networks of individuals and groups to identify and define problems. CHARM-EU is a transdisciplinary university alliance in which all stakeholders, students, academic and extra academic actors collaborate equally to tackle global challenges, to create new knowledge, and to transgress boundaries. Transdisciplinarity develops in students the ability to use theoretical frameworks to analyse complex problems, source and appraise data, assess stakeholder needs, build collaboration and teamwork, and create action plans to develop solutions.

Example: Our MSc students are from many disciplinary backgrounds and work together on sustainability challenges with external stakeholders throughout the programme. This mix of disciplinary backgrounds, scaffolded with transdisciplinary teaching by teachers and societal stakeholders from multiple disciplines and sectors, fosters educational excellence to address global challenges.

Challenge-based learning (CBL)

The CHARM-EU curriculum is challenge-based and built on trans-institutional research missions focused on solving global and local challenges. Students learn through Challenge-Based Learning (CBL), an educational approach that frames learning around global, real-world, authentic challenges. These challenges are co-developed, investigated and acted upon by students and multidisciplinary stakeholders, including academic and extra-academic (social and traditional enterprise) actors.

Example: Many of our modules use CBL to scaffold teaching and learning and employ the [CBL Engage, Investigate, Act](#) cycle to structure student challenges.

Research-based learning (RBL)

The CHARM-EU curriculum is research-based: it is deeply connected to research strengths and practices of its member universities. CHARM-EU facilitates innovation and networks across education and research and, through Research-Based Learning (RBL), students develop the skills to analyse and interpret information, reach conclusions and, wherever relevant, propose solutions.

Example: Our MSc students experience and reflect on the full process of a research project at multiple times during their programme (e.g. research question development, methodological training, data gathering, and reporting), culminating in an individual research-based report in their Capstone project.

Technology-enhanced

CHARM-EU explores and integrates new technologies to enhance and innovate education, research and pedagogy. Following a learner-centered approach of education, technology is used not only for instructional purposes, but to promote self-directed and self-paced acquisition of knowledge, skills, and attitudes. This includes the development of digital skills as described in relevant digital competence frameworks. Hybrid and virtual learning environments provide optimal conditions for new ways of learning and teaching, enabling cross-location learning and enhancing flexibility, mobility, and accessibility for students and teachers alike.

Example: CHARM-EU uses hybrid classrooms in its MSc, allowing for inter-institutional collaboration across geographical boundaries.

Student-centred

Students are active partners in independent and collaborative learning and can exercise flexibility in time and location with regard to their learning experience. Students can choose and contribute to challenge pathways as a group or individually to fulfil their professional and educational ambitions and support their personal needs. Assessment methods strive to be student-centered, holistic, feedback-focused, mentor-supported, flexible, and outcome-based.

Example: The MSc has been developed with student participants to ensure that their needs are met. Throughout the MSc, teaching staff are encouraged to facilitate rather than instruct to ensure that students have an active and central part of the learning process. CHARM-EU has student representation on multiple governance structures, and students are consulted in many strategic and operational decisions.

Situated learning

Students learn through social interaction in authentic, realistic contexts. They participate in networks and/or communities and gradually learn and grow from novices into experts, building their identity throughout their studies. Students learn authentically in close collaboration with global and local partners in a variety of professional environments, for example, research groups and laboratories, enterprise, civic organisations and administrations.

Example: During the second phase of the MSc, students embark on a blended mobility to a CHARM-EU country, where they closely collaborate with local stakeholders on challenges that they are facing.

Transnational and intercultural learning

CHARM-EU educational programmes offer a dynamic environment for transnational and intercultural learning. Our diverse teaching staff, representing academic experts and external stakeholders from various cultures and nations, provide students with a unique global perspective. Collaborating with international peers and stakeholders, coupled with

mobility, and internationalisation “at home,” ensures a dynamic, multilingual, and globally-oriented educational journey.

Example: Mobility is embedded within our MSc programme, whereby CHARM-EU MSc students move between CHARM-EU partner institutions at least twice during the programme. Mobility can be both physical and virtual, facilitated by the CHARM-EU hybrid classrooms.

Inclusivity

CHARM-EU educational programmes are designed to respect the diversity of students and are adapted to different students’ learning needs and preferences taking into consideration their backgrounds or abilities. They will enable all students to take part in learning and fulfil their potential. Where possible, any barriers that prevent students from learning are minimised or removed. Designing the CHARM-EU teaching and learning environment by applying universal design educational principles (multiple means of engagement, representation, and expression) is a proactive rather than a retrospective approach which fosters access and participation in education to the greatest extent of students possible.

Example: CHARM-EU encourages applications from all candidates who fulfil the MSc specific requirements, regardless of their backgrounds, lived experiences, and access needs. In order to ensure access and inclusion, MSc applicants from under-represented communities (in terms of age, gender, family status, disability, sexual orientation, race and ethnic origin, religion, migration status, membership of the Roma and Traveller communities, and socio-economic background in all aspects of higher education, among others), that wish to be considered for 10 additional points can indicate this on their application.

Additional Resources

- For further details about each of these principles please refer to our CHARM-EU [Pedagogical Guidelines](#).
- [Learn how to integrate CHARM-EU educational principles into your teaching with these practical tips](#)

Development

The CHARM-EU educational principles are the result of a series of workshops held throughout 2019 (Utrecht, June 2019, Budapest, September 2019, and Dublin, February 2020) in which all CHARM-EU partners articulated an educational philosophy, mission, vision, and values for CHARM-EU educational programmes. They were reviewed and revised in March and April 2020 by the Work Package (WP) 3 (Curriculum Design) team to include feedback from Work Packages 5 (Mobility) and 6 (Inclusiveness).

Subsequently, as part of the CHARM8 project, a systematic review of the educational principles was undertaken by WP3 (Education) in 2023/2024. As part of this review, the educational principles were updated following a thorough evaluation with the CHARM-EU Academic council, students, staff, stakeholders, and educationalists.