

Titolo del corso	<b>Computer and Data Science Innovation in Multidisciplinary Areas</b>
Sottotitolo	Emerging Models and Paradigms in Network Science
Docente	Dr. Francesco Cauteruccio (Polytechnic University of Marche, Italy)
Abstract	<p>Network science, one of the key disciplines in data science, focuses on studying complex systems consisting of interconnected entities represented as networks or graphs. By exploring the structure, dynamics, and behavior of these networks, it provides valuable insights into domains such as social networks and biological networks. As data science continues to evolve, so does network science. This course delves into the latest advancements in network science, emphasizing models and approaches to analyze multi-dimensional and time-varying relationships in networks. It covers established and innovative models like temporal networks, multilayer networks, stream graphs, and hypernetworks, along with new methodologies to model network scenarios and examine phenomena like entity influence and centrality. The course aims to equip both experts and non-experts with the skills to address complex network analysis challenges in diverse domains, combining theoretical understanding with practical application.</p>