CURRICULUM T&LS3 EDUCATIONAL TECHNOLOGIES

Doctoral scholarship for a restricted research topic (M.D. 629/2024)	**2**
Doctoral scholarship for a restricted research topic (M.D. 630/2024)	**3**
Doctoral scholarships provided and funded by partner Institutions or Universities	**0**
Doctoral positions without scholarship	**0**

Available positions	Research topic	Details
n. 1 doctoral scholarship D.M. n. 629/2024 Inv. 3.4 Digital and environmental transitions	**[DM629-TDA]** *MixEd: Exploring the Potential, Benefits, and Challenges of Mixed Reality in Education* (Main centre of activities: School of Architecure and Design UNICAM, Ascoli Piceno)	***Description of the activities*** The research project aims to explore the potential and educational benefits of integrating Mixed Reality (MR) technologies into educational pathways, contributing to the development of more effective and inclusive teaching methodologies. The project will investigate not only the effectiveness of MR technologies in terms of learning outcomes but also their sustainability and scalability in the educational context, considering aspects such as costs, teacher training, and necessary technological infrastructure. ***Obligations of PhD students*** Periods of study and research in companies or research centres for **six (6) months.** Study and research period of **six (6) months abroad**.
n. 1 doctoral scholarship D.M. n. 629/2024 Inv. 4.1 Public Administration	**[DM629–PA]** *Adaptive Intelligent Learning Environments* (Main centre of activities: University of Naples Federico II)	***Description of the activities*** The availability of increasingly powerful technological devices allows learners to immerse themselves in their learning environment at any time. An environment that thanks to AI can be enhanced with physical artificial agents (robots, for a tangible experience) or simulated (from simple 3D to extended reality). Through constant monitoring of learning progress, the goal is the study and implementation of an adaptive learning environment that can motivate and help learners to develop specific skills. ***Obligations of PhD students*** Periods of study and research in Public administration, companies or research centres for at least **six (6) months.** Study and research period of **six (6) months abroad**.

Available positions	Research topic	Details
n. 1 doctoral scholarship D.M. n. 630/2024 Inv. 3.3 From Research to Enterprise	**[DM630]** *Gamification and Artificial Intellingence in Education* (Main centre of activities: European University of Rome)	***Description of the activities*** The research project aims to promote innovative educational paths that use digital solutions to make subject learning more engaging and transformative, stimulating knowledge, skills and values fundamental to the Education for Life model. The aim is to analyse possible integrations between gamification and artificial intelligence for the personalisation of learning and the construction of dynamic and immersive educational experiences. ***Obligations of PhD students*** Periods of study and research in companies for at least **six (6) months**. Study and research period of **six (6) months abroad**.
n. 1 doctoral scholarship D.M. n. 630/2024 Inv. 3.3 From Research to Enterprise	**[DM630]** *AI, Digital Automation & Learning Management System* (Main centre of activities: Università Degli Studi di Salerno, Dipartimento Scienze Umane, Filosofiche e della Formazione)	***Description of the activities*** The P.H.D. student will be involved in research activities related to the following topics: • Literature analysis on security standards used in widely used Learning Management Systems (LMS). • Development of algorithms and software for cybersecurity. • Analysis and fine-tuning of AI models applicable in the field of cybersecurity. • Development of algorithms and software for digital automation. • Application and optimization of artificial intelligence models in Learning Management Systems. • Data analysis and interpretation to improve the effectiveness of digital systems. • Design of BPMN (Business Process Model and Notation) models and workflows for business process automation, with a particular focus on AI integration. • Natural language processing (NLP) to improve interaction and content management. • Development of microservices-based systems with gateway patterns for efficient and scalable application management. ***Obligations of PhD students*** Periods of study and research in companies for at least **twelve (12) months.** Study and research period of **six (6) months abroad**.

Available positions	Research topic	Details
n. 1 doctoral scholarship **D.M. n. 630/2024** **Inv. 3.3** From Research to Enterprise	**[DM630]** *XR Technologies and Virtual Learning Environment* (Main centre of activities: Università Degli Studi di Salerno, Dipartimento Scienze Umane, Filosofiche e della Formazione)	***Description of the activities*** The candidate will be involved in activities related to the design and implementation of permanent training and education models aimed at reducing the mismatch between labor supply and demand. The primary objective is to create training design methodologies that will reduce the skill gap effect on workers by observing the labor market and the needs of companies. The design will involve both traditional teaching methodologies and those supported by new technologies, in particular through the use of augmented and virtual reality headsets. ***Obligations of PhD students*** Periods of study and research in companies for at least **twelve (12) months.** Study and research period **of six (6) months abroad**.