Alta Scuola Politecnica
14th cycle - Winter School 2019

The Fourth Industrial Revolution: promises and pitfalls in blending new and traditional approaches in manufacturing and service sectors

March, 11th – 15th
Loano (SV)

Coordinator   Paolo Neirotti
Tutors   G. Attanasio, R. Colombari, C. Montipò, D. Pesce, F. Strada

Monday, March 11th

10:45 – 11:00	**Welcome Address** *ASP Board*
11:00 – 11:45	**Introduction to the School** Paolo Neirotti, Politecnico di Torino, Dep. of Management and Production Engineering
11:45 – 13:15	**Technologies and architectures for data science and big data management** Elena Baralis, Politecnico di Torino, Dep. of Control and Computer Engineering
13:15	*Lunch*
14:30 – 15:30	**Knowledge discovery process: Self-tuning strategies for a deeper understanding of real industrial data** Tania Cerquitelli, Politecnico di Torino, Dep. of Control and Computer Engineering
15:30 – 16:45	**Data visualization and new machine-man interfaces: Augmented Reality (AR) and Virtual Reality (VR)** Andrea Bottino, Politecnico di Torino, Dep. of Control and Computer Engineering
17:05 – 17:30	**Introduction to the project work**
17:30 – 19:00	**Project work. Step 1**
19:00 – 19:30	**Wrap-up of the Day**

Tuesday, March 12th

09:00 – 10:45	**Industry 4.0: smart products, smart process and new business models** Marco Taisch, Politecnico di Milano, School of Management of Politecnico di Milano
11:15 – 12:30	**Industry 4.0 – Achievements and the Journey ahead** Guido Hertel, AT Kearney
12:30	*Lunch*
14:00 – 15:30	**Robots, vision, and data: how industrial automation is changing the production processes** Paolo Rocco, Politecnico di Milano, Dep. of Electronics, Information and Bioengineering
15:30 – 16:00	**Introduction to the project work – Step 2**
16:00 – 18:30	**Project work. Step 2**
18:30 – 19:00	**Wrap-up of the Day**

Wednesday, March 13th

09:00 – 11:00	**Technology: developments, promises and challenges over the years** Harry Boer, Aalborg University, The Faculty of Engineering and Science
11:30 – 13.00	**Digitalization and the transformation of work** Paolo Neirotti, Politecnico di Torino, Dep. of Management and Production Engineering
13.10	*Lunch*
14:15 – 15:15	**Enel and the digital transformation in electrical utilities** Giuseppe Amoroso,Enel
15:5 – 16:15	**The teaching factory and the i-Fab experience** Tommaso Rossi, Rossella Pozzi, LIUC – Università Cattaneo, Castellanza, School of Industrial Engineering
16:15 – 17:15	**Final Exam Presentation**, Alessandra Oppio, Emilio Paolucci, *ASP Board*
17:00 – 19:00	**Project work. Step 3**
19:00 – 19:30	**Wrap-up of the Day**

Plenary Sessions and ASP Events will take place in
Room Luna Rossa

09:00 – 10:30   **AI, big data and the legal regulatory framework**
Alessandro Mantelero, Politecnico di Torino, Dep. of Management and Production Engineering

11:10 – 12:00   **IKEA and its digital transformation**
FidesTosoni, Ikea

12:00 – 13:00   **Virtual Reality in healthcare and assisted living. SAM4.0Care:**
Smart Advanced Modeling for Care
Anna Osello, Politecnico di Torino, Dep. of Structural, Geotechnical and Building   Engineering

            13:00   *Lunch*

14:00 – 15:00   **Digitalization of the cultural heritage industry**
Valeria Gasparotti, Google

15:00 – 15:30   **Best practices in the Digital Transformation of cultural heritage: The Van Gogh Museum**
Danilo Pesce, Politecnico di Torino, Dep. of Management and Production Engineering

15:45 – 16:45   **World Class Manufacturing and the Digital Factory**
Francesco Canuto, FCA

17:00 – 19:00   **Project work. Step 4**

19:00 – 19:15   **Wrap-up of the Day**

Friday, March 15th

09:00 – 10:30   **The data deluge and how our brain works**
Giulio Zotteri, Politecnico di Torino, Interuniversity Department of Regional and Urban Studies and Planning (DIST)

11:00 – 12:30   **Digital Open Urban Twins**
Matteo Robiglio, Politecnico di Torino, Dep. of Architecture and Design
Antonio Vetrò, Dep. of Control and Computer Engineering

12:30 – 13:30   **Project Work Presentation**

            13:30   *Lunch*

Plenary Sessions and ASP Events will take place in
Room Luna Rossa