CHARM-EU Educational Principles
The CHARM-EU educational principles (Figure 1) represent the guiding or organising concepts that underpin the design of a CHARM-EU educational experience. They 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 3 team to included feedback from Work Packages 5 and 6.

1. Challenge-driven
The CHARM-EU curriculum is challenge-driven and built on trans-institutional research missions focused on solving global 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.

2. Research-led, research-based
The CHARM-EU curriculum is research-led: it is deeply connected to research strengths and practices of its member universities. Students are actively engaged with researchers and, through Research-Based Learning (RBL), develop the skills to analyse and interpret information, reach conclusions and, wherever relevant, propose solutions.

3. Sustainability
CHARM-EU educates all stakeholders (students, academic and extra-academic actors) 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.

4. Technology-enhanced
CHARM-EU explores and implements technology that supports education, didactics, research and pedagogy. This will enhance existing models of learning and develop new models that meaningfully integrate technology in learning. Technology-enhanced learning is not only instructional but paves the way for interaction and knowledge construction through the use of digital technology in education. Technology will be built into the educational experience and used to support flexibility, accessibility and mobility.

5. Student-centred
Students are active partners in independent and collaborative learning and can exercise flexibility in time and location with regards 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.

6. 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 partners in a variety of professional environments, for example, research groups and laboratories, enterprise, civic organisations and administrations.

7. Transversal skills
CHARM-EU programmes are designed to provide consistent opportunity for the development of non-specific competences, for example, transversal skills such as critical and innovative thinking, inter- and intra-personal skills, global citizenship, media and information literacy, project management, problem-solving and entrepreneurialism.

8. 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 in which all stakeholders – students, academic and extra-academic actors – collaborate equally to tackle global challenges. 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. It is built on the foundation of disciplinary depth, which is central to the CHARM-EU educational mission.

9. Transnational and intercultural learning
CHARM-EU educational programmes provide students as well as academic and non-academic staff with transnational and intercultural learning opportunities through mobility and internationalisation ‘at home’.

10. 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.
Figure 1: CHARM-EU Educational Principles