

PhD Course in	HUMAN-CENTRED ARTIFICIAL INTELLIGENCE: FOUNDATIONS AND APPLICATIONS
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Duration	3 years - Starting date: November 2 nd 2026
Disciplines	All disciplines belonging to Area 1: Mathematical and Computer Sciences, Computer Engineering, Environmental Technical Physics, Mathematical Methods for Economics and Actuarial and Financial Sciences, Statistics, Statistics for Experimental and Technological Research, Social Statistics, Psychometrics, Neuropsychology and Cognitive Neurosciences, General Psychology, and Cellular and Applied Biology.
PhD Programme description	The PhD Programme in “Human-Centred Artificial Intelligence: Foundations and Applications” is embedded within the framework of the INGENIUM Alliance of European Universities and it is developed in close collaboration with its partner institutions, fostering an integrated European environment for doctoral education, research, and innovation. In addition to the institution formally involved in the co-funding of the current doctoral cycle, namely Munster Technological University (MTU, Ireland), the programme benefits from the active participation of several partner universities within the INGENIUM Alliance, including the University of Oviedo (UNIOVI, Spain), Karlsruhe University of Applied Sciences (HKA, Germany), Gheorghe Asachi Technical University of Iași (TUIASI, Romania), South-Eastern Finland University of Applied Sciences (Xamk, Finland), and the University of Skövde (HiS, Sweden). Representatives of these institutions are members of the PhD Board and contribute to the programme’s governance, scientific development, and quality assurance processes. They actively support doctoral training through supervision and mentoring activities, participation in doctoral courses, workshops, seminars, and summer schools, as well as by promoting international mobility opportunities and facilitating access to research infrastructures. Furthermore, INGENIUM partner universities may participate in the supervision of doctoral candidates through joint supervision agreements and, where appropriate, cotutelle arrangements aimed at awarding a double or joint doctoral degree. Specific agreements will be defined on a case-by-case basis, in accordance with the regulations of the institutions involved. Although some universities may not provide direct financial support for the current doctoral cycle, their contribution significantly strengthens the programme’s international, interdisciplinary, and collaborative character, enhancing its integration within the European Higher Education and Research Areas. The PhD Programme is a joint international programme of advanced education and research dedicated to the design, development, analysis, and evaluation of Artificial Intelligence (AI) systems that are aligned with human values, needs, and capabilities. It has been established in response to the rapid evolution of AI technologies and the growing awareness that technical performance alone is not sufficient: intelligent systems must also be transparent, trustworthy, explainable, fair, usable, and socially responsible. The programme combines the scientific foundations of Artificial Intelligence—including machine learning, automated reasoning, multi-agent systems, optimization, natural language processing, computer vision, computational social choice, data mining, knowledge

	representation, robotics, planning, and data-driven methodologies—with interdisciplinary approaches drawn from human-computer interaction, cognitive science, biology, ethics, psychology, and the social sciences. It therefore promotes the integration of principles, methodologies, and technologies from a wide range of disciplines, including computer science, mathematics, physics, robotics, biology, medicine, and cognitive sciences. The programme also encourages research on human–AI interaction, immersive and collaborative technologies, cognitive and creative AI models, and applications in domains such as healthcare, biology, digital transformation, sustainability, public governance, and democratic participation. Research activities are organized around several major thematic areas: theoretical foundations of human-centred AI, applications of human-centred AI, trustworthy and responsible AI, human–AI interaction, cognitive and creative AI, AI for health and global challenges, technological resilience, and democratic futures. Research projects are characterized by methodological rigor, scientific innovation, and a strong focus on the social and institutional relevance and impact of AI technologies. The programme operates within a collaborative research environment that brings together expertise primarily from computer science, while also involving engineering, logic and mathematical analysis, physics, biology, economics, and psychology. This environment fosters interdisciplinary dialogue and the development of scholars capable of contributing to the advancement of responsible, trustworthy, and human-centred AI systems. The educational pathway adopts an international co-supervision model, including mobility across partner institutions and potential collaborations with public and private international partners. All activities are oriented towards open innovation, technology transfer, and societal impact, in line with the priorities of the United Nations 2030 Agenda for Sustainable Development. A mandatory international visiting period of at least 6 months is required. In the case of a scholarship funded by MTU, or if applying for a double degree, the mandatory international visiting period must be at least 12 months.
PhD Website	https://www.scuolasuperiore.unich.it/offerta-formativa https://www.dec.unich.it/home-human-centred-artificial-intelligence-foundations-and-applications
Available positions	n. 4 positions of which: n. 2 funded by the University. n. 2 funded by Munster Technological University (MTU).
Admission requirements	See art. 2 PhD Call 42nd cycle - Academic Year 2026/2027 Where enrolment at a partner institution is required (e.g. for joint or double degree pathways), applicants must also satisfy the admission requirements and enrolment regulations of all participating universities.
Language	English language knowledge is required
Date publication pre-Selection	September 14, 2026
Exam date	The oral examination will be held remotely on September 17th, 2026 . Admitted candidates will be contacted by email by the Selection Committee, which will provide the link and the scheduled time for the oral examination.