



# Academic Highlights

MASTER IN INDUSTRY 4.0 – Final Conference in Malaysia  
on “Industrial 4.0 and Challenges for a Sustainable Future”

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are testing their laboratories by accessing them “REMOTELY”

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## MASTER IN INDUSTRY 4.0 – FINAL CONFERENCE IN MALAYSIA ON “INDUSTRIAL 4.0 AND CHALLENGES FOR A SUSTAINABLE FUTURE”

Companies are increasingly being more interconnected, digital and flexible: a new industrial revolution named Industry 4.0 is coming. Because of cultural and social shifts, new preferences are emerging with regard to education and skills development especially in countries such as Malaysia, Cambodia and Indonesia.

A pressing problem to be addressed is to fill the opening gap between the need (and the capability) of Asia businesses to adopt Industry 4.0 and the low readiness of the educational sector to provide industry-ready graduates.

Educational programmes in target country institutions need to be reinforced in order to prepare students to cope with the technological diversities of the field and the practical implications of applying these technologies to existing production and business models.



In order to cope with the existing needs, the European project Master Degree in Industry 4.0/Ind4.0, started four years ago, was aimed at delivering an MSc Programme in Industry 4.0 in the Higher Education Institutions of Cambodia, Indonesia and Malaysia all belonging to the ASEAN region. Within the reference of the project, from 3 to 6 October 2023, the “1st International Conference of Business and Technological Advances in Industry Revolution 4.0”, will be held in Sarawak (Malaysia).

The Minister for Education, Innovation and Talent Development will attend the event. Rationale of the conference stands on the emergence of the fourth industrial revolution in the past few decades. It has changed the technology, industries, and societal patterns and processes in the 21st-century due to increasing interconnectivity and smart automation.

In such context, the conference will aim at providing the platform for educators to share and discuss new approaches, teaching methodologies and strategies for the organization, structuring and execution of teaching programs for Industry Revolution 4.0.

It will bring together leading academicians, scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of the Fourth Industrial Revolution.

All most important stakeholders, will contribute to provide a platform for public and private policy makers, senior decision makers from industries and top experts of ICT companies, and stakeholders sharing their new ideas, original research results and practical development experiences.

The most important milestones of the projects will be highlighted and valorised. The objectives of the conference will be disseminating the curriculum development of higher education in Industrial 4.0, the latest developments of Industry 4.0, and finally, exploiting recent innovations, trends, and concerns in theory and practice as well as practical challenges encountered and solutions adopted in Smart Industries and the Fourth Industrial Revolution.

To register to the event and receive for information, [www.kaib.com.my/conference](http://www.kaib.com.my/conference)

by Ilaria Reggiani



## WORKSHOP ON COMMUNITY REPORTING METHOD

A workshop on how collect the stories using the Community reporting method was organized by Guglielmo Marconi University on 27 April in the framework of the project Dig-2-Inc.



Dig-2-Inc – Inclusive Digital Learning is an Erasmus+ project that offers training and design principles to staff members to facilitate inclusion in higher education. It also develops a system of micro-credentials and open badges to credential students' acquisition of academic skills in second and third cycle education.

With a novel method of Community reporting, teachers and students are engaged to voice out experiences of diversity and support a culture of active engagement, equality and non-discrimination. Special focus of the project is in socioeconomic inclusion, but also other aspects of inclusion and diversity, including those relating to ethnicity, migration background, ability, health, gender, sexuality, and geographic location are considered.

The participants learned how to share their own story, and make other people's stories heard. During the training session, learners got to grips with storytelling techniques such as Snapshot Stories, Dialogue interviewing and Personal Monologues. Part of the training was dedicated to the curation processes which helps to understand the insights that can be found in people's stories, ethical principles.

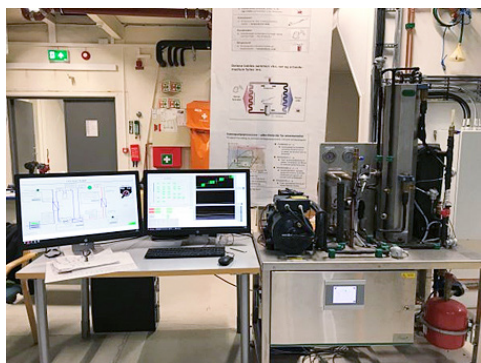
At the end of the practical part, the participants had possibility to put in practice the theoretical input received and record their own videos with the unique stories some of with will contribute to the project's research.

You can read more about the project in English at [dig-2-inc.eu](http://dig-2-inc.eu) and follow #dig2inc in social media!



# Spotlight on Research

## STUDENTS OF FIVE EUROPEAN UNIVERSITIES ARE TESTING THEIR LABORATORIES BY ACCESSING THEM “REMOTELY”



During the Covid-19 pandemic the educational systems came to a sudden stop, forcing learning institutions, including traditional universities, to move their lessons online. Complementary activities, such as practical experiments, were left aside. Practical activities are crucial for science and engineering subjects, because they allow students to acquire skills such as working in group, set up an experiment or use real equipment.

RE-OPEN project, coordinated by Marconi University, aims to overcome the challenges of online education by creating a collaborative remote laboratories infrastructure in 5 European universities: Università degli Studi Guglielmo Marconi from Italy, Fachhochschule Technikum Wien from Austria, Munster Technological University from Ireland, Norwegian University of Science and Technology from Norway, University of Huelva from Spain.

A standard ICT communication protocol was designed to allow the access of the ICT infrastructure and tools located at each university laboratory class for the remote control of the experimental system to perform experimental work.

The ICT communication protocol includes the standard devices, communications outputs and the LMS learning platform (developed with Moodle) as user interface. This RE-OPEN Moodle platform hosts the remote laboratories of the five European universities.

The Remote laboratory ICT system and infrastructure for the connection at distance of the physical laboratories (developed with the support of the ICT company VJ Technology) is also reinforced by the Augmented Reality (AR) as additional guide during laboratory experiments.

Currently, a sample of 44 students enrolled in STEM and engineering faculties and subjects of the five European universities are testing remotely the laboratory of their own university and at least other two laboratories of the others universities, sharing the experiences with the other students at national and international level.



by Susanna Correnti



## UNITEL GUIDELINES FOR MODERNIZING HEIS ENGINEERING AND STEM STUDIES CURRICULUM BY INTEGRATING NEW PEDAGOGICAL AND DIGITAL LEARNING APPROACHES

Due to the continuous succession of sanctions, the Iranian economy remains particularly unstable. In its World Economic Outlook released late on October, the International Monetary Fund (IMF) said Iran's oil-driven economy is expected to shrink by 9.5 percent this year, down from a previous estimate of a 6% contraction as the country feels the impact of tighter US sanctions. Economics and education, especially at tertiary level, are strictly connected.



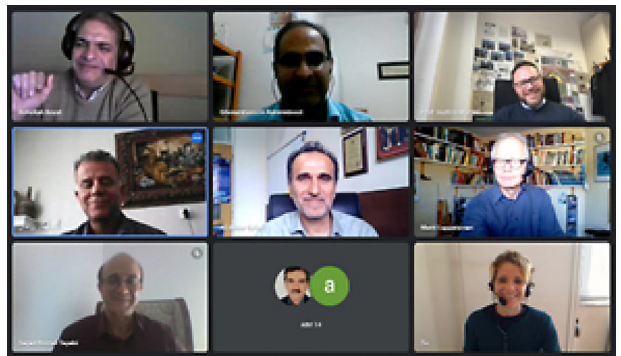
This is clear looking at the numerous challenges both sectors are facing like high youth unemployment, especially among college graduates, and out-migration of skilled citizens. In the higher education sector, a severe shortage of seats at the postgraduate level has served as a prompt for substantial numbers of Iranian nationals to seek education abroad.

Even if the number of Higher Education institutions in Iran increased substantially over the past two decades, the education at tertiary level is still faced with many challenges (Raisan, 2009): a) the shortcoming of professional skills and competencies of teachers and faculty members; b) the weakness of methods and applications; c) education not relevant to the labour market; d) and the lack of sufficient knowledge and ability to exploit technology are just a few of them.

In order to cope with the existing lacks, UNITEL Project received the necessary funding to contribute to the Modernisation and internationalisation of Iranian HEIs.

UNITEL is a three years EU project focused on the Modernisation and internationalisation of Iranian HEIs via collaborative TEL-based curriculum development in engineering and STEM. With reference to the main outcomes of the Baseline Research, the Shahid Chamran University of Ahvaz, partner in the UNITEL project and leader of the WP1 Baseline Research's phase has just published the UNITEL guidelines for modernizing HEIs engineering and stem studies curriculum by integrating new pedagogical and digital learning approaches.

It has been released after the second webinar organised on 17th, April 2023 by the coordinator to follow up the UNITEL Training Path delivery.



The research document represents an important linkage with the past and future activities. It tackles the identified needs, the lacks and the expectations related to the curriculum modernization and harmonization through the integration of contemporary ICT-based solutions, innovative pedagogical approaches, and tools.

The purpose of the document is boosting the Iranian access to education and improving the quality of teaching and training in line with the ECTS, Diploma Supplement, ET2020, and Modernization Agenda.

The report is based on the documentary research, conducted surveys and interviews with the target groups (HEIs, business, and society; UNITEL project, State of art reports). It also processes the expertise and best practices provided by the involved European countries. Although many Iranian universities have e-learning facilities and technological basic structures, they don't have a long-lasting background in TEL. They have mainly implemented or enhanced the distance education during covid 19. Therefore, it is necessary to re-design the TEL courses and embed them in an innovative university's strategic plan.

Some additional recommendations are included in the report as a reference document.

To download the document, please look at the Project website <https://unitelproject.net/>

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by Ilaria Reggiani



# Glance at the Future

## Universities in the age of Artificial intelligence

What is the function of a university in an age of accelerating digital transformation processes?

Until recently, the university's function was almost exclusively to transfer "vertical" skills structured to be competitive in the job market. It has been clear for some years that this is no longer enough, because there is a considerable mismatch, a gap between training in doctrine and the real demands of the world of work.

To fill this criticality, large universities equipped themselves quickly and with appreciable results. Guglielmo Marconi University, like other large universities, faced it by collaborating with important institutions, companies, highly skilled professionals and managers. Until yesterday this seemed to be the most effective way to maintain the skills of young talents.

But something new has happened, an event that was awaited for a long time but not so soon, a topic that is being strongly debated today and which, in some way, also recalls themes related to the world of art and more generally to creative activities. We are witnessing a very strong acceleration of the processes linked to the digital transformation, in particular to the applications that every day refer to artificial intelligence and their powerful impact on our economy and on the labor market.

This new "revolution", perhaps the fifth, recalls the fears that were evoked every time a new enabling technology created systems that could replace men in their occupations. We recall the debates related to the replacement of workers by machines and the fear that this would have created a major unemployment problem.

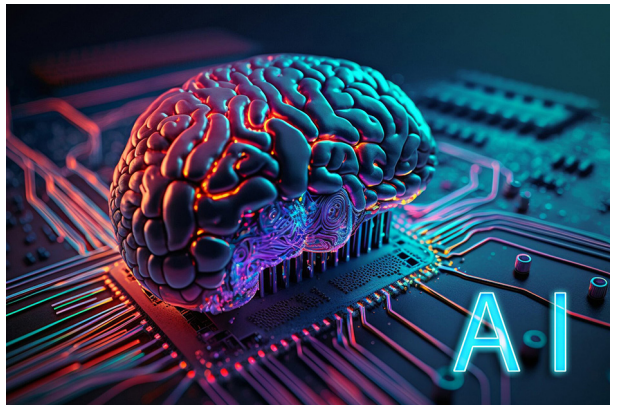
The main question was: what would the workers do? Well, they simply acquired new skills, they specialized in programming automatisms in order to continue to make their contribution. Their work improved, leaving the hardest tasks to the machines and giving the possibility of contributing to a better organization of work.

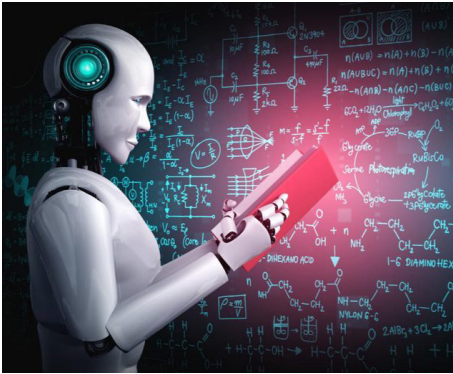
And now it's time for the so-called "artificial intelligence" and it is gradually replacing jobs that were still performed by people. The machines now program themselves. They maintain themselves. Not only that, with AI content creators can be replaced, as well as lawyers can be replaced in their activity of preparing judicial documents. The fear of unemployment is coming back.

This time, the position of optimistic economists, of those who think that also this time we will manage and that new professions will emerge, is severely tested, while the strong concern of pessimistic economists portends the possibility of devastating effects on the labor market and employment, with serious social consequences that can be easily guessed.

It is evident to everyone that the community cannot keep up with technological evolution, does not have the time to work out how to manage it and to imagine possible new employment opportunities. In fact, more than a thousand researchers from the famous Future for Life Institute, including Elon Musk, proposed a six-month moratorium on research precisely because they fear losing "contact" and management of this extraordinary technological transformation.

The fear is even more accentuated by the real possibility, whose advent times are uncertain, of the construction of the so-called AGI, Artificial General Intelligence.





Today the AIs are unbeatable at doing specific jobs, from winning chess, programming video games or creating images, but they will be able to work on all fronts, including that of creating new intelligent systems. It is no coincidence that it is said that the AGI could be the last human creation. If it were already present, we could say right now that man would become useless from a productive point of view.

Therefore, the university cannot fail to consider these scenarios in its teaching activity and it must participate in the ongoing debate. Let's say right away that the only thing we can't do is to think of solving the problem by stopping the research. Never in human history has it been possible to stop science.

So, what can we do? Waiting to finally find ourselves not only simply obsolete but also dramatically useless? Obviously, whoever proposes a solution, whatever it is, is lying. There is therefore no recipe, but a method of approach yes. It lies in the still only human ability to face problems with the skills

that have led small beings of a small planet lost in an infinite universe, to reach extraordinary goals of understanding. We have done it with human intelligence, which includes creativity, lateral thinking, emotions, intuitions that are, currently impossible for any "artificial" system..

This is why, as an optimistic economist, I imagine a society that is open to discussion, a debate that sees the joint efforts of universities, researchers, companies and political governance bodies. Let's tackle delicate issues together, let's talk about Beneficial Artificial Intelligence, let's model it to help us and not to let us destroy it.

As always, to arrive at wisdom, one must pass through competence and above all through the real sharing of knowledge and desire.

by Tommaso Saso





## How your digital footprint can affect your career

Have you ever tried to Google your name and surname? You could be surprised by the results! You will probably find at least your photos from social media pages, or even your phone number, email, comments, publications, information about participation in certain events.

Performing any action on the Web, the users leave a digital footprint, which can be used to make their portrait. There is nothing bad about it if you know how to manage it. Therefore, it is very important to pay close attention to what is shared on the Internet, from geolocation to photos, but also to the comments and tags of friends.



Once information has been posted online, it can be difficult (most likely even impossible) to remove, so it's essential to be careful about managing and protecting your digital footprint.

This is especially important for young people who usually leave considerable footprint while using multiple social media sites. Some of the content might go back many years and do not correspond to the current personality of the user. However, it will still remain visible to anyone who decides to do quick research about their author on the internet, including a potential employer.

In the era of digital technology, a Curriculum Vitae is no longer the only source of information. Employers are showing increasing interest in the digital footprints of their employees.

What initially was created only for our communication with friends, today begins to affect our success in finding a job, our reputation and status.

A survey conducted by CareerBuilder found that 70% of employers "use social media to screen candidates before hiring.

Of course, a digital footprint cannot be considered an official confirmation of the unreliability of a candidate. But the presence of negative information (aggression, discrimination, explicit language etc.) could become an obstacle to employment or even damage your professional reputation.

So, what would you like recruiters to find out about you? To ensure that your online image makes a positive impression on potential employers, pay attention to digital hygiene and "filter" the information posted in the public domain.



Managing your digital footprint starts with getting a clear idea of what data about you currently exists online. To do this, do your own search of your name, surname, phone number and email address and see the results.

If there are any old photos, videos or comments, that might give a negative impression about your personality, update your privacy settings or delete them entirely. Make sure all social media accounts that could be found through your contact details such as name, phone number and email address are free from the content which could be potentially harmful for your reputation.

Make sure the privacy settings regarding the posts you share, comments in the communities and pages and tags from your friends are at the appropriate level, especially if among your friends on social media pages there are also your colleagues.

Look at your posts from the perspective of the hiring manager you interacted with or the boss who hired you to join the team. Analyze what you saw. Can anything affect the fact that you are not hired? Delete some posts if necessary.



## BRAND4CAREERS

It might seem that the easiest way to minimize the risk of failure due to a dubious digital footprint is to clear all your accounts. However, according to some studies, closed or completely deleted profile alarms HR managers no less than dubious content. In fact, 21% of employers said they wouldn't consider someone who doesn't have a social presence. It looks like you either have something to hide or nothing to show, both of which will send your resume to the bottom of the pile. Especially if you are applying for a position that involves social activity and communication with other people, for example PR or Social Media manager.

Nowadays it is impossible to face the world of work without our social image reflecting on the opportunities of work or on managing the relationship with our colleagues or the employer.

To know more about the ways to improve your career opportunities, please visit <https://brand4careers.eu/>

by Darina Chesheva





**GMU Magazine** has been released with the contribution of all academic staff and partners around the world, if you wish to contribute highlighting any important news in accordance with the line of the release, please do not hesitate to contact us sending an email to [d.chesheva@unimarconi.it](mailto:d.chesheva@unimarconi.it)