

# Seminari del Departament d'Estadística i Investigació Operativa

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**Title:** Towards Ubiquitous Education: Implementing and Controlling Education 4.0.

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**Abstract:** In a context of accelerated change driven by the irruption of Industry 4.0, we will explore how these can act as engines for transformation in the classroom—revolutionizing teaching methodologies while simultaneously reinforcing the role of the professor. We will analyse how the concept of ubiquitous education becomes a central element of this metamorphosis, facilitating the seamless integration of technologies such as artificial intelligence and digital twins into the educational environment. Furthermore, we will present concrete examples of their application at the UPC and FUPC, highlighting improvements in the learning experience. Finally, we will discuss the challenges and risks associated with this educational transformation.

**Bio:**

Pau Fonseca Casas holds a PhD in Statistics and Operations Research from Universitat Politècnica de Catalunya (UPC). He is a Professor at the UPC, where he teaches in the fields of Simulation, Data Processing, Operations Research, and Statistics. He collaborates with the Simulació Ambiental area of the UPC's inLab FIB, leading simulation projects primarily linked to the industrial and environmental sectors. He is a member of the Comissió Indústria 4.0 d'Enginyers de Catalunya ([www.comissioindustria40.cat](http://www.comissioindustria40.cat)).

Xavier Pi i Palomés is an Industrial Engineer graduated from the Universitat Politècnica de Catalunya (UPC) and a judicial expert witness specializing in Industrial Informatics and ICT. He has served as a Software Engineering lecturer at the Barcelona School of Informatics (FIB-UPC) and at the Open University of Catalonia (UOC). He is a member of the Comissió Indústria 4.0 d'Enginyers de Catalunya ([www.comissioindustria40.cat](http://www.comissioindustria40.cat)).