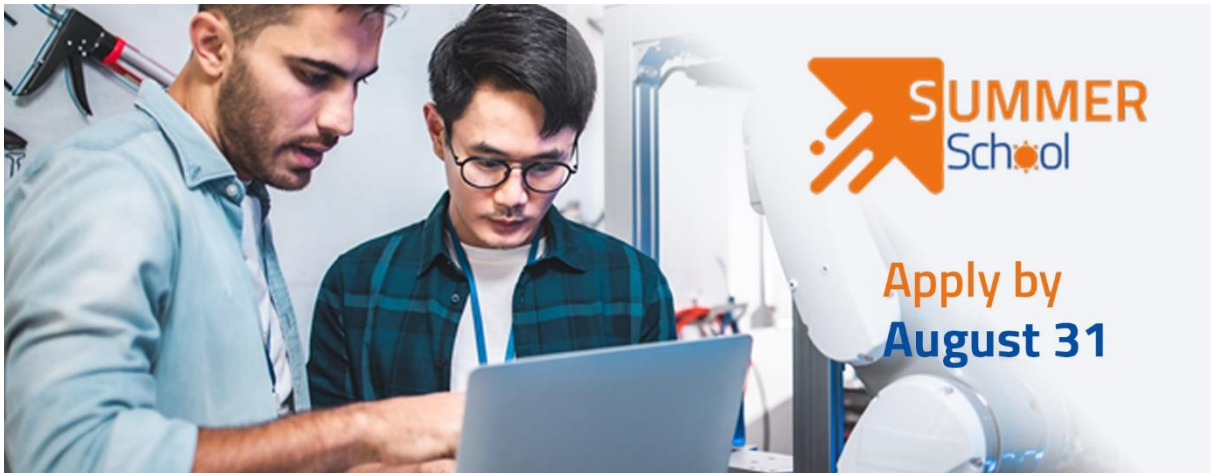


## Summer School on “The Way to Smart Manufacturing”



### Overview of the EIT Manufacturing Summer School 2021

The Summer School is the second academic event organized in the framework of the EIT Manufacturing Doctoral School program. Devoted to Smart Manufacturing, this event will provide current or prospective PhD students with the necessary skills, practical know-how, attitudes and values to meet complex demands in 4.0 industry environment.

The ‘smart manufacturing’ is indeed a key component of the transformation experienced by the manufacturing industry and appears as a main competitiveness driver. This technological shift produces a large amount of data at different levels, and of various nature (technological, operational, economic, environmental, as well as socio-cultural). It also raises new needs in terms of flexibility, resilience, and sustainability.

The EIT-M Summer School will be the opportunity for self-driven, ambitious PhD candidates to broaden their network with potential European partners and to boost their abilities and competencies in advanced tools for the design, implementation, organization, quality assessment and improvement of intelligent manufacturing systems. The Summer School will inspire and generate a highly skilled manufacturing workforce able to leverage manufacturing innovation, thereby contributing to the European competitiveness and the creation of high-level jobs.

The target audience is PhD students and professionals from industry with the right mindset to become movers and shakers ready to create a positive smart manufacturing impact by offering sustainable solutions.

## Organization and international mobility plan of the EIT-Manufacturing Summer School 2021

Considering that the health of the participants has the highest priority and anticipating the predictions on COVID-19 pandemic status Worldwide, the Summer School will be organized virtually in two steps with the objective of delivering knowledge, skills and attitudes preparing learners for creativity, innovation and entrepreneurship.

First step involves kick-off lectures and introduction of topics of hackathon provided by collaborating companies, also formation of teams with participants and tutors from academia and industry.

Second step will take place Sept 28-30 2021 with half day intensive online collaboration, discussions and lectures.

### Program of Summer School 2021

Starts remotely (16<sup>th</sup> of September) with workshops where industrial partners pitch industrial challenges and students collaboratively work on their solutions. During the “central week” (28<sup>th</sup>-30<sup>th</sup> September) students work together (in blended mode) in 8 hours of hacking time together with local mentors to translate their innovation into a feasible business solution. School includes lectures and hands-on training on: design thinking, proof of concept, ROS, levels of autonomy, etc.

<b>Training topics and modules courses</b>	<ul style="list-style-type: none"> <li>▪ Levels of autonomy</li> <li>▪ Human robot interaction</li> <li>▪ Introduction of ROS</li> <li>▪ Best practices and challenges from industry</li> <li>▪ Lean experimentation in product/service development</li> <li>▪ Innovation methods and creativity</li> </ul>
<b>Expected outcomes</b>	<ul style="list-style-type: none"> <li>▪ Generating start-ups and innovation within manufacturing companies and ecosystem contributing to European competitiveness</li> <li>▪ Ability to act and interact in new situations</li> <li>▪ Transdisciplinary expert-knowledge</li> <li>▪ Increased value of a degree—combining academia and industry network</li> <li>▪ Partnerships for career opportunities, recruiting or project cooperation</li> <li>▪ Real-life complexity experienced via Learning Factories</li> <li>▪ Domain-specific expert-knowledge</li> <li>▪ Social and ethical competence</li> <li>▪ European view of Smart Manufacturing and the future of industry</li> </ul>

## Calendar and Location

The EIT Manufacturing Summer School is held from 16<sup>th</sup> to 30<sup>th</sup> September 2021 and it is organized in two steps, the pre-event and the central week.

### Pre-Event

- Pre-event **lectures** times will be **on the 16<sup>th</sup> and 23<sup>th</sup> of September** (morning or afternoon).

### Central Week

- The central week (online) session of the Summer School 2021 will be scheduled between the **28<sup>th</sup> – 30<sup>th</sup> September 2021**.

Sept 28 <sup>th</sup> 2021	<ul style="list-style-type: none"> <li>Welcome ceremony</li> <li>Keynote lecture from industry</li> <li>Presentation on Business creation</li> <li>Lecture: levels of autonomy</li> <li>Online discussion of hackathon teams in separate sessions</li> </ul>
Sept 29 <sup>th</sup> 2021	<ul style="list-style-type: none"> <li>Lecture: Human robot interaction</li> <li>Hackathon               <ul style="list-style-type: none"> <li>Discussions in groups, pitch training, general discussions</li> </ul> </li> <li>Virtual get-together roundtable with virtual drinks</li> </ul>
Sept 30 <sup>th</sup> 2021	<ul style="list-style-type: none"> <li>Hackathon presentations</li> <li>Academic lecture</li> <li>Keynote presentation from industry</li> <li>Announcement of hackathon winners</li> <li>Closing ceremony.</li> </ul>

## Admissions/Applications

Applications must be submitted at [EITM Doctoral School Portal](#).

Applications consist in:

- a CV,
- a motivation letter,
- an abstract of the PhD/Research topic description or Professional experience in Manufacturing

More information about the documents are available at the EIT Manufacturing Summer School web page and application portal.

The applications will be provided to the EIT **Doctoral School Scientific and Industrial Committee** (SIC) for evaluation.

The EIT Manufacturing Summer School 2021 is targeted towards innovative manufacturing community (professionals and outstanding students) from Europe: Professionals from small and medium sized companies, people connected to smart manufacturing— e.g. start-ups and company employees, PhD candidates, scholars and students with relevant background in the innovation processes and sustainable manufacturing.

**Selection process:**

- The **Doctoral School Scientific and Industrial Committee** (SIC) will review the application materials through a competitive selection process based on the scientific excellency and the academic qualification of the applicants.
- Up to thirty participants will be selected from the submitted applications with balance gender participation and pan-European balance.

**Fees:**

Main fee	500€
PhD Students and professionals from EIT Manufacturing partners & Excellent PhD student from RIS	200€
PhD Students and professional from SIC* members	free of charge
Special offer for RIS women PhD students	free of charge

\*Scientific and Industrial Committee members contributing to the Summer School program

**The fee covers access to all digital materials, including lectures and access to online sessions**

**Global manufacturing Innovation will  
be led by Europe,  
With you by its side!**