

## Programme of activities

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Activities comprise three modules for the course “Organisational Theory” and a seminar series open to other programmes within the E4E PhD School:

- Module 1 - Expertise in the era of digital influence
- Module 2 - Simple graphs in business settings: the role of visualizations in business
- Module 3 - Digital Sociology of professions: how to study professionalization using social media data

These learning units of 12 hours each expose students to different concepts of science & technology studies, the sociology of expertise and the sociology of professions, with a particular focus on new forms of expertise and forms of data to study them. A syllabus including a list of suggested readings will be handed out before each seminar.

Seminar Series: The seminar series summarises my book “Social Data Science Xennials: between analog and digital social research” published by Palgrave in November 2020. I will discuss how to study technological phenomena when they unfold over time and across disparate sites. How can the researcher account for extended phenomena using quali-quantitative methods? This series of three seminars of 4 hours each will comment upon the empirical results and the methodological evolutions of my research process from the critique to ethnographic methods to the integration of computational and statistical methods in the development of mixed methods for the study of expert work in the IT sector.

**Teaching language:** English or Italian.

**Delivery mode:** on-campus or hybrid (with elements of online learning).

### **Module 1: Expertise in the era of digital influence**

One of the most impactful effects of easier access to a larger proportion of data on an increasing number of phenomena is the use of rankings to assess all aspects of the performance of products and organizations based on customer feedback. This seminar provides students with skills to develop a comprehensive understanding of the making of organizational reputation indices; compare different methods to collect data on digital influence; capture the effects of rankings on organizations; manage reputation risk in the light of new social media-based ranking systems. Our analysis will start from media ranking and progressively extend to automated ranking systems.

### **Module 2: Simple graphs in business settings: the role of visualizations in business**

The 2x2 matrix is the premier figuration for representing business valuations but remains the unexplained success of the business world. Scholars have a rather vague sense of how to theorise its influences on processes of decision-making and valuation in markets. The temptation is to dismiss the matrix as ‘overly simple’. More difficult still, however, is to account

for the disproportionality between the simplicity of this format and its effects. One reading is that simple graphs are not mere supplements but intrinsic and constitutive parts of business evaluation processes. In this seminar we extend the recent interdisciplinary discussions of 'calculative agency' and we argue the case for more specific terminology to capture the heterogeneity of calculation in business settings.

### **Module 3: Digital Sociology of professions: how to study professionalization using social media data**

By applying social data science to large amounts of internet-generated data on job histories, this seminar discusses a project aiming at developing new knowledge to support workforce development policies and practices to address the ICT-skill gap. The gap in the ICT skills demanded versus skills available amounts in Europe to 272,000 jobs and it is meant to grow to 515,000 in 2020, with UK showing the highest gap in Europe, even before the potential restrictions on immigrants once the UK leaves the EU. Existing research focuses on the unstructured nature of entrepreneurial careers in the digital economy as one of the key reasons of a growing ICT skills gap. In professions such as law or medicine, early career entry and longer time spent in education mean that workers in these sectors enjoy a formal system of career progression. On the contrary, IT professionals originate from a wide variety of fields and education does not seem to play such a crucial role in their careers. The central question of this seminar is how to harness the potential of internet-generated professional networking data to better understand IT career pathways and provide a research base for workforce development policy in the new knowledge economy.