



**UNIVERSITÀ DEGLI STUDI  
DI BERGAMO**  
Dipartimento di Scienze umane e sociali



## **INDUSTRY 4.0: TRIGGERING FACTORS AND ENABLING SKILLS**

VIII Edition

1-2 December 2017  
Bergamo (Italy)  
Piazzale Sant'Agostino, n. 2

 #skills40





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Industry 4.0 is a manufacturing paradigm that has been around in socioeconomic settings since 2011. It originated in Germany as a tool to fulfil specific economic and political objectives. Within the space of a few years, the concept has come to encompass a set of technological, social, economic and cultural changes impacting processes of knowledge creation and dissemination. The local character of the Industry 4.0 phenomenon is visible for all to see, though the digital revolution and the Internet of Things (IoT) which have made the world we live in increasingly interconnected. Local areas provide the backdrop against which a revolution is taking place that goes beyond mere technology transfer, as it calls into question the idea we have of traditional educational models, work organisation patterns, welfare schemes and infrastructure planning (e.g. that related to research, logistics and telecommunications). While being concerned with the changes brought about by post-Fordism, this process has also contributed to shaping an economic and productive scenario where the distinction between sectors is increasingly blurred. Consequently, new business models are being established that are more receptive to external factors, above all environmental aspects and consumers' needs. Digital techniques have enhanced mass customisation and the creation of customised products, but this should come with a thorough review of current work and business organisation.





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For this reason, it is necessary to come to terms with the aspects that are prompting this revolution other than those strictly related to technology. In other words, the debate on these innovative processes should not be limited to the technological dimension and its links with work. An approach of this kind would overlook those qualitative elements that are marking a move away from the industrial relations systems, the training schemes and the employment patterns put in place in the 1900s.



In consideration of the above, and to continue on the path laid down by the past international conferences “[The Great Transformation of Work](#)” (Bergamo, 6-7 November 2015, and “[The Future of Work: A Matter of Sustainability](#)” (Bergamo, 10-11 November 2016) organised by ADAPT and the University of Bergamo, this year’s conference aims to provide insights into the challenges posed by Industry 4.0. Specifically, and through an interdisciplinary and comparative approach, the purpose is to reflect upon the pedagogical, psychological, social, institutional and regulatory factors that prompt the development of skills, training, knowledge infrastructures, employment safeguards and industrial relations processes to tackle the implications of this new paradigm.



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To this end, the [International Doctoral School in Labour Relations and Human Capital Formation](#) encourages professors, researchers, doctoral students, practitioners and all those who have an interest in the above-mentioned topics to submit a paper on the **following themes**:

### **(I) New skills and professional profiles:**

- Emerging skills and professional profiles in the Industry 4.0 context and ways to promote their development;
- Tools to evaluate skills gaps and training needs in light of shifting manufacturing processes and products;
- Ways to transfer and develop cross-disciplinary and meta-skills as a tool to support occupational transitions;
- Training schemes and processes to develop innovative professional profiles.

### **(II) (Knowledge) infrastructures**

- The role of research facilities, local hubs (e.g. digital innovation hubs, technology clusters, competence centres, industrial districts, science parks, etc.) and of local institutions;
- Local networks for innovation and training, networks consisting of schools and employers, and business networks;
- The use of network contracts to promote digitalisation.

### **(III) New safeguards and welfare systems**

- The governance of the labour market in relation to globalisation and the new role of local areas: a move away from active labour policies?
- New tools and models promoting employee welfare at the contractual, company and local level;
- New forms of inclusive protection in transitional labour markets (e.g. portability);
- The role of the social partners and private-social organisations in developing local networks for social protection.

### **(IV) Industrial relations and collective bargaining**

- The impact of technology on employees' tasks and employment grade systems;
- New terms laid down by collective bargaining as regards training and flexible arrangements about where and when work is performed;
- The impact of collective bargaining – especially that carried out at the local level – on the institutional setting.



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### Conference Scientific Committee

- The **Teaching Faculty** of the International Doctoral School in Human Capital Formation and Labour Relations;
- Members of **ADAPT's International Scientific Committee**.

### Abstract Submission

Abstracts shall be sent to [sid@unibg.it](mailto:sid@unibg.it) indicating “**Abstract Bergamo**” in the subject line.

### Deadlines

Submission of Abstracts: **1 September 2017**  
Notification of Selection: **30 September 2017**  
Confirmation of Participation: **3 November 2017**  
Submission of final papers: **30 November 2017**



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### Papers

The best papers presented at the conference will be selected and, depending on the topic, evaluated for publication in *Formazione persona lavoro*, *Professionalità Studi*, *Diritto delle Relazioni Industriali*, and *E-Journal of International and Comparative LABOUR STUDIES*. Editors will also consider for publication the papers by those who are unable to attend the conference but are willing to provide their contribution just the same.

### Costs

Participation in the conference is free. Participants must bear the costs for travel and accommodation, though a limited number of grants covering part of the travel expenses are available for selected Doctoral or university students whose papers are deemed of particular academic value.

### Further information

Further information is available [here](#) or by sending a mail to [sid@unibg.it](mailto:sid@unibg.it)