

## YOUTH IMPULSE STEAM

## ADULTS IMPULSE

### *RECOVERING PORTUGAL, BUILDING THE FUTURE*

2021-2026

Includes list of all contracts approved, January 2022



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# Introductory remarks

**Manuel Heitor**

Minister of Science, Technology and Higher Education

December 2021

## **Boosting Youth and Adult Education 2021-2026: Researching more, Learning more, Employing better**

This booklet summarizes the 33 "Contracts Program" approved between consortia of higher education institutions and public and private employers, including businesses and central, regional and local public administration, under the "Youth Impulse STEAM" and "Adults Impulse" programs of the Recovery and Resilience Plan (PRR) with the aim of **boosting the training of young people and adults over the next 5 years in the face of emerging challenges.**

In fact, we are living unprecedented times, in Portugal and worldwide, especially in the context of the international crisis associated with the epidemiological situation caused by the coronavirus SARS-Cov-2 and the disease COVID-19, overlapping with the global challenges of ecological transition and the opportunities of the emerging digital transition.

If it is true that uncertainty and ignorance about the future has flooded our daily routines, it is no less true to admit that in a way also unprecedented in Portugal in times of crisis, we are witnessing an extraordinary build-up of the confidence of young people and their families in scientific and academic training and institutions, as well as in the advantages of scientific research and higher qualifications.

In 2020, total R&D spending in Portugal reached a new historic peak of over EUR 3.2 billion, now representing 1.62% of GDP (when it was 1.2% in 2015) and showing an increase for the fifth consecutive year, an annual total of more than EUR 1 billion compared with 2015. The private sector represents now 57% of total expenditure, while it was below 44% in 2015, in association with an 81% increase in the number of researchers registered in companies (went from 12,000 to 22,000 in full-time). Also for the first time in Portugal, more than half of 20-year-olds are studying in higher education (while they were 40% in 2015 and less than 30% in 2000) and more than 46% of the population living in the 30-34 age group have higher qualifications (while it was less than 35% in 2015).

It is also in Portugal where young people and their families visit science museums the most, according to recent European data.

But this requires much more than reaching these or other quantitative targets, as well such as broadening the levels of formal qualifications of the entire population, which should continue to increase in order to achieve an average higher education attendance rate of 6 out of 10 young people aged 20 by 2030 and ensure 50% tertiary education

graduates in the 30-year age group 34 years, along with an overall R&D expenditure of 3% of GDP by 2030.

But how can we guarantee the active and effective qualification of the population? Researching more, learning more, questioning more and better but above all, addressing the main challenges and opportunities that, in the current context of Portugal in Europe, are facing the Portuguese in the next decade.

It is in this context, that this set of " Contracts Programme " are geared towards implementing an investment of EUR 252 million, which will have to be implemented by 2026 with the following targets:

**1. increasing by 10% young graduates in STEAM areas**

Graduate an additional 18,000 students in higher education in the fields of science, engineering, technology, arts and mathematics (i.e., "STEAM - science, technology, engineering, arts and mathematics" domains) in the next 5 years, compared to a total of 48.5 thousand graduates in these areas in 2019/20. It represents an average increase of around 10% over the next five years compared with 2020.

**2. doubling the participation of adults in Programmes of upskilling and reskilling**

Double the participation of adults in processes of retraining and upgrading skills and competences in higher education (i.e., upskilling and reskilling), through the participation of more than 95 thousand active adults in training Programmes articulated with public and private employers, including companies. Considering that in 2019/2020 academic year there were around 24,500 students enrolled in post-graduate courses with no academic award degree, this target corresponds to a doubling of participants in this type of training offer.

**3.enhance quality, benefiting more than 260 thousand students by upgrading of infrastructures**

Reinforce the quality of the offer and of the education/learning systems, benefiting more than 260 thousand students with interventions in the construction, recovery, modernization of infrastructures, facilities and equipment, for which around half of the investment is allocated.

**4. stimulating and/or creating "alliances" and " post graduate schools", including in inner regions**

The retraining and upgrading of adult skills includes the creation of "Alliances" or "Schools" of postgraduate, involving consortia between higher education institutions, companies and the central, regional and local public administration.

But, can we guarantee that these 33 "Contracts Programme" will encourage ALL citizens to be an integral part of Portugal's development in the coming years?

I include, in this debate, the need to learn more to diversify and complex the structure of the economy, encouraging young people to learn, learn to learn and to undertake, consolidating routines of articulation between the production and dissemination of new knowledge. I include the need to ensure adequate standards of territorial cohesion in conjunction with the evolution towards a more environmentally sustainable and balanced economy, valuing the opportunities of digitisation in our personal and professional routines. I also include the need to learn more to build a more cohesive society, with longer and happier lives, better sharing the distribution of generated wealth and fighting the inequalities that persist in our societies, particularly among young and old, rich and poor.

Learning to question more is the best way to learn how to deal with uncertainty and ignorance about the future, as the new coronavirus SARS-Cov-2 showed us.

Deepening this topic is being increasingly relevant as this new coronavirus has moved from animals to men and although this process is far from being known we know that zoonotic diseases are increasing due of the pressure that our societies and their economic development jointly wield on nature. It is a clear signal of the lack of balance of human influence on Earth, which is also expressed through climate change. However, the possible scientific proof of these links with the pandemic that we are now experiencing requires asking more difficult questions in order to better understand the risks we are running.

Learning to live and to live with risk is, in fact, the challenge of all modern societies and the best we can pass on to future generations. It demands more research, more learning, with more solidarity and intergenerational debate, understanding the respect for others, respect for gender, age, origin or sexual orientations.

This process will only be successful with more knowledge, in terms of volume of funding, but also in terms of the intensity of that funding (i.e., per person funding), referring to the public option and the political thinking, the guarantee of considering learning and knowledge as "public goods", reinforcing its role of creating more and better jobs.

We need more science and more innovation and therefore to continue the effort of providing higher education of the whole population, with the continuous and systematic upskilling and reskilling of skills. **more science**, because we always need new fundamental knowledge; **more innovation**, to create and access new markets, through companies and disruptive processes; and **more training**, because we are facing processes of technological, digital and ecological change, which will accelerate and will, always, require us to update our skills of all of us, regardless of our age, socio-economic, ethnic or sexual orientations. That is, **more science, more innovation, more training to ensure the quality of life, the quality of employment and the well-being of future generations.**

In this context, the " Youth Impulse STEAM " and "Adults Impulse" Programmes of the Recovery and Resilience Plan (PRR) have been geared towards **developing our collective capacity to learn more and question better** to build new horizons for Portugal in Europe, in a context in which cohesion and competitiveness must be articulated through knowledge and, therefore, from the increasing and continuous qualification of the population. This collective effort needs to be promoted around **new relationships of trust between citizens and knowledge**.

The 33 "Contracts-Programme" approved and summarized in this booklet include contracted finance plans and amounts, as well as contractual performance indicators. They result from the evaluation of 35 expressions of interest submitted in September 2021 by consortia of Higher Education Institutions with public and private employers, which was conducted by an **independent, high-level international panel**, which assessed, discussed and negotiated in detail the proposals individually with all applicants. All contracts were concluded and the first payments were done before Christmas 2021, about 3 months after the submission of proposals. I thank, and acknowledge the dedication, mobilization and exceptional work done in an extremely short period by the Panel, coordinated in an exemplary way by Professor António Rendas, as well as the entire exceptional team of the **Directorate-General for Higher Education**, which has monitored and will monitor the Programme over the next five years.

**Maria da Conceição Saraiva da Silva Costa Bento**

Director General of Higher Education

December 2021

In order to respond to the negative impacts of the SARS-Cov-2 coronavirus pandemic and COVID-19 disease that was generated in European economies, a strategic instrument to mitigate these impacts has been established, both economically and socially, with the aim of promoting economic convergence and the resilience of the economies of the European Union, contributing to ensuring long-term sustainable growth and also responding to the challenges of the dual transition to a greener and more digital society. It is, in this context, that in Portugal it is framed by the Recovery and Resilience Plan (PRR), which aims to implement a set of reforms and investments that will enable the country to resume sustained economic growth by strengthening the objective of convergence with Europe over the next decade. This recovery strategy, accompanied by a relevant action to strengthen the resilience of the Portuguese economy and society, has as one of its priorities innovation and renewal of the productive and business structures, based on promoting the development of skills for innovation and industrial renewal, adjusting the training offer to the transformation of labour markets and to the new needs of employment, and on the increasing the number of graduates from higher

education, namely in STEAM (science, technology, engineering, arts and mathematics) areas.

To achieve these objectives, and aligned with the work developed under the initiatives "University without Walls" (EUA-European University Association, 2021) and "Post-Covid Skills 4 - Skills for the Future" (OECD & Directorate-General for Education, Youth, Sport and Culture of the European Commission, 2021), a set of reforms and investments have been defined which contribute to increasing the participation of young people in higher education, the graduation of the population and the increase of research and development in Portugal. In this context, the Programmes « Youth Impulse STEAM » and « Adults Impulse » have been set up to support initiatives to be developed by Higher Education Institutions in partnership or consortium with companies, public and/or private employers, including local, regional and national authorities and public bodies.

For the execution of the two Programmes, PRR - RE-C06-i03 Adults Incentive and Re-c06-i04 Youth Impulse STEAM, funding contracts were concluded - INVESTMENT RE-C06 -I04 Youth Impulse STEAM, with a total value of 122 million euros, in 20.06.2021 and corrected in 25.08.2021 and INVESTMENT RE-C06-I03 "Adults Impulse - Underinvestment Adults Impulse Programme", with a total value of 130 million euros in 20.06.2021- between the Portuguese Recovery Mission Structure (EMRP), responsible for operational coordination of the PRR , in Portugal, and the Directorate General of Higher Education which is the intermediate beneficiary responsible for the financial execution of the Investment Contract and the implementation and execution of the Programmes through the funding of projects submitted by public and private Higher Education Institutions, by themselves or consortium members (final beneficiaries) selected in an independent evaluation, in an open and competitive setting of proposals-expressions of interest-for training Programmes, based on previously established eligibility and evaluation criteria, taking into account international best practices and ensuring the safeguard of transparency and merit in allocating the funds earmarked for the Programmes.

Following the signing of the contracts with the Mission Structure, the Youth Impulse STEAM and Adults Impulse Programmes were publicly presented on June 21, 2021 (session held at the Thalia Theatre in Lisbon, which was attended by the Prime Minister, Minister of Science, Technology and Higher Education, Minister of State and Minister of Planning) . Also on this day it was launched the call for expression of interest 01/PRR/2021 for Youth Impulse STEAM and Adults Impulse Programmes - as well as the launch of the official page of "Impulse Programmes" ([https://www.dges.gov.pt/pt/pagina\\_IMPULSO](https://www.dges.gov.pt/pt/pagina_IMPULSO)). Order 6577/2021, published on 6 July 2021, established the High Level Panel for the selection and monitoring of the Youth Impulse STEAM and Adults Impulse Programmes, responsible for evaluating and selecting the applications to be funded and deciding on the amount of funding to be allocated. The two Programmes, although distinct, relate to each other and therefore the decision was to launch a single open and competitive tender procedure, to which applications could be submitted which included projects under the two Programmes:

- The Youth Impulse STEAM Programme, which aims to promote and support initiatives aimed exclusively at increasing the undergraduate level of young people in science, technology, engineering, arts and mathematics (STEAM - Science, Technology, Engineering, Arts and Mathematics) as a response to the new labour market needs.



- The Adults Impulse Programme, which aims at strengthening and diversifying post-secondary training, ensuring, respectively, the retraining and upgrading of skills through the development of flexible qualification solutions, quality and able to respond to the transformation of labour markets and the new requirements of employability, reinforcing the articulation with the systems of science and higher education in the search for joint solutions that allow to enhance both the relevance of acquired skills and the success of graduates in labour market, as well as new collaborative arrangements guided by scientific knowledge.

At the time this booklet is published, providing an account of the path already taken, the main results that are expected to be achieved with the implementation of the approved projects and, we present, in sum, each of the 33 projects under contract-Programme with their respective proposing Higher Education Institutions or consortia, being already, at this stage been completed two of the three phases of this trajectory: **the first phase**, which corresponded to the open and competitive "expression of interest" call, allowing all HEI to submit proposals for the two Programmes, which ran from 21 June to 10 September 2021 (1st phase) and **the second phase**, which included the evaluation and negotiation of the submitted projects and the negotiation of the funding to be allocated, followed by an invitation to sign a contract-Programme, directed to the "call of expression interest " selected in the 1st phase by the Panel of High Level Selection and Monitoring of the Programmes Youth Impulse STEAM and Adults Impulse, which ran from 11 September until 31 December 2021; **the third phase**, of monitoring the implementation and execution of the projects, with annual evaluations and the possibility of reprogramming from 2023, in order to ensure the completion of the implementation of the projects within the defined deadlines, started in December 2021, with the signing of the Contracts Programme, concluded between the Directorate General of Higher Education and each of the 33 proposing institutions of the applications selected for funding by the High –Level Panel, and will run until the end of 2026.

We believe that this Booklet gives an account of the extraordinary transformative potential of these Programmes and of the approved and financed projects, with an expected impact far greater than initially expected. But we cannot make invisible the extraordinary effort, involvement, dedication and work of a large number of institutions and people who made possible the path made and to whom we wish to express here our most sincere gratitude and deep recognition:

- To the Higher Education Institutions and the partners they have involved in the submitted projects - note that the approved applications involve, in the implementation of the commitments made under the contract-Programme, in total, more than two thousand civil society entities (companies, municipal entities, research centres, etc.) - for the remarkable work developed.

- To the High Level Selection and Follow-up Panel of the Youth Impulse STEAM and Adults Impulse Programmes, which under the wise and competent leadership of Professor António Rendas, has provided the evaluation and selection of the projects to be funded, as well as the definition of the respective amounts to be financed by developing a unique process for the allocation of this type of funding over a very short period of time.

- To the team in the Directorate General of Higher Education that follows this process, in particular to the Executive Coordinator of the Impulse Programmes, António Bob Santos, to the team of the Directorate of Support Services to the Higher Education Network and Technical and Administrative Support Division.

Finally, we would like to record the full willingness of the Directorate-General for Higher Education to continue to monitor closely the implementation of the approved projects, acting as a facilitator of the fulfilment of the commitments entered into in contracts-Programme and creating the best possible conditions for project implementation.

Thank you very much!

### **António Rendas**

Coordinator of the High-Level Panel for the Selection and Follow-up of “Impulsos”  
Programmes  
December 2021

On 21 June 2021, a few weeks after the signing between the Portuguese Government and the European Commission of the Recovery and Resilience Programme for Portugal (PRR), the call for tender 01/PRR/2021 "Expression of Interest: Youth Impulse Programme STEAM and Adults Impulse Programme", was drafted and published according to the terms defined by the Government and provided in the Financial Agreement concluded between the Mission Structure Recover Portugal (EMRP) and the Directorate-General of Higher Education (DGES). These terms and this same public Notice determined that a High Level Panel that would have the assistance and logistical support of DGES, as well as the monitoring and supervision of the Coordinating Council of Higher Education (CCES) would ensure the evaluation and monitoring of the projects.

In order to continue the above determinations, Order No 6577/2021 of the Minister for Science, Technology and Higher Education of 6 July, stipulates that the process of selecting and monitoring projects to be funded under the Youth Impulse STEAM and Adults Impulse Programmes involved three phases, based on the general terms to be set under the Recovery and Resilience Plan (PRR) and good national and international practices: phase 1: tender for the submission of «expression of interest», open and competitive, allowing all institutions to submit applications for the two Programmes, which would take place between 21 August and 10 September; stage 2: evaluation and negotiation, followed by a call for «expressions of interest» selected in Stage 1, with a view to implementing « contracts Programme », including the financing plans and amounts selected and approved in the meantime, this phase took place in the first period until 10 October, which continued until the end of December with the signing of the contracts Programme between DGES and the applicants; and phase 3: monitoring of implementation, with annual evaluations and possibility of reprogramming from 2023 onwards, in order to ensure completion of implementation within defined deadlines.

The High Level Panel of independent selection and monitoring of the projects, is composed by the following individuals: Luís Braga da Cruz, Helena Nazaré, Carlos Salema, José Carlos Marques dos Santos, Anabela Romano, Pedro Guedes de Oliveira, Luís Soares, Carlos Faro, João Ferrão, Andrée Sursock, Han Brezet, José Manuel Fonseca Moura, Ruaidhri Neavyn, William Krull, Conceição Bento (co-coordinator) and António Rendas (coordinator). Logistical, administrative and financial support was ensured, by a team of DGES, coordinated by António Bob dos Santos (executive coordinator). To the Director-General of Higher Education, Conceição Bento, and to him goes my most sincere thanks, in my personal name and on behalf of the Panel.

This summary addresses the activities carried out by the High Level Panel between September 11 and the end of December 2021, activities framed by the provisions of Notice 01/PRR/2021 "Expression of Interest: Youth Impulse STEAM Programme and Adults Impulse Programme" of 21 June 2021. First, and in accordance with the criteria set out in the abovementioned Notice, the panel decided to admit all 35 applications submitted. Thereafter, between 20 and 30 September, followed 35 public presentations of the applications, also disseminated via streaming, followed by restricted meetings, with each applicants, on their respective days, for clarification of the contents and request for additional information, a total of 70 meetings.

Between 6 and 10 October, the third meetings with the promoters of each application took place, who were informed of the Panel's overall assessment of the size and merit of their application and the feasibility of approval for funding. Each application has been informed of the need to reduce the financial amount per initial request in relation to the expression of interest, taking into account the financial allocation available for the Programme, of EUR 252 million. This budget includes the Youth Impulse STEAM Programme, with EUR 122 million, and Adults Impulse, with EUR 130 million.

The examination of the applications took into account what was stipulated in Notice 01/PRR/2021, which stated, in Point 5, "that the amount of support to be granted per application should vary according to two components: "size and merit of the application" and "size of the HEI(s) and proposing consortia(s)". Point 8 of that Notice stated that the assessment of expressions of interest would be carried out on the basis of 5 criteria, indicating the weighting to be assigned to each of them and establishing that the selected proposals would be hierarchized in descending order of final classification.

Based on the application of this methodology, the Panel decided at its meeting on the 26 October on the classifications set out in the Table. Similarly, the Panel decided, on the basis of the methodology already described, to propose the allocation of the funding amounts to each expression of interest, which are also listed in Table 1. Given the high quality of the applications and given that the process involves three stages, the Panel decided that the possibility of reprogramming from 2023 should be considered in Phase 3 of the selection and monitoring process, with an additional financial increase of €120M to be distributed among all approved applications, based on the evaluation criteria used in this call for proposals and the evaluation of the performance of applications by the end of 2023.

**Table 1 - Panel's Proposed Nomination and Funding Rating divided between Youth Impulse STEAM and Adults Impulse**

Lídero of the Consortium	Co-promoters	Panel Classification (0-10)	Panel Proposed Budget(M€)	Impulso Youth STEAM (€M)	Impulso Adults (€M)
Universidade de Lisboa - ULisboa Post-Graduation School and Young Impulse STEAM program		9.75	<b>22.089</b>	6.272	15.817
Universidade do Minho - UMinho Education Alliance – Skills for a Better Future		9.75	<b>13.496</b>	5.541	7.955
Universidade Nova de Lisboa - CIVIC” and “GLOBAL”!		9.75	<b>12.895</b>	5.432	7.463
Universidade de Aveiro - Aveiro education and social alliance		9.75	<b>12.365</b>	5.051	7.314
ISCTE - Instituto Universitário de Lisboa - Mais Digital		9.75	<b>11.024</b>	7.538	3.486
Instituto Politécnico de Setúbal - SONDA2026 - Smart Open Networks for Development Acceleration		9.63	<b>9.804</b>	4.266	5.538
Universidade de Coimbra - Living the Future Academy	1- Escola Superior de Enfermagem de Coimbra 2- Universidade dos Açores 3- Instituto Politécnico da Guarda 4- Instituto Politécnico de Viseu	9.50	<b>16.467</b>	7.968	8.499
Universidade do Porto - U. Porto Programme for Multidisciplinary Education and Training – Impulso Jovens STEAM & Impulso Adultos		9.50	<b>16.327</b>	7.001	9.325
Instituto Politécnico do Cávado e do Ave - SKILLS BOOST 2025@IPCA		9.50	<b>9.754</b>	4.163	5.591
Instituto Politécnico do Porto - Resilient P. PORTO		9.38	<b>10.294</b>	5.542	4.752
Instituto Politécnico de Leiria - Skills4Future		9.38	<b>8.724</b>	5.446	3.277
Universidade Católica Portuguesa - Training for Resilience		9.38	<b>8.563</b>	2.622	5.942
Instituto Politécnico de Bragança - STEAM Skills Mountain Knowledge Campus - Mountain Alliance for Knowledge and Co-Creation		9.38	<b>7.463</b>	4.314	3.149
Instituto Politécnico de Portalegre - MERIDIES Consortium:	1- Instituto Politécnico de Santarém 2- Instituto Politécnico de Setúbal 3- Instituto Politécnico de Beja 4- Universidade de Évora	9.25	<b>7.463</b>	2.498	4.965
Instituto Politécnico de Coimbra - To Boost People and Territory		9.16	<b>8.523</b>	5.270	3.253

MAIÊUTICA - COOPERATIVA DE ENSINO SUPERIOR CRL / Universidade da Maia - JIT4NSTEAM - Just in time for new steam (1)	1- Instituto Politécnico da Maia	9.16	<b>0.980</b>	0.553	0.428
Escola Superior de Hotelaria e Turismo do Estoril - Tourism International Academy	1- Universidade Nova de Lisboa 2- Universidade Aberta	9.13	<b>6.773</b>	3.267	3.505
Universidade Lusófona/COFAC - COOPERATIVA DE FORMAÇÃO E ANIMAÇÃO CULTURAL, CRL - HEAD_L – “Aliança do Ensino Superior para o Desenvolvimento da Educação, Formação e Investigação no Espaço Lusófono”	1- Universidade Lusófona do Porto (COFAC) 2- ISDOM – Instituto Superior Dom Diniz da Marinha Grande (COFAC) 3- ISMAT – Instituto Superior Manuel Teixeira Gomes (COFAC) 4- IP Luso – Instituto Politécnico da Lusofonia (SESC) 5- Universidade Autónoma de Lisboa (C.E.U.) 6- ISG – Business & Economic School (ENSINUS) 7- ISLA Gaia (ENSIGAIA) 8- ISLA Santarém (ISLA Santarém) 9- ISEC – Instituto Superior de Educação e Ciências (UNIVERSITAS)	8.88	<b>7.423</b>	5.163	2.260
ESAD/CIFAD - CENTRO DE INVESTIGAÇÃO E FORMAÇÃO EM ARTES E DESIGN, LDA - Blue Design Alliance	1- Instituto Politécnico de Viana do Castelo 2- Instituto Politécnico de Bragança 3- Escola Superior de Biotecnologia da Universidade Católica Portuguesa	8.84	<b>3.932</b>	1.851	2.080
Instituto Politécnico de Viseu - IPV Região Impulsiona e inclui	1- Universidade Aberta	8.75	<b>4.182</b>	2.666	1.515
Instituto Politécnico de Saúde do Norte/CESPU - Platform For a Global Health - Qualification of Human Health Resources	1- Escola Superior de Enfermagem da Cruz Vermelha Portuguesa - Alto Tâmega 2- ESEP - Escola Superior de Enfermagem do Porto 3- Escola Superior de Saúde da Cruz Vermelha Portuguesa – Lisboa 4- Escola Superior de Saúde do Norte da Cruz Vermelha Portuguesa 5- ESSSM - Escola Superior de Saúde de Santa Maria 6- ISAVE - Instituto Superior de Saúde 7- Escola Superior de Tecnologia de Fafe (IESF) 8- Escola Superior de Educação de Fafe (IESF)	8.75	<b>3.872</b>	2.274	1.598
Instituto Politécnico de Viana do Castelo - BAITS (Business, Art, Innovation, Technology, Sustainability)		8.75	<b>3.812</b>	2.911	0.901
Universidade de Trás-os-Montes e Alto Douro - UTAD - Skills for Life		8.69	<b>4.782</b>	3.049	1.733
Universidade Aberta - UAb Impulso2025		8.69	<b>4.340</b>	0.000	4.340
Universidade da Beira Interior - UBImpulso, Green and sustainable growth in a digital world		8.63	<b>4.902</b>	2.911	1.991

Instituto Politécnico de Castelo Branco - A23 Polytechnic Network	1 - IP Guarda 2 - IP Tomar	8.63	<b>4.742</b>	2.859	1.883
IP Santarem - Consórcio Entre o Tejo e o Mar - CETM	1- Instituto Politécnico de Tomar 2- Escola Náutica Infante Dom Henrique	8.63	<b>4.162</b>	3.880	0.282
Instituto Politécnico de Lisboa - Next Level Higher Education for All @ Politécnico de Lisboa - Next Level@IPL		8.50	<b>6.543</b>	4.032	2.511
Universidade de Évora - Prometheus	1- Instituto Politécnico de Portalegre 2- Instituto Politécnico de Setúbal 3- Universidade Atlântica (E.I.A.)	8.50	<b>4.822</b>	2.964	1.858
Universidade da Madeira - Fosteam@South	1- Universidade do Algarve 2- Universidade de Évora 3- Universidade Nova de Lisboa	8.38	<b>3.521</b>	2.056	1.466
Santa Casa da Misericórdia de Lisboa / Escola Superior de Saúde do Alcoitão - AHED - Longlife Health Education	1 - Escola Superior de Enfermagem de Lisboa; 2- Escola Superior de Saúde da Cruz Vermelha Portuguesa – Lisboa; 3 - Escola Superior de Saúde Egas Moniz; 4 - Instituto Universitário Egas Moniz	8.31	<b>2.640</b>	0.000	2.640
Universidade do Algarve - Skills4All		8.25	<b>3.321</b>	2.047	1.274
Escola Superior de Enfermagem do Porto - IP Alliance (2)	1- Universidade do Porto - Faculdade de Medicina da Universidade do Porto 2- Instituto Politécnico do Porto – Escola Superior de Saúde	8.06	<b>2.001</b>	0.592	1.409
UNIVERSITAS -Cooperativa de Ensino / ISEC Lisboa - Instituto Superior de Educação e Ciências - ALLIANCE UPGRADE TO GROW (Up2G)		7.25	<b>0.000</b>	0.000	0.000
ENSILIS - Educação e Formação, Unipessoal Lda / Universidade Europeia - One Vision		6.00	<b>0.000</b>	0.000	0.000

1) The proposed amount corresponds to the value requested by the receiving entity.

2) The proposed amount is within the range of the funding to be allocated to each application

Subsequently, and in accordance with the provisions of the Notice of Call for Competition 01/PRR/2021, the candidates were heard and asked to comment on the decisions of the Panel in the framework of the legal procedures in force. At the end of that period and the acceptance of the applications in the final version by the High Level Panel, DGES sent an invitation to the applicants to formally submit their applications, which were duly signed by both parties by the end of December 2021.

Finally, I should like to inform you that the work of the High Level Panel took place in an environment of great openness and transparency with the applicants of the applications in a climate of dialogue that clearly demonstrates the maturity of the national higher education system extending from the coast inland, from north to south, as well as the archipelagos of the Azores and Madeira. I should also mention three meetings of the High Level Panel respectively, with the Minister of Planning and the Minister of Science, Technology and Higher Education, on 3 November, with the Coordinating Council of Higher Education, on 8 November and with the National Council of Science, Technology

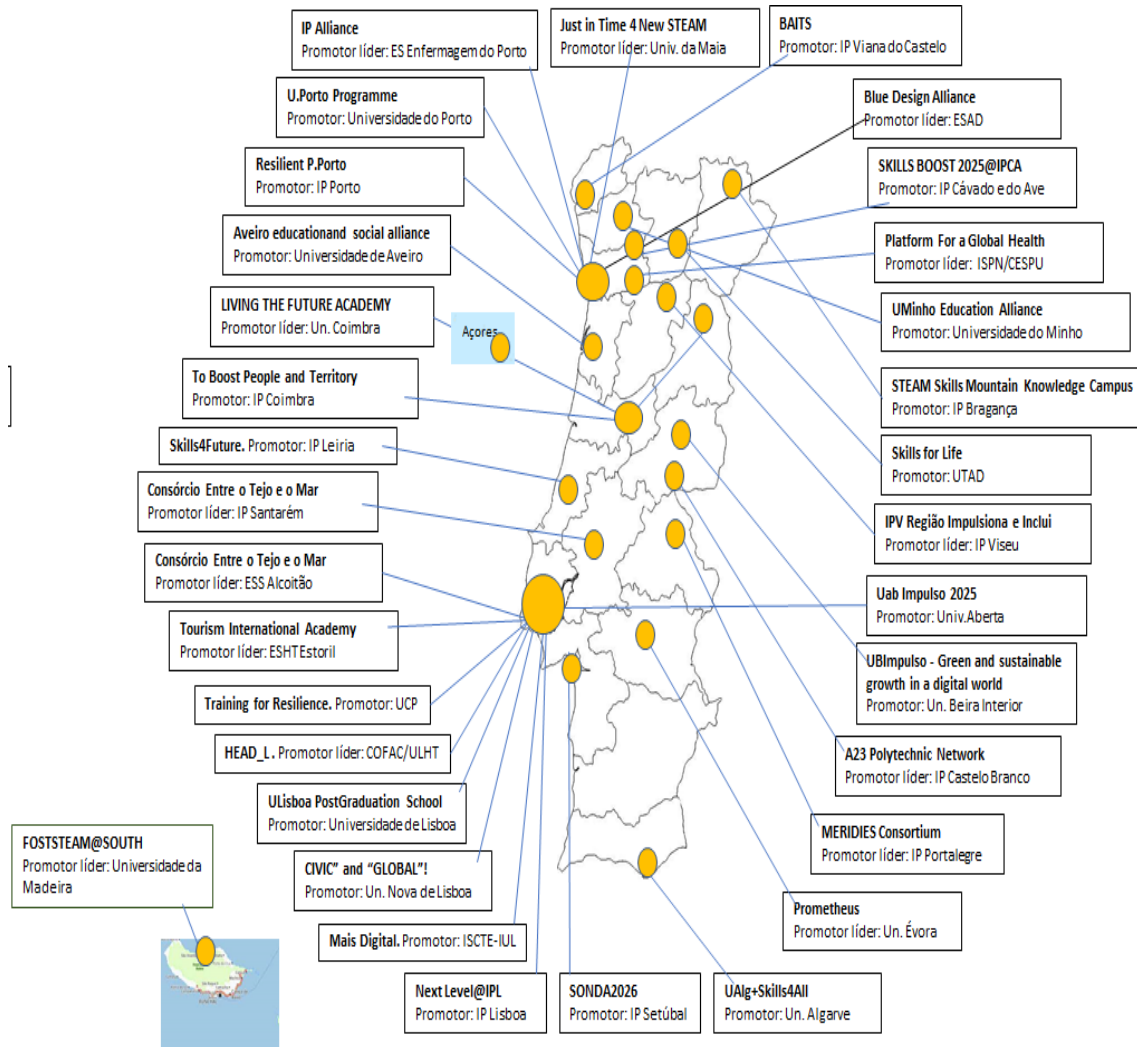
and Innovation, on 11 November. These meetings took place after the deliberations of the High Level Panel, but they were very useful in accentuating the need to monitor the Programmes beyond this initial stage we are in, given the five-year nature of the funding. I wish to stress the constant presence of the Minister of Science, Technology and Higher Education at these meetings and to point out, despite his independence from the process, that it is due a word of recognition for the vision in launching the Impulse Programmes in the fertile and diversified terrain of higher education that so well knows and that every day helps to develop.

This creates the conditions to achieve, by 2026, targets and objectives for the growth, quantitative and qualitative, qualifications and competences at the higher level in areas where Portugal has deficiencies: a 10% increase in STEAM graduates (science, engineering, technology, arts and mathematics); duplication of updating and reconversion of active adults, with the participation of another 95 thousand in training courses organized in partnership with public and private employers, often from "alliances" or "schools" post-graduate, including about two dozen inside; infrastructure modernisation through the construction, renovation and modernisation of facilities and equipment that are expected to benefit more than 250,000 students. I end with a word of deep thanks to my fellow Panellists for their generosity, beyond the undeniable competence, as they responded to the challenges of this new and enriching experience that enabled us to contribute to consolidating what was already very good, among us, at the level of higher education, but also, and above all, enabled new initiatives to qualify the Portuguese population in places where it is born, grows, lives and works.

## **PART 1: Summary of the Programmes contracted for 2021-2026**



**Figure 1: THE 33 APPROVED CONSORTIA**



**Table 1: Summary of the approved and contracted CONSORTIA, 2021-2026**

Lider of the Consortium	Copromoters	Panel Budget Proposal (€M)	Impulso Youth STEAM (€M)	Impulso Adults (€M)
<b>Universidade de Lisboa</b> - ULisboa Post-Graduation School and Young Impulse STEAM program		<b>22.089</b>	6.272	15.817
<b>Universidade do Minho</b> - UMinho Education Alliance – Skills for a Better Future		<b>13.496</b>	5.541	7.955
<b>Universidade Nova de Lisboa</b> - CIVIC” and “GLOBAL”!		<b>12.895</b>	5.432	7.463
<b>Universidade de Aveiro</b> - Aveiro education and social alliance		<b>12.365</b>	5.051	7.314
<b>ISCTE - Instituto Universitário de Lisboa</b> - Mais Digital		<b>11.024</b>	7.538	3.486
<b>Instituto Politécnico de Setúbal</b> - SONDA2026 - Smart Open Networks for Development Acceleration		<b>9.804</b>	4.266	5.538
<b>Universidade de Coimbra</b> - Living the Future Academy	1- Escola Superior de Enfermagem de Coimbra 2- Universidade dos Açores 3- Instituto Politécnico da Guarda 4- Instituto Politécnico de Viseu	<b>16.467</b>	7.968	8.499
<b>Universidade do Porto</b> - U.Porto Programme for Multidisciplinary Education and Training – Impulso Jovens STEAM & Impulso Adultos		<b>16.327</b>	7.001	9.325
<b>Instituto Politécnico do Cávado e do Ave</b> - SKILLS BOOST 2025@IPCA		<b>9.754</b>	4.163	5.591
<b>Instituto Politécnico do Porto</b> - Resilient P.PORTO		<b>10.294</b>	5.542	4.752
<b>Instituto Politécnico de Leiria</b> - Skills4Future		<b>8.724</b>	5.446	3.277
<b>Universidade Católica Portuguesa</b> - Training for Resilience		<b>8.563</b>	2.622	5.942
<b>Instituto Politécnico de Bragança</b> - STEAM Skills Mountain Knowledge Campus - Mountain Alliance for Knowledge and Co-Creation		<b>7.463</b>	4.314	3.149
<b>Instituto Politécnico de Portalegre</b> - MERIDIES Consortium:	1- Instituto Politécnico de Santarém 2- Instituto Politécnico de Setúbal 3- Instituto Politécnico de Beja 4- Universidade de Évora	<b>7.463</b>	2.498	4.965
<b>Instituto Politécnico de Coimbra</b> - To Boost People and Territory		<b>8.523</b>	5.270	3.253
Universidade de Mais /MAIËUTICA - COOPERATIVA DE ENSINO SUPERIOR CRL - JIT4NSTEAM - Just in time for new steam (1)	1- Instituto Politécnico da Maia	<b>0.980</b>	0.553	0.428
<b>Escola Superior de Hotelaria e Turismo do Estoril</b> - Tourism International Academy	1- Universidade Nova de Lisboa 2- Universidade Aberta	<b>6.773</b>	3.267	3.505

<b>Universidade Lusófona/COFAC - COOPERATIVA DE FORMAÇÃO E ANIMAÇÃO CULTURAL, CRL - HEAD_L – “Aliança do Ensino Superior para o Desenvolvimento da Educação, Formação e Investigação no Espaço Lusófono”</b>	1- Universidade Lusófona do Porto (COFAC) 2- ISDOM – Instituto Superior Dom Diniz da Marinha Grande (COFAC) 3- ISMAT – Instituto Superior Manuel Teixeira Gomes (COFAC) 4- IP Luso – Instituto Politécnico da Lusofonia (SESC) 5- Universidade Autónoma de Lisboa (C.E.U.) 6- ISG – Business & Economic School (ENSINUS) 7- ISLA Gaia (ENSIGAIA) 8- ISLA Santarém (ISLA Santarém) 9- ISEC – Instituto Superior de Educação e Ciências (UNIVERSITAS)	<b>7.423</b>	5.163	2.260
<b>ESAD/CIFAD - CENTRO DE INVESTIGAÇÃO E FORMAÇÃO EM ARTES E DESIGN, LDA - Blue Design Alliance</b>	1- Instituto Politécnico de Viana do Castelo 2- Instituto Politécnico de Bragança 3- Escola Superior de Biotecnologia da Universidade Católica Portuguesa	<b>3.932</b>	1.851	2.080
<b>Instituto Politécnico de Viseu - IPV Região Impulsiona e inclui</b>	1- Universidade Aberta	<b>4.182</b>	2.666	1.515
<b>Instituto Politécnico de Saúde do Norte/CESPU - Platform For a Global Health - Qualification of Human Health Resources</b>	1- Escola Superior de Enfermagem da Cruz Vermelha Portuguesa - Alto Tâmega 2- ESEP - Escola Superior de Enfermagem do Porto 3- Escola Superior de Saúde da Cruz Vermelha Portuguesa – Lisboa 4- Escola Superior de Saúde do Norte da Cruz Vermelha Portuguesa 5- ESSSM - Escola Superior de Saúde de Santa Maria 6- ISAVE - Instituto Superior de Saúde 7- Escola Superior de Tecnologia de Fafe (IESF) 8- Escola Superior de Educação de Fafe (IESF)	<b>3.872</b>	2.274	1.598
<b>Instituto Politécnico de Viana do Castelo - BAITS (Business, Art, Innovation, Technology, Sustainability)</b>		<b>3.812</b>	2.911	0.901
<b>Universidade de Trás-os-Montes e Alto Douro - UTAD - Skills for Life</b>		<b>4.782</b>	3.049	1.733
<b>Universidade Aberta - UAb Impulso2025</b>		<b>4.340</b>	0.000	4.340
<b>Universidade da Beira Interior - UBImpulso, Green and sustainable growth in a digital world</b>		<b>4.902</b>	2.911	1.991
<b>Instituto Politécnico de Castelo Branco - A23 Polytechnic Network</b>	1 - IP Guarda 2- IP Tomar	<b>4.742</b>	2.859	1.883
<b>IP Santarem - Consórcio Entre o Tejo e o Mar - CETM</b>	1- Instituto Politécnico de Tomar 2- Escola Náutica Infante Dom Henrique	<b>4.162</b>	3.880	0.282
<b>Instituto Politécnico de Lisboa - Next Level Higher Education for All @ Politécnico de Lisboa - Next Level@IPL</b>		<b>6.543</b>	4.032	2.511
<b>Universidade de Évora - Prometheus</b>	1- Instituto Politécnico de Portalegre 2- Instituto Politécnico de Setúbal 3- Universidade Atlântica (E.I.A.)	<b>4.822</b>	2.964	1.858
<b>Universidade da Madeira - Fosteam@South</b>	1- Universidade do Algarve 2- Universidade de Évora 3- Universidade Nova de Lisboa	<b>3.521</b>	2.056	1.466

<b>Escola Superior de Saúde do Alcoitão/SCML - Longlife Health Education</b>	1 - Escola Superior de Enfermagem de Lisboa; 2- Escola Superior de Saúde da Cruz Vermelha Portuguesa – Lisboa; 3 - Escola Superior de Saúde Egas Moniz; 4 - Instituto Universitário Egas Moniz	<b>2.640</b>	0.000	2.640
<b>Universidade do Algarve - Skills4All</b>		<b>3.321</b>	2.047	1.274
<b>Escola Superior de Enfermagem do Porto - IP Alliance (2)</b>	1- Universidade do Porto - Faculdade de Medicina da Universidade do Porto 2- Instituto Politécnico do Porto – Escola Superior de Saúde	<b>2.001</b>	0.592	1.409
		<b>252.000</b>	<b>122.000</b>	<b>130.000</b>

- 1) The proposed amount corresponds to the value requested by the receiving entity.
- 2) The proposed amount is within the range of the funding to be allocated to each application

## Programme Youth Impulse STEAM and Adults Impulse - key data and indicators

January 2022

33 "Programme Contracts" with a budget of EUR 252 million aimed at:

1.

Increase STEAM youth graduates by 10% over the next 5 years, representing more than 18,000 graduates compared to 2020;

2.

Double the participation of adults in updating and reconversion Programmes, in conjunction with employers, representing more than 95 thousand adults graduates in the next 5 years;

3.

enhancing the quality of education/learning provision and systems, benefiting more than 260 thousand students by the modernization of infrastructure and equipment;

4.

Promote "Alliances" or "Graduate Schools" in conjunction with public and private employers, including companies, reinforcing postgraduate studies in urban centres and in regions of low population density.

The 33 " Contracts Programme " approved between consortia of Higher Education Institutions and public and private employers, including enterprises and central, regional and local public administration, under the "Youth Impulse STEAM" Programmes are completed and underway, and "Adults Impulse" of the Recovery and Resilience Plan (PRR), as made available on the website of the Directorate-General of Higher Education. These "Programme Contracts" aim to achieve the following targets:

**1. increase by 10% young graduates in STEAM areas**

Graduate an additional 18,000 students through higher education in the fields of

science, engineering, technology, arts and mathematics (i.e., "STEAM - Science, technology, Engineering, arts and Mathematics") over the next 5 years, compared to a total of 48,500 graduates in these areas in 2019/20. It represents an average increase of around 10% over the next five years compared with 2020.

## **2. double the participation of adults in Programmes to update and convert skills**

To double the participation of adults in processes of updating and reconversion of competences of higher scope (i.e., "upskilling" and "reskilling"), through the participation of more than 95 thousand adults active in training Programmes articulated with public and private employers, including companies. Considering that in the 2019/2020 school year there were about 24,500 students enrolled in post-graduate non-university graduates, this goal corresponds to a doubling of participants in this type of training offer over the next 5 years.

## **3. enhance quality, benefiting more than 260,000 students from the modernisation of infrastructure**

Enhancing the quality of supply and education/learning systems, benefiting more than 260,000 students from building interventions, recovery, upgrading of infrastructure, facilities and equipment, for which about half of the investment is intended.

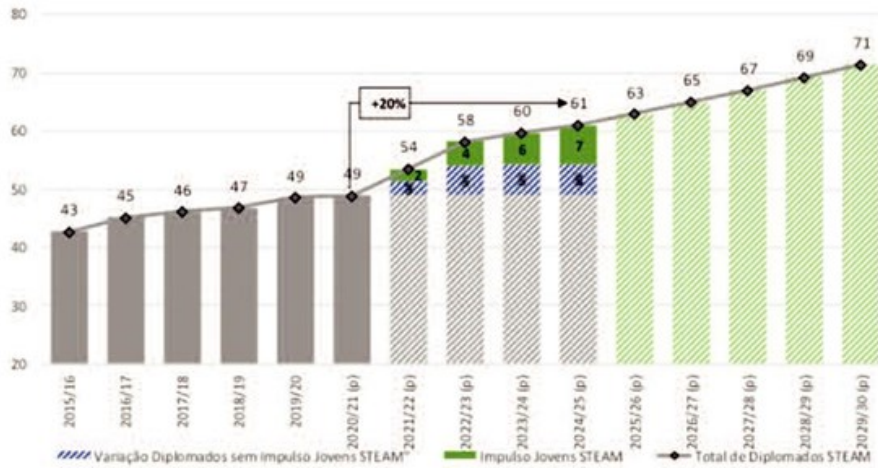
## **4. stimulate and/or establish post-graduate "alliances" and "schools"**

The updating and reconversion of adults skills includes the creation of "Alliances" or "Schools" of postgraduate, involving consortia between Higher Education Institutions, companies and the central, regional and local public administration.

The 33 approved and ongoing "Contracts Programme" should contribute to achieving the following targets in terms of the population resident in Portugal:

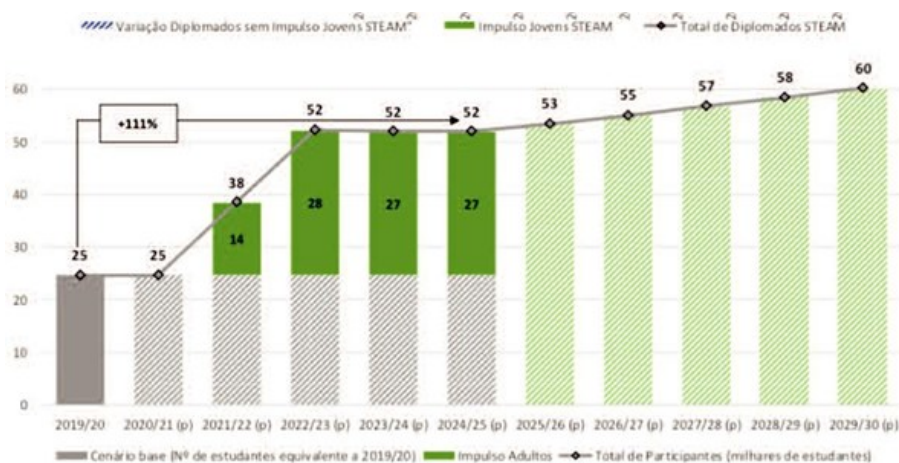
- 60% of 20-year-olds participating in higher education by 2030 (while it was about 51% in 2020) (Figure 3);
- 50% of graduates of higher education among the population aged 30-34 until 2030 (while it was about 43% in 2020) (Figure 4);
- increase by five times the number of adults in lifelong learning in all IES, in conjunction with employers, by 2030;

**Figure 1: Evolution of the annual number of STEAM graduates (including the areas of Science, Technology, Engineering, Arts and Mathematics) | Thousands of graduates**



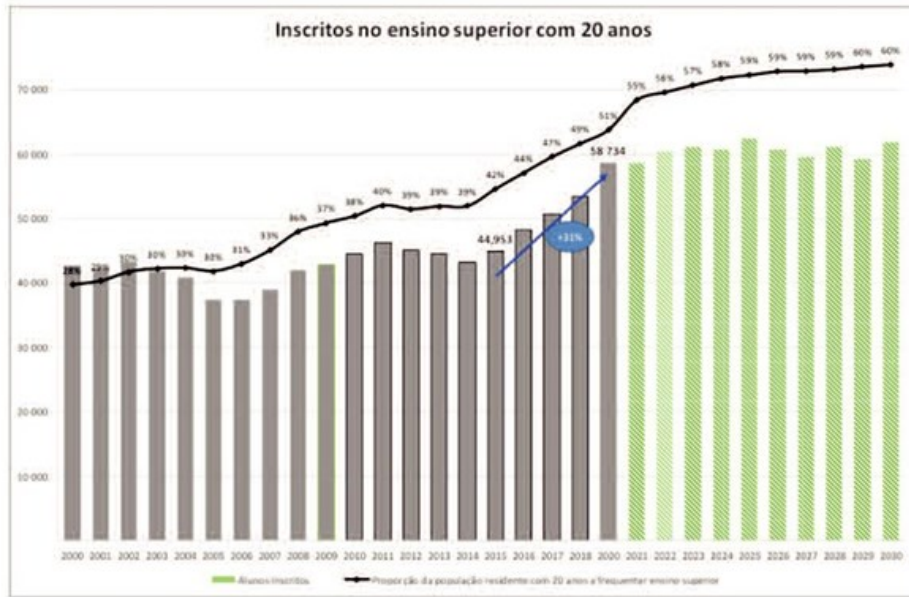
Source: DGES/MCTES, based on DGEEC | Note: Defined DGEEC Results by 2020 for Number of Graduates in STEAM Areas; "Graduate Variation without Youth Impulse STEAM" corresponds to the projection until 2024/25 based on the expected variation in the number of graduates in STEAM areas resulting from the recent enlargement of the social base of higher education, namely the recent evolution of the number of new students enrolled in the various STEAM study cycles and the average duration of each type of study cycle, " Youth Impulse STEAM " corresponds to the expected increase in the number of graduates in STEAM areas arising exclusively from the implementation of the measure "Youth Impulse STEAM "; Projection of the average growth of graduates of 3% between 2025/26 and 2029/2030, according to the verified history

**Figure 2: Evolution of the number of adults over 23 years of age living in Portugal to participate annually in training activities in all areas of knowledge, organized in ECTS and non-electrical graduates**



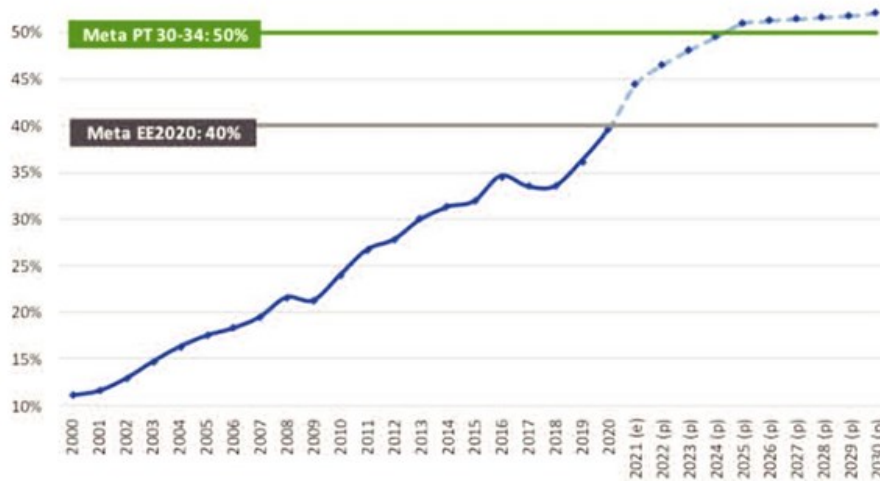
Source: DGES/MCTES Note: DGES results in 2019/20, with projections between 2021/22 and 2024/2025 based on the contracted increase in the number of participants resulting from the Adults Impulse measure, and projection of the average annual growth of 3% between 2025/26 and 2029/30

**Figure 3: Evolution of the percentage of 20-year-olds living in Portugal participating in higher education in all areas of knowledge**



Source: DGES/MCTES, based on DGEEC and INE | Note: Final results of DGEEC and INE up to 2020 concerning respectively the number of students aged 20 and the resident population aged 20, with projections until 2030, considering the expected evolution of the number of 20-year-olds, due to the widening of the social base of higher education, and the population projections up to 2030 of the respective age group (INE)

**Figure 4: Evolution of the percentage of adults aged 30-34 living in Portugal who have completed higher education degrees in all areas of knowledge**



Source: DGES/MCTES, based on DGEEC and INE | Note: Final results of DGEEC/INE until 2020, with an estimate for 2021 based on the first three known quarters of the year, and with projections until 2030, based on the known evolution of the schooling rate of younger age groups (25-29 years) and the expected impact of policies to broaden the social basis of higher education



The **Youth Impulse STEAM Programme** aims to promote and support initiatives aimed exclusively at raising the undergraduate level of young people in science, technology, engineering, arts and mathematics (STEAM - Science, Technology, Engineering, Arts and Mathematics) in conjunction with the needs emerging in the labour markets. Includes projects promoted and to be implemented by Higher Education Institutions (HEI), in partnership or consortium with enterprises, public and/or private employers, local, regional and national authorities and public bodies, as well as in close liaison with secondary schools. It also includes the attraction of foreign students, as well as the reinforcement of the offer of undergraduate and other initial higher education (e.g., professional higher technical courses in the case of Polytechnic education) within a framework of interdisciplinary and transdisciplinary, reinforcing the national and international affirmation of the IES.

**The adults Impulse Programme** aims to strengthen and diversify the participation of adults in upgrading and reconversion processes of higher education skills, including through short-term higher education, initial and post-secondary education as well as lifelong learning. It includes support for Programmes promoted and to be implemented by Higher Education Institutions (HEI), in partnership or consortium with enterprises, public and/or private employers and including local, regional and national authorities and public bodies. They may take the form of "schools", "alliances" and/or "Programmes", oriented towards initial and post-graduate higher education of adult audiences (including short-term postgraduate degrees and master's degrees), in all areas of knowledge, aimed at lifelong learning, as well as strengthening the national and international affirmation of the IES.

The 33 approved "Contracts Programme" include contractual financing plans and amounts, as well as contractual performance indicators. The call had 35 expressions of interest that were submitted by consortia of Higher Education Institutions and were analysed by an independent high-level international panel, which discussed and negotiated in detail the proposals individually with all the proponents. EUR 252 million are thus allocated for the various approved projects, which will have to be implemented by 2026, including:

- 48% of the investment is allocated to the modernization of infrastructures and equipment;
- 32% of the investment is devoted to the reinforcement of teaching and non-teaching bodies in order to allow the reinforcement of the training offer;
- 13% of the investment is allocated for support and incentives directed at students, in the form of scholarships, merit scholarships and/or other types of direct support to students;
- 7% of the investment in other investment support costs.

**Table 2: Youth Impulse STEAM - List of supported Programmes to train young people in science, technology, engineering, arts and mathematics (STEAM - Science, Technology, Engineering, Arts and Mathematics) - Short training and undergraduate degrees**

**Table 2 a) - Offer in Consortia led by Polytechnics**

<p style="text-align: center;"><b>CONSORTIA</b></p> <p style="text-align: center;"><b>HEI APPLICANT AND CO-SPONSORS</b></p>	<p style="text-align: center;"><b>New or updated courses 2021-2026</b></p>
<p>A23 Polytechnic Network</p> <p>Polytechnic of Castelo Branco</p> <p>Polytechnic of Guarda</p> <p>Polytechnic of Tomar</p>	<p><b>Short training (Higher Education professional technical courses, CTESP)</b></p> <ul style="list-style-type: none"> <li>• Security and Civil Protection (ongoing)</li> <li>• Forest Resources (ongoing)</li> <li>• Civil Protection (ongoing)</li> <li>• Technological Drawing</li> <li>• Land Registry Technician (IPG) (ongoing)</li> <li>• Geospatial Information Management (IPG) (ongoing)</li> <li>• Renewable Energy</li> <li>• Valuation of Biological Resources</li> </ul> <p><b>Proposal for new short training courses (higher education professional technical courses CTESP):</b> to be created, focused on project-based learning methodology, adapted to the needs of enterprises:</p> <ul style="list-style-type: none"> <li>• Altran (Capgemini Engineering): Fundão; Outsystems: Proença-a-Nova; Softinsa (IBM): Tomar and Fundão; Axians: Castelo Branco; Itsector: Castelo Branco; SIBS: Castelo Branco; Everis: Castelo Branco.</li> </ul>
<p>STEAM skills mountain knowledge campus - mountain alliance for Knowledge and co-creation</p> <p>Polytechnic of Bragança</p>	<p><b>Short training (higher education professional technical courses CTESP): new courses</b></p> <ul style="list-style-type: none"> <li>• Clean automotive technologies</li> <li>• Clean Health Technologies</li> </ul> <p><b>Short trainings (higher education professional technical courses CTESP): reformulation/revision</b></p> <ul style="list-style-type: none"> <li>• Multimedia Product Development</li> <li>• Biotechnology and innovation</li> <li>• Renewable Energy and Electrical Infrastructure and Telecommunications</li> </ul>

	<ul style="list-style-type: none"> <li>• Computer science</li> <li>• Bioanalysis and control</li> </ul>
<p>IPV Região Impulsiona</p> <p>Polytechnic of Viseu Aberta University</p>	<p><b>Offering courses in the areas of Digital Transition, Re-industrialization and Climate Transition</b></p>
<p>Skills boost 2025@ipca Polytechnic of</p> <p>Cávado e do Ave</p>	<p><b>Short training (higher education professional technical courses CTESP): TESP plus - CTESP</b></p> <ul style="list-style-type: none"> <li>• Computer Technologies and Innovation</li> <li>• Food Innovation and Culinary Arts</li> <li>• Digital Audiovisual</li> <li>• Collaborative Robotics and Industrial Intelligence</li> <li>• Web development and multimedia</li> <li>• Security and Data Protection for Information Systems</li> <li>• Digital Marketing and Social Media</li> <li>• Injection moulding of plastics (to take place at company premises).</li> <li>• Etesp SKILL BOOST</li> </ul> <p><b>Undergraduate - reformulation/review of courses 8 tech&amp;arts PLUS)</b></p> <ul style="list-style-type: none"> <li>• Computer Systems Engineering (Programme restructured and new class).</li> <li>• Electrotechnical Engineering and Computers (new class).</li> <li>• Digital Game Development Engineering (restructured Programme and new class).</li> </ul> <p><b>Undergraduate (new courses)</b></p> <ul style="list-style-type: none"> <li>• Audiovisual Design</li> <li>• Artificial Intelligence</li> <li>• Industrial Engineering and Management</li> <li>• Computer science</li> <li>• Bioanalysis and control</li> </ul>
<p>next level Higher education for all @ Polytechnic of Lisbon –</p> <p>next level@ipl Polytechnic of Lisbon</p>	<p><b>Undergraduate degrees (new courses):</b></p> <ul style="list-style-type: none"> <li>• Applied Physical Engineering</li> </ul>

<p>Resilient p.porto</p> <p>Polytechnic of Oporto</p>	<p><b>Network of educational spaces STEAM</b></p> <p>Creation of a network of technological Educational Spaces that encourage and support educational approaches integrated in STEAM areas in secondary schools and municipal facilities, with the aim of training 200,000 high school students.</p> <p><b>Short training (higher education professional technical courses CTESP):</b></p> <ul style="list-style-type: none"> <li>• Technologies Applied to International Communication in Sme.</li> <li>• Integrated Systems Management.</li> <li>• Programming of Scenic Lighting Systems.</li> <li>• Motion Design and Visual Effects - Santo Tirso.</li> <li>• Design and Technologies for Mobile Applications - Santo Tirso.</li> <li>• Agile Software Development - Ermesinde.</li> <li>• Cell cultures and laboratory maintenance</li> <li>• Food Quality and Control</li> </ul> <p><b>Undergraduate Degree:</b></p> <ul style="list-style-type: none"> <li>• Technologies for Education</li> </ul>
<p>Skills4future-</p> <p>Polytechnic of Leiria</p>	<p><b>Short training (higher education professional technical courses CTESP):</b></p> <ul style="list-style-type: none"> <li>• Production and Musical Creation in a Digital Environment</li> <li>• Cybersecurity and Computer Networks</li> <li>• Data Analysis and Market Studies</li> <li>• Restoration and Management of Marine Ecosystems</li> <li>• Tourism 4.0</li> </ul> <p><b>Short courses</b></p> <p>Short Advanced Programmes (SAP) with microcredits, in different areas, namely, in digital arts and entertainment; digital image production and editing, game animations, 3D modelling, and sustainable design.</p>
<p>To boost people and territory -</p> <p>Polytechnic of Coimbra</p>	<p><b>Short training (higher education professional technical courses CTESP):</b></p> <p><b>Arts and Design</b></p> <ul style="list-style-type: none"> <li>• Piano tuner</li> <li>• Product Design Product Design</li> <li>• Luminotechnics for shows</li> <li>• Production of audiovisual content</li> </ul> <p>• Sonoplasty</p> <p><b>Forests, Environment and Agrifood</b></p> <ul style="list-style-type: none"> <li>• Agricultural Operations and Maintenance Control</li> <li>• Interpretation of Nature and Natural Spaces</li> <li>• Forestry operations</li> </ul> <p><b>Industry and Digital Technology</b></p> <ul style="list-style-type: none"> <li>• Electronics and Industrial Automation</li> <li>• "Residential" Maintenance Technician</li> <li>• Computer Technologies</li> </ul>

	<p><b>Health, Ageing, Sport and Tourism</b></p> <ul style="list-style-type: none"> <li>• Health Care Technician</li> </ul> <p><b>Microcredentials:</b></p> <p><b>Arts and Design</b></p> <ul style="list-style-type: none"> <li>• Design, Communication &amp; Marketing</li> </ul> <p><b>Forests, Environment and Agrifood</b></p> <ul style="list-style-type: none"> <li>• Agriculture in Urban Areas</li> <li>• Biodiversity and Conservation</li> <li>• Autonomous Training in Fire Analysis</li> <li>• Genotyping of Woody Species</li> <li>• Invasive Species Management</li> <li>• Production of Forest Plants</li> <li>• Food Processing Technologies</li> <li>• Environmental Toxicology</li> </ul> <p><b>Industry and Digital Technology</b></p> <ul style="list-style-type: none"> <li>• Intelligent Data Analysis</li> <li>• Development of mobile applications</li> <li>• Specialization in Cybersecurity</li> <li>• Frontend and Backend Technologies (Web Development)</li> </ul> <p><b>Health, Ageing, Sport and Tourism</b></p> <ul style="list-style-type: none"> <li>• Water and Soil Quality Management</li> <li>• Mycology in Public Health</li> <li>• Environmental Microbiology and Bioremediation</li> <li>• Air Quality</li> <li>• Occupational Noise</li> <li>• Public Health and Environmental Health</li> </ul>
<p>BAITS  Polytechnic of Viana do Castelo</p>	<p><b>Short training (higher education professional technical courses CTESP): new courses</b></p> <ul style="list-style-type: none"> <li>• Automobile Mechanics</li> <li>• Electric Power Systems</li> <li>• Biotech Industries</li> <li>• CNC Additive Manufacturing and Programming</li> <li>• Digital Art and Manufacturing</li> <li>• Digital Marketing and Ecommerce</li> </ul>
<p>Sonda2026 - smart open networks for development acceleration Polytechnic of Setúbal</p>	<p><b>Short training (higher education professional technical courses CTESP): new courses</b></p> <ul style="list-style-type: none"> <li>• Aeronautical Production</li> <li>• Computer Technologies (Loures)</li> <li>• Programming Technologies and Information Systems (Amateur and Sines)</li> <li>• Chemical and Biological Laboratory Technologies (Vila Franca de Xira, Loures and Sines)</li> <li>• Cloud and Cibersecurity (Sines)</li> <li>• Renewable Energy (Sines)</li> <li>• Logistics (Loures)</li> <li>• Retail Management (Setúbal)</li> </ul>
<p>Meridies Consortium  Polytechnic of Portalegre Polytechnic of Santarém Polytechnic of Setúbal Polytechnic of Beja University of Évora</p>	<p>Short training (higher vocational technical courses, etc.): new courses</p> <ul style="list-style-type: none"> <li>• Automation, Robotics and Industrial Control</li> <li>• Construction and maintenance of websites</li> <li>• Sound Design and Music Production</li> <li>• Sport, Technology and E-sports</li> <li>• Business Management</li> <li>• 3D Production</li> <li>• Agile Programming and Information Systems Security</li> </ul>

	<ul style="list-style-type: none"> <li>• Technology and Digital Design</li> <li>• Food technology and innovation</li> <li>• Agri-environmental technologies and sustainability</li> <li>• Support Technologies for the Elderly</li> <li>• Renewable gas technologies</li> <li>• Agricultural Production Technologies</li> <li>• Sustainable Production Technologies</li> <li>• Information Systems Technologies and Programming</li> <li>• Technologies in health and safety at work degree (new courses)</li> <li>• Civil Engineering</li> <li>• Industrial Engineering and Management</li> </ul>
<p>IP Alliance</p> <p>Nursing School of Oporto University of Oporto– Faculty of Medicine Polytechnic Institute of Oporto - Health School</p>	<p><b>Short training (higher education professional technical courses CTESP): new courses</b></p> <ul style="list-style-type: none"> <li>• Cell culture and laboratory maintenance</li> <li>• Food Quality and Control</li> </ul>
<p>Tourism International Academy</p> <p>Estoril Higher Institute for Tourism and Hotel Studies</p> <p>Nova University of Lisbon</p> <p>Aberta University</p>	<p>The proposed training offer is developed in the following areas:</p> <ul style="list-style-type: none"> <li>• Digital Transformation and Innovation in Tourism, Hospitality and Food Production;</li> <li>• Initial Training in Tourism and Hotel Management;</li> <li>• Training for qualification in Tourism Management and Development of transversal skills for the tourist and hotel heritage of tomorrow;</li> <li>• Emerging topics in the Tourism and Hospitality professions;</li> <li>• Multidisciplinary Training for the new challenges of Tourism</li> <li>• Multidisciplinary Hotels and Graduate Studies for the new challenges of Tourism and Hospitality.</li> </ul>
<p>Blue design alliance</p> <p>Esad/cifad - Research centre and training in arts and design, Lda</p> <p>Polytechnic of Viana do castelo</p> <p>Polytechnic of Bragança</p> <p>Universidade Católica Portuguesa (ESB)</p>	<p><b>Short training (higher education professional technical courses CTESP): new courses</b></p> <ul style="list-style-type: none"> <li>• Sea and River Front and Nautic Design</li> <li>• Water Design: Interface and Communication</li> <li>• Food Production Design and Communication</li> </ul>
<p>Platform for a global Health Qualification of Human Health Resources</p> <p>Polytechnic Institute for Health - North - CESPU</p> <p>Nursing School of Cruz Vermelha Portuguesa - Alto Tâmega;</p>	<p><b>Short training (higher education professional technical courses CTESP ) new courses</b></p> <ul style="list-style-type: none"> <li>• Bioanalysis and Control</li> <li>• Cybersecurity and Health Information Systems</li> </ul>

<p>ESEP -Nursing School of Oporto</p> <p>School of Health of Cruz Vermelha Portuguesa -Lisbon;</p> <p>School of Health of Cruz Vermelha Portuguesa -North;</p> <p>ESSM - School of Health of Santa Maria;</p> <p>Higher Education Institute of Fafe;</p> <p>Higher Education Institute of Health of Alto Ave</p> <p>University Institute of Health Sciences - CESPU;</p>	<ul style="list-style-type: none"> <li>• Social and Environmental Entrepreneurship</li> <li>• Gastronomy, Tourism and Welfare</li> <li>• Hospital Operational Management</li> <li>• Information Systems Technologies and Programming</li> </ul>
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**Table 2 b) - Offer in Consortia led by Universities**

<p style="text-align: center;"><b>CONSORTIA</b></p> <p style="text-align: center;"><b>HEI APPLICANT AND CO-SPONSORS</b></p>	<p style="text-align: center;"><b>New or updated courses 2021-2026</b></p>
<p>UTAD - Skills for Life</p> <p>University of Trás-os-Montes e Alto Douro</p>	<p><b>Undergraduate degrees: new courses</b></p> <ul style="list-style-type: none"> <li>• Sustainable Design</li> <li>• Physical Engineering</li> </ul> <p><b>Undergraduate degrees: increasing the training offer</b></p> <ul style="list-style-type: none"> <li>• Communication and Multimedia</li> <li>• Computer Engineering</li> <li>• Electrical and Computer Engineering</li> <li>• Applied Mathematics and Data Sciences</li> </ul> <p><b>Undergraduate: reformulation/revision of courses</b></p> <ul style="list-style-type: none"> <li>• Communication and Multimedia; Applied Mathematics; Data Sciences; Veterinary Medicine; Nursing; Nutrition Sciences; Agronomic Engineering; Zootechnical Engineering; Oenology; Biotechnology and Forest Engineering, Genetics; Biotechnology.</li> </ul>
	<p><b>Undergraduate degrees: significantly increase the number of graduates in the courses where the global disparity of access is more pronounced, encompasses nine 1st cycle courses:</b></p> <p>"Design"; Communication Design"; "Multimedia Art", at the Faculty of Fine Arts (FBA);</p>

<p>Ulisboa post-graduation school and Youth</p> <p>Impulse STEAM Programme</p> <p>University of Lisbon</p>	<p>"Aerospace Engineering"; "Technological Physical Engineering"; "Computer and Informatics Engineering"; "Applied Mathematics and computation"; Biomedical Engineering"; Industrial Engineering and Management, at Técnico ( IST)</p> <p><b>Undergraduate degrees - new offers (in association with the revision of former integrated master's degrees):</b></p> <p>"Aerospace Engineering"; "Technological Physics Engineering"; "Computer Science and Engineering"; "Applied Mathematics and Computing"; "Biomedical Engineering"; "Industrial Engineering and Management".</p>
<p>Uminho education alliance – skills for a better future</p> <p>University of Minho</p>	<p><b>Undergraduate degrees (new courses)</b></p> <ul style="list-style-type: none"> <li>• Data Science</li> <li>• Aerospace</li> </ul>
<p>U.porto Programme for multidisciplinary education and training - Youth STEAM Impulse &amp; Adults Impulse</p> <p>University of Oporto</p>	<p><b>Undergraduate degrees (new courses, submitted or submitted for prior accreditation):</b></p> <ul style="list-style-type: none"> <li>• Bioinformatics</li> <li>• Drawing</li> <li>• Literature and Studies interarts</li> <li>• Applied Mathematics</li> <li>• Digital Health and Translational Medicine</li> </ul> <p><b>Undergraduate degrees (increase in the number of vacancies):</b></p> <ul style="list-style-type: none"> <li>• Agronomic Engineering</li> <li>• Artificial Intelligence and Data Science</li> <li>• Other 1st STEAM Study Cycles with Excellence Index (to be defined annually)</li> </ul>
<p>38 More Digital</p> <p>ISCTE - University Institute of Lisbon</p>	<p><b>Undergraduate Degree (new courses):</b></p> <ul style="list-style-type: none"> <li>• Digital Technologies and Health</li> <li>• Software Development for Services</li> <li>• Digital Technologies and Management.</li> <li>• Cybersecurity</li> <li>• Digital Technologies, Culture and Heritage</li> <li>• Educational Technology Management and Innovation</li> <li>• Robotics and Intelligent Systems</li> <li>• Artificial Intelligence</li> <li>• Digital Technologies and Construction</li> <li>• Mathematics Applied to Digital Technologies</li> <li>• Politics, Economy and Society</li> </ul>
<p>Aveiro Education and Social</p> <p>Alliance University of Aveiro</p>	<p><b>Short trainings (higher education professional technical courses, CTESP) (new courses):</b></p>



	<p>Industry and Materials: Metrology, Instrumentation and Quality; CNC Programming and Machining; Welding and Metallic Constructions</p> <p>Competitiveness Support Areas: Communication for Product Design</p> <p><b>Short training (higher vocational technical courses, etc.) (restructuring and increase of vacancies):</b></p> <p>Industry and Materials: Automation, Robotics and Informatics</p> <p>TICE: Informatics and Organizational Communication; Electrical Installations and Automation; Information Systems Programming; Networks and Computer Systems</p> <p><b>Undergraduate degrees (new courses):</b></p> <p>Industry and Materials: Aerospace Engineering; Industrial Automation Engineering</p> <p>TICE: Engineering of Software</p>
<p>fosteam@south</p> <p>University of Madeira</p> <p>University of Algarve</p> <p>University of Évora</p> <p>Nova University of Lisbon</p>	<p><b>Short trainings (higher education professional technical courses, CTESP)</b></p> <ul style="list-style-type: none"> <li>• Science and Technology Equipment Technicians: laboratories, scientific nautics, atmosphere</li> <li>• Blue Technology</li> <li>• Promoting the quality of life of older people</li> <li>• Agrifood technologies</li> <li>• Management of Housing.</li> </ul>
<p>“ciVic” and “global”!</p> <p>Nova University of Lisbon</p>	<p><b>Undergraduate degrees (new courses)</b></p> <ul style="list-style-type: none"> <li>• Data Sciences</li> <li>• Agroindustrial technology (as approved)</li> <li>• Integrated Master of Medicine (MIM) - curriculum restructuring</li> </ul>
<p>ubimpulso</p> <p>University of Beira Interior</p>	<p><b>Undergraduate degrees (new courses)</b></p> <ul style="list-style-type: none"> <li>• Physics and Applications</li> <li>• Sustainable Fashion Technology and Product.</li> </ul> <p><b>Undergraduate degree - programmatic review/reinforcement, with equipment/laboratories/facilities</b></p> <ul style="list-style-type: none"> <li>• Atelier-Studios Laboratories (refurbishment)</li> <li>• Medicine</li> <li>• Aeronautical Engineering</li> <li>• Computer science</li> <li>• Electromechanical, Electrotechnical, Industrial Engineering and Management and Computational Mechanics</li> <li>• Civil Engineering and Architecture</li> <li>• Chemistry, Mathematics and Applications</li> <li>• Industrial Design, Multimedia and Fashion Design</li> <li>• Communication Sciences and Culture</li> </ul>

	<ul style="list-style-type: none"> <li>• Pharmaceutical Sciences, Optometry and Vision and Biomedical Sciences</li> </ul>
<p>Prometheus</p> <p>University of Évora Polytechnic of Portalegre Polytechnic of Setúbal Atlântica – University Institute</p>	<p><b>Undergraduate degrees (new courses)</b></p> <ul style="list-style-type: none"> <li>• Biomedical Sciences</li> <li>• Aerospace Engineering</li> <li>• Integrated Master in Pharmaceutical Sciences</li> </ul>
<p>Living the future academy</p> <p>University of Coimbra Nursing School of Coimbra University of Azores Polytechnic of Guarda Polytechnic of Viseu</p>	<p><b>Undergraduate degrees (new courses)</b></p> <ul style="list-style-type: none"> <li>• Engineering and Management of Smart and Sustainable Cities</li> <li>• Earth Observation Sciences and Technologies</li> </ul> <p><b>Thematic academies under the "Youth Impulse STEAM " Programme</b></p> <ul style="list-style-type: none"> <li>• UC Factory-Academies (FA)</li> <li>• Soft skills Academy for future STEAM are professionals</li> <li>• STEAM Academy for Entrepreneurship, sustainability and innovation (AESI)</li> <li>• Digital Intelligence Academy (AID)</li> </ul>
<p>Skills4all</p> <p>University of Algarve</p>	<p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Education and Pedagogical Innovation</li> <li>• Hand Therapy</li> <li>• Physiotherapy and Rehabilitation</li> <li>• Entrepreneurship and Innovation</li> <li>• Data Science</li> <li>• Accounting and Taxation</li> <li>• Art of Sound and Image</li> <li>• Blue and Circular Economy</li> </ul> <p><b>Postgraduate studies</b></p> <ul style="list-style-type: none"> <li>• Adapted Sport and Physical Activity</li> <li>• Civil Protection and Emergency and Disaster Management</li> <li>• Autism Spectrum Disorders</li> <li>• Management of Health Units</li> </ul> <p><b>Short courses</b></p> <ul style="list-style-type: none"> <li>• Short Advanced Programmes (SAP) with microcredits in the area of digital transformation</li> </ul>
	<p><b>Short trainings (higher education professional technical courses, CTESP) new courses</b></p>

<p>A Head_L alliance of higher education for the development of education, training and research in the Portuguese-speaking area</p> <p>Lusófona University /COFAC- Cooperativa de Formação e Animação Cultural Lusófona University of Oporto (COFAC) ISDOM – Instituto Superior Dom Diniz da Marinha Grande (COFAC) ISMAT – Instituto Superior Manuel Teixeira Gomes (COFAC) IP Luso – Polytechnic Institute of Lusofonia (SESC Lisbon Autónoma University (C.E.U.) ISG – business &amp; economic school (ENSINUS) ISLA Gaia (ENSIGAIA) ISLA Santarém (ISLA Santarém) ISEC– Instituto Superior de Educação e Ciências (UNIVERSITAS)</p>	<ul style="list-style-type: none"> <li>• Automation and Robotics</li> <li>• Audiovisual media</li> <li>• Computational Applications for Data Science</li> <li>• Graphic and Digital Production</li> <li>• Industrial Organization and Management</li> <li>• Digital Marketing and E-commerce</li> <li>• Web Development and Mobile Devices</li> </ul> <p><b>Undergraduate Degree (new courses)</b></p> <ul style="list-style-type: none"> <li>• Data Science</li> <li>• Applied Mathematics and Computing</li> </ul>
<p>JIT4NSTEAM - just in time for new STEAM- University of Maia/ Maiêutica - Cooperativa de Ensino Superior CRL</p> <p>Polytechnic Institute of Maia (IPMaia)</p>	<p><b>Undergraduate degrees (new courses)</b></p> <ul style="list-style-type: none"> <li>• Public Relations and Communication Management (under approval)</li> <li>• Digital Production and Brand Communication (already approved by A3ES)</li> </ul>
<p>Training for Resilience Universidade  Católica Portuguesa</p>	<p><b>Undergraduate degrees (new courses)</b></p> <ul style="list-style-type: none"> <li>• Liberal Sciences   Biotechnology   Commercial and Retail Management   Philosophy, Politics and Economics</li> </ul> <p><b>Undergraduation (reformulation/recast)</b></p> <ul style="list-style-type: none"> <li>• Medicine   Bioengineering   Nutrition Sciences   Microbiology   Business Administration (International)   Economics and Finance (International)   Sound and Image   Biomedical Sciences   Dentistry (Integrated Master)</li> </ul>

**Table 3: Adults Impulse - list of supported Programmes for conversion and updating of adults skills ("i.e., "reskilling" and "upskilling")**

**Table 3 a) - Offer in Consortia led by Polytechnics**

<p style="text-align: center;">CONSORTIA</p> <p style="text-align: center;">HEI APPLICANT AND CO-SPONSORS</p>	<p style="text-align: center;">New or updated courses 2021-2026</p>
<p>A23 Polytechnic Network</p> <p>Polytechnic Institute of Castelo Branco</p>	<p><b>Area of protection of goods and persons</b></p> <p><b>Post-graduate training</b></p> <ul style="list-style-type: none"> <li>• Forest Sciences (Partnership with Univ. Open)</li> <li>• Civil Protection (Partnership with Univ. Open)</li> <li>• Civil Protection (Partnership with ENB)</li> <li>• Monitoring Environmental Risks and Impacts</li> <li>• Integrated Forest/Rural Fire Management</li> <li>• Geographic Information Systems</li> </ul> <p><b>Short-term training courses and short-term technical courses</b></p> <ul style="list-style-type: none"> <li>• Risk and Civil Protection Training (13 short training courses)</li> <li>• Forest Training (5 courses)</li> <li>• Registration Training (5 courses)</li> <li>• Space Planning Training (9 courses)</li> <li>• Training in Cartography and Geographic Information Technologies (4 courses) Certifications or micro certifications of higher education level</li> </ul> <p><b>Micro Certifications / Microcredentials</b></p> <p>Review After Event/ Causes of Fire (planning)/ Environmental and Risk Communication (development)/ Natural Engineering/Natural Engineering Controlled Fire - accreditation/ Controlled Fire - Planning/ Fire Suppression/ Fires in Structures/ Forest Infrastructures to support combat/ Lessons Learned/ Monitoring and Evaluation Methodologies/ Psychological profiles of the use of fire/</p> <p>Fire Analysis/Fire Analysis</p> <p>Statistics and Causality/ Fire Susceptibility / Support Infrastructures / Fire Behavior / Fire Management/ Resource Management / Refurbishments / Tools Decision Support / Fuel Management / Fuel Management Rural Fire Protection/ Management and Recovery emergency/</p> <p><b>Digital skills area</b></p>

	<p><b>Post-graduate training</b></p> <ul style="list-style-type: none"> <li>• Customized postgraduate courses, to be defined in the areas: software development, software engineering, networks and cloud, interactive systems, mobile communications, robotics and automation, cybersecurity.</li> </ul> <p><b>Short-term specialisation courses (4-6 ects)</b></p> <ul style="list-style-type: none"> <li>• Cloud Azure / AWS IaaS / PaaS</li> <li>• Containers and Kubernetes</li> <li>• IaaS Infrastructure as a Code &amp; Dev Ops</li> <li>• Infra Automation / Ansible &amp; Terraform</li> <li>• NGN Networks &amp; Communication Micro accreditation in digital areas</li> <li>• Advanced productivity and collaboration tools</li> <li>• E-commerce: Company strategy and implementation</li> <li>• Cyber security</li> <li>• Social Network Management</li> <li>• UX/UI Design</li> <li>• Analysis of data</li> <li>• Business Intelligence</li> <li>• Programming languages</li> <li>• Customer Relationship Management (CRM)</li> <li>• Systems of automation</li> </ul>
<p>STEAM Skills Mountain Knowledge Campus</p> <p>Mountain Alliance for Knowledge and Co-Creation</p> <p>Polytechnic Institute of Bragança</p>	<p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Professional Master's Degree: Technologies for the Future and Innovation</li> <li>• Product and Process Innovation (curriculum change)</li> </ul> <p><b>Programme "Competence Badges"</b></p> <ul style="list-style-type: none"> <li>• The goal is to provide a simple certification, which can be used by all citizens as a recognition of skills, competencies and learning outcomes</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>• Various offers for Upskilling and Reskilling</li> </ul>
<p>Polytechnic Institute of Viseu</p> <p>IPV Região Impulsiona e Inclui</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Reindustrialization: Industrial Technological Innovation</li> </ul> <p><b>Short courses</b></p> <ul style="list-style-type: none"> <li>• Digital Switchover    </li> </ul> <p>Computer Vision Data Science Internet of Things</p>

	<p><b>Reindustrialization</b>   Production   Energy Industrial Management   Automation and Robotics   Innovation   Maintenance</p> <p><b>climate transition</b> Production and Harvesting Technologies   Agriculture and Sustainable Production   Agroecology Food Systems   Animal Production   Laboratory Techniques</p> <p><b>tourism</b></p>
<p>Polytechnic Institute of Cávado do Ave</p> <p>- SKILLS BOOST 2025@IPCA</p> <hr style="border: 2px solid #00AEEF; margin-top: 20px;"/>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Fashion and Textile Design</li> <li>• FINTECH</li> <li>• Management of European Funds</li> <li>• Management of Tourist Accommodation</li> </ul> <p><b>Master’s degree</b></p> <ul style="list-style-type: none"> <li>• Artificial Intelligence</li> <li>• Management and Industrial Engineering</li> </ul> <p><b>Professional Master’s degree</b></p> <ul style="list-style-type: none"> <li>• 3D modeling and additive manufacturing</li> <li>• STEAM Education Technologies</li> <li>• Cybersecurity</li> <li>• Logistics and Production Management</li> <li>• Supply Chain Management and Logistics</li> <li>• Tax and Tax Management</li> <li>• Executive Director</li> <li>• Management of Tourist Accommodation</li> </ul> <p><b>Specialization courses</b></p> <ul style="list-style-type: none"> <li>• Simulated Practical Training Programme, specializing in Management and Finance</li> <li>• Short Advanced Programmes (SAP) (6 SAP per year)</li> <li>• Advanced Courses promoted by 2Ai.</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>• Etesp SKILL BOOST courses - courses in business environment</li> </ul>

<p>Polytechnic Institute of Lisboa - Next Level Higher Education for All @ Politécnico de Lisboa - Next Level@IPL</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Statistics open to all</li> <li>• E-learning pedagogy for higher education</li> <li>• Graphic Design for E-learning Resources</li> <li>• E-learning Pedagogy</li> <li>• Animated puppets and forms</li> <li>• Management and Sustainable Development</li> <li>• Data Science for Communication and Marketing</li> <li>• Creative Industries: Management and Trends</li> <li>• Interactive products for education</li> <li>• Liberal Studies in Arts and Technologies - STEAM</li> <li>• Video games</li> <li>• Metrology and Metrology in Health</li> <li>• New approaches in applied acoustics and audio</li> <li>• Digital product design</li> <li>• Integrated Management and Quality in Healthcare</li> <li>• Communication and Marketing in the Pharmaceutical Industry</li> <li>• Specialisation Railway</li> <li>• Renewable Energy Engineering and Management</li> <li>• Conservation and Rehabilitation of Buildings</li> <li>• Energy Efficiency and Sustainability in Buildings</li> <li>• Design and Maintenance of Electrical Installations</li> <li>• Building Inspection, Expertise and Monitoring</li> <li>• Chemical Analysts</li> <li>• Advanced Manufacturing Processes</li> </ul> <p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Optoelectronic and Photonic Engineering</li> <li>• Choreographic Creation and Professional Practices</li> </ul> <p><b>Short courses</b></p> <ul style="list-style-type: none"> <li>• Fab Academy - Specialization Course in Digital Production</li> <li>• Preliminary Mathematics</li> <li>• Preparatory Physics Course</li> <li>• Basic Course in Taxation</li> <li>• Specialization Course in Accounting, Taxation and Planning in the insurance sector</li> </ul>
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**Microcredentials**

- Medicine and Medication Safety
- Hot Topics in the Study of Respiratory Function
- Cardiovascular Pharmacotherapy
- Respiratory Pharmacotherapy
- Respiratory Function Study and COVID-19
- Safety and Radiation Protection Dosimetry Adjusting to serial CT Scans
- Epigenetics in Development and Heredity
- Advances in Detection of mycobacteria
- Image-Guided Adaptive Radiotherapy - Delivering Personalized Radiation Therapy
- Gait Analysis in Amputates and Orthotic Users and Quantification of Their Functionality
- Human Exposure Assessment
- Environmental Microbiology
- Thorax CT scan management Practices and Resources in COVID-19 Diagnostic and follow-up Patients
- Advanced Nuclear Cardiology
- Transthoracic Echocardiography
- Cardiac Magnetic Resonance Imaging
- Thoracic Ultrasound
- Clinical Nutritional Assessment: challenges and current perspectives
- Kidney and nutrition: prevention and intervention in kidney disease
- Advanced course in pediatric nutrition
- Human Molecular Genetics
- Statistical and bioinformatics methods in molecular diagnosis
- Next Generation Sequencing.
- Digital PCR in molecular diagnostics
- Visual testing for tele-health using mobile applications and new technologies for home monitoring of eye disease
- Training in Virtual Environmental Radiotherapy
- Approach to 3D printing and its use in prostheses and orthotics
- In the age of telematics: adaptation of nutritionist intervention



	<ul style="list-style-type: none"> <li>• Physiotherapy in palliative care</li> <li>• Clinical Analysis of Movement</li> <li>• Vascular echodoppler</li> <li>• Evaluation and analysis of visual health biomarkers</li> <li>• mTOR signaling inhibition strategies: from research to clinical practice</li> <li>• Health data protection and management</li> <li>• Analytical procedures for combating doping</li> <li>• Exercise in pregnancy and postpartum</li> <li>• Weight Management - Nutritional Interventions Not Prescribed</li> </ul>
<p>Polytechnic Institute of Santarém Consórcio Entre o Tejo e o</p> <p>Mar - CETM</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Home Hospitalization (45ECTS/225h)</li> <li>• Nursing in Senology (45ECTS/225h)</li> <li>• Telecare (45ECTS/225h)</li> <li>• Intercultural Health and Communication (45ECTS/225h)</li> <li>• International Affairs (45ECTS/225h)</li> <li>• Project Management (45ECTS/225h)</li> <li>• Healthcare Information Systems and Technologies (30ECTS/150h)</li> <li>• Digital Enterprise Technologies (upgrading) (30ECTS/150h)</li> <li>• Digitization and Sustainability in Companies (45ECTS/225h)</li> <li>• Communication Networks and Infrastructures (60ECTS/300h)</li> <li>• STEAM Education (60ECTS/300h), to progress to a Master's Degree</li> <li>• Computational Data Analysis and Processing (50 ECTS/650h)</li> <li>• Civil Protection (60 ECTS/ 650h)</li> <li>• Bioresources and Sustainability (40 ECTS/154h)</li> <li>• Development of Interactive Procedural Systems with Virtual or Augmented Reality (30ECTS/150h)</li> <li>• Enterprise Management Systems - SAP (60 ECTS/ 360 Hours)</li> <li>• Health Management (30 ECTS/180h)</li> <li>• Social Gerontology (30 ECTS/150h)</li> <li>• Occupational Health Management (30 ECTS/180h)</li> <li>• Logistics (40 ECTS/240h)</li> <li>• Post-graduation in Projects and Internationalization</li> </ul>

	<ul style="list-style-type: none"> <li>• Information Management and Digital Citizenship</li> <li>• Post-graduation in Global Citizenship and Social Responsibility</li> <li>• New Approaches to Industrial Equipment Maintenance (60 ECTS / 300 Hours)</li> <li>• Air Conditioning and Cooling (60 ECTS/ 300h)</li> <li>• Health and Safety at Work (90 ECTS/ 500 Hours)</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>• Organizational Diagnosis and Intervention (6 ECTS / 40h)</li> <li>• International Human Resources Management (6 ECTS / 30h)</li> <li>• Healthy Working Environment Management (5 ECTS / 30h)</li> <li>• Strategic Management of Organizations (7 ECTS / 40h)</li> <li>• Marketing and Innovation Planning (5 ECTS / 30h)</li> <li>• Management Processes for Startups (7 ECTS / 40h)</li> <li>• Strategic Human Resources Management (5 ECTS / 30h)</li> <li>• International Marketing (5 ECTS / 30h)</li> <li>• Labour Law (5 ECTS / 30h)</li> <li>• Logistics and Supply Chains (5 ECTS / 30h)</li> <li>• Financial Risk Management Instruments (5 ECTS / 30h)</li> <li>• Financial Audit (5 ECTS / 30h)</li> <li>• Corporate Governance (5 ECTS / 30h)</li> <li>• Health Finance, Economy and Quality Management (4 ECTS / 24h)</li> <li>• Clinical governance, policies and health systems (4 ECTS / 24h)</li> <li>• Operations, Logistics and Health Planning (4 ECTS / 24h)</li> <li>• Internal Logistics and Warehouse Management (4 ECTS / 24h)</li> <li>• Project Management (4 ECTS / 24h)</li> <li>• Business Intelligence (4 ECTS / 24h)</li> <li>• Analytical Systems Architecture ( 8 ECTS / 52h)</li> <li>• Safeguarding and Protection of Heritage (4 ECTS / 45h)</li> <li>• Conception of Periodicals (10 ECTS / 90h)</li> <li>• Large Data Analysis and Processing (Large Data) (7.5 ECTS /60h)</li> <li>• Basic Safety (60 h)</li> <li>• Protection awareness (4 h)</li> <li>• Crowd control (8 h)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Maintenance and repair of electrical and electronic equipment (14 h)</li> <li>• Safety for crew members providing direct assistance to passengers (4h)</li> <li>• Vibration analysis in equipment fault diagnosis (2 ECTS/30 h)</li> <li>• Thermography for equipment fault diagnosis (2 ECTS/30 h)</li> <li>• Pneumatic Automation (2 ECTS/30 h)</li> <li>• Hydraulic Automation (2 ECTS/30 h)</li> <li>• Industrial Controller Programming (2 ECTS/30 h)</li> <li>• Welding techniques (4 ECTS/60 h)</li> <li>• Computer-assisted design of industrial equipment (4 ECTS/60h)</li> <li>• 3D printing for industrial applications (5 ECTS/45h)</li> <li>• Basic Safety ( 8 ECTS /60h)</li> <li>• Introduction to Protection (4h)</li> <li>• Crowd Control Management (8h)</li> <li>• Maintenance and repair of electrical and electronic equipment (14h)</li> <li>• Safety for the crew of the ship directly assisting passengers (4h)</li> <li>• Interpersonal Communication and Health Relations (6 ECTS/ 45h)</li> <li>• Intercultural Health and Mediation (6 ECTS/ 45h)</li> <li>• Health Planning (4 ECTS/30h)</li> <li>• Epidemiology and Biostatistics (5 ECTS/40h)</li> <li>• Health Policy (6 ECTS/45h)</li> <li>• Digital Laboratory II (9 ECTS/63h)</li> <li>• Design and evaluation of intervention projects (7 ECTS /42h)</li> <li>• Management of social organizations (6 ECTS/36h)</li> </ul>
<p>Polytechnic Institute of Oporto</p> <p>Resilient P. PORTO</p>	<p><b>Post graduate studies (60 ects)</b></p> <ul style="list-style-type: none"> <li>• Knowledge and Resources for Teaching Portuguese Sign Language</li> <li>• Academy for Digital Skills</li> <li>• Business Analytics Management and Administration</li> <li>• Management of Business Information Systems o Public Accounting</li> <li>• Quality Management o Digital Business Decision Intelligence</li> <li>• Technology and Innovation Management and Entrepreneurship o Digital Marketing for internationalization</li> <li>• Soft Skills for Management</li> </ul>

	<ul style="list-style-type: none"> <li>• Cultural Resources for Business</li> <li>• Liberal Arts, in two areas</li> <li>• Multimedia and media arts, with postgraduate degrees in Interior Design and Space, Script Writing, Digital Cinematography, Digital Photographic Book: Photographic and Editorial Practices, Web Design , Innovation Project and Design Development, Virtual Stage and Set Design (for Cinema and Television);</li> <li>• Tourism, hospitality and catering, with postgraduate degrees in Sommelier, Business Tourism and Events, Interpreting Guide, etc.</li> <li>• Technology and Innovation, in three areas Industry 4.0 Cyber Security and Forensic Investigation Augmented and Virtual Reality.</li> </ul> <p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Teaching Portuguese in the digital age</li> </ul> <p><b>Short training courses for adults (6 ects):</b></p> <p><b>Technology area:</b></p> <ul style="list-style-type: none"> <li>• Powerbi Bootcamp</li> <li>• Big Data: Data Analytics for Business and Beyond</li> <li>• Creation of networks</li> <li>• Cybersecurity</li> <li>• Automation</li> <li>• Network security</li> <li>• Cloud</li> <li>• System Administration</li> <li>• Software development (Upskills)</li> </ul> <p><b>Area of management and administration</b></p> <ul style="list-style-type: none"> <li>• Tax Management</li> <li>• Inverse logistics</li> <li>• International Value Chain Management</li> <li>• Digital Marketing - Strategy and Implementation</li> <li>• Project Management for Electronic Business</li> <li>• Social Network Management</li> <li>• Digital Entrepreneurship (2-Summer School Modules)</li> <li>• Public Relations for Public Administration</li> <li>• Inclusive Audiovisual Communication</li> <li>• Data-based support for decision-making</li> <li>• Electronic Business Management</li> <li>• Transversal Training Actions</li> </ul>
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<p>skills4future</p> <p>Polytechnic Institute of Leiria</p>	<p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Education and Pedagogical Innovation</li> <li>• Joint Hand Therapy</li> <li>• Palliative Care</li> <li>• Physiotherapy and Rehabilitation</li> <li>• Science of Aging</li> <li>• Medical-Surgical Nursing - Area of Nursing for the Critical Person - Torres Vedras</li> <li>• Entrepreneurship and Innovation</li> <li>• Data Science</li> <li>• Accounting and Tax Affairs</li> <li>• Engineering of Services</li> <li>• Arts of Sound and Image</li> <li>• Space Design</li> <li>• Design for Health and Well-being (international)</li> <li>• Blue and Circular Economy</li> </ul> <p><b>Post Graduations</b></p> <ul style="list-style-type: none"> <li>• adapted sport and physical activity</li> <li>• civil protection and emergency and catastrophe management</li> <li>• autism disorders</li> <li>• health units management</li> </ul> <p><b>Short courses</b></p> <ul style="list-style-type: none"> <li>• SAP courses in different areas within the scope of the Digital Crafts Platform: digital arts and entertainment; image and communication in digital media; capture and editing digital images for social networks and storytelling.</li> <li>• Creation of advanced short courses with microcredits</li> </ul>
<p>To boost people and territory Polytechnic Institute of Coimbra</p>	<p><b>Short trainings (higher education professional technical courses, CTESP)</b></p> <p><b>Public administration and services</b></p> <ul style="list-style-type: none"> <li>• Senior Technician of Justice Officer</li> </ul> <p><b>Post graduate training</b></p> <p><b>Public administration and services</b></p> <ul style="list-style-type: none"> <li>• Land Register</li> <li>• Healthy and Resilient Cities</li> <li>• Digital communication in museum spaces</li> <li>• Strategic Communication for Municipalities</li> </ul> <ul style="list-style-type: none"> <li>• Neuro Marketing</li> </ul> <p><b>Arts and design</b></p> <ul style="list-style-type: none"> <li>• Design in ceramics</li> <li>• Multimedia Design</li> <li>• Textile Design</li> <li>• Illustration applied to Design</li> <li>• 3D Modeling, Calculation and Industrial Design</li> </ul>

	<ul style="list-style-type: none"> <li>• Vitrinism</li> </ul> <p><b>Forests, environment and agrifood</b></p> <ul style="list-style-type: none"> <li>• Fire Analysis (PNGIFR)</li> <li>• Industrial Biotechnology</li> <li>• Conservation of Biodiversity</li> <li>• Control of agroindustrial Production</li> <li>• Sustainable Development</li> <li>• Horseback Riding for Therapeutic Purposes</li> <li>• Establishment and Management of Linear Easements</li> <li>• Adaptive Forest Management</li> <li>• Irrigation Systems Management</li> <li>• Innovation and Sustainability in the Food Industry</li> <li>• Agricultural Innovation and Technology</li> <li>• Innovation in Forest Operations Management</li> <li>• Innovation, Health and Welfare in Poultry Meat Production</li> <li>• Organic Production</li> <li>• Production and Processing of Aromatic, Medicinal and Seasoning Plants</li> <li>• Food Security</li> </ul> <p><b>Industry and digital technology</b></p> <ul style="list-style-type: none"> <li>• BIM - Information Management for Construction</li> <li>• Digital communication</li> <li>• Quality Control in the Pharmaceutical Industry</li> </ul> <ul style="list-style-type: none"> <li>• Renewable Energy</li> <li>• Digital Marketing and Strategy</li> <li>• IHC - Person Computer Interaction</li> <li>• Logistics Intelligence and Supply Chain Management</li> <li>• Computer-Assisted Manufacturing Industrial Processes</li> <li>• Computer Programming and Systems</li> <li>• Industrial and Collaborative Robotics</li> <li>• Advanced Physical Asset Management and Maintenance Systems</li> <li>• Industrial Automation Systems</li> <li>• Industrial Vision Systems</li> <li>• Smart Tourism: New Technologies and Digital Channels applied to Tourism</li> <li>• Software for Embedded and Critical Systems</li> <li>• Digital Technologies in Education</li> </ul> <p><b>Health, ageing, sport and tourism</b></p> <ul style="list-style-type: none"> <li>• Biotechnology in Health</li> </ul> <ul style="list-style-type: none"> <li>• Nature Sports</li> <li>• Aging and Health</li> <li>• Clinical Physiology - Specialization in Cardiac Ultrasonography and Vascular Function/ Sleep Physiopathology and Non invasive Ventilation/ Applied Electroencephalography</li> <li>• Gerontomotricity</li> <li>• Local Sports Services Management</li> <li>• Nature Heritage Tour Guides</li> <li>• Gerontological intervention</li> <li>• Drug Production and Quality Control</li> <li>• Advanced Health Management Systems</li> </ul> <p><b>Microcredentials</b></p> <p><b>Public administration and services</b></p> <ul style="list-style-type: none"> <li>• Accounting and Finance for Nonfinancial Municipalities</li> <li>• Education, Leisure and Local Development</li> </ul> <ul style="list-style-type: none"> <li>• Urban Engineering Management</li> </ul> <p><b>Industry and digital technology</b></p> <ul style="list-style-type: none"> <li>• Urban Hydraulic Infrastructure Management and Rehabilitation</li> </ul>
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	<p><b>Health, ageing, sport and tourism</b></p> <ul style="list-style-type: none"> <li>• Climate Change and Health</li> <li>• Physical Activity and Play in Childhood</li> <li>• Cardiac simSchool - Simulation training in Cardiac Intervention Procedures</li> <li>• Surfing Coaches Course</li> <li>• Practical Theoretical Course of Vascular Echodoppler</li> <li>• Radiological Protection and Safety for Nurses</li> <li>• Radiological Protection and Safety for Physicians</li> </ul>
<p>BAITS Polytechnic Institute of Viana do castelo</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Regional Guides</li> <li>• Educational Services and Heritage Enhancement</li> <li>• Multidimensional Gerontological Evaluation</li> <li>• Stress Management and Mental Health</li> <li>• One Health &amp; Animal Biodiversity</li> <li>• Sustainable logistics and business models</li> <li>• Sports Technologies</li> </ul> <p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Industrial Engineering and Management and Innovation</li> <li>• Innovation and Sustainability Agrifood and Environmental</li> </ul> <p><b>Short Term Courses</b></p> <ul style="list-style-type: none"> <li>• Finance for non-financial</li> <li>• Strategic and Operational Marketing</li> <li>• Statistical Treatment of Health Data</li> <li>• Creation of Business</li> <li>• Introductory course for height work</li> <li>• Rope Access Technician - level 1</li> <li>• Rope Access Technician - level 2 (rescue)</li> <li>• Vitrinism</li> <li>• Immediate Health Care and Basic Life Support</li> <li>• Life cycle feeding</li> <li>• Food processing and quality control</li> <li>• Biology and molecular genetics</li> <li>• Urban and Social Horticulture in Organic Agriculture</li> <li>• green infrastructures natural engineering</li> <li>• Sustainability in viticulture and oenology</li> <li>• Statistical Analysis in SPSS</li> </ul>

<p>Sonda2026 - smart open networks for development</p> <p>acceleration</p> <p>Polytechnic Institute of Setúbal</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Data Analytics</li> <li>• Speech therapy: communication, language and speech in adults</li> <li>• Speech Therapy: communication, language and speech in children</li> <li>• Physical exercise and health</li> <li>• Nursing Therapy Stomatology</li> <li>• Occupational Health Nursing</li> <li>• Nursing and Health Management</li> <li>• Emergency Care for Extra-Hospital Nurses</li> <li>• Clinical Supervision in Nursing</li> </ul> <p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Data science for enterprises</li> <li>• Biomedical Engineering</li> <li>• Education, Artistic Practices and Inclusion</li> <li>• Advanced Practice of Physiotherapy in Neurology</li> <li>• Speech Therapy</li> <li>• Sports Physiotherapy (with UNL)</li> </ul> <p><b>Professional master's degree</b></p> <ul style="list-style-type: none"> <li>• Supply Chain Management and Logistics</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>• Amazon Web Academy (AWS)</li> <li>• UAS Open Remote Pilot Category - A1+A3</li> <li>• UAS Open Remote Pilot Category - A2</li> <li>• UAS Remote Pilot Specific Category</li> <li>• Promotion of ethnic-racial equality at the Polytechnic Institute of Setúbal</li> <li>• Technology and vestibular rehabilitation</li> <li>• Technology-oriented management of chronic neurological diseases</li> <li>• Professional development and monitoring of clinical outcomes</li> <li>• Prescription Exercise in Physical Therapy</li> <li>• Infection prevention and control</li> <li>• Health Ethics and Bioethics</li> <li>• Evidence-Based Practice and Results</li> </ul>
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	<ul style="list-style-type: none"> <li>• Strategies for Intervention in Occupational Health Physiotherapy</li> <li>• Language Skills Promotion Programme (Meta) for Speech Therapists</li> <li>• Training in (target) language skills</li> <li>• Training for communication skills and language difficulties</li> <li>• Awareness-raising training in communication and language difficulties</li> <li>• Stuttering and stuttering awareness training</li> <li>• Technical and Relational Intervention with the Elderly</li> <li>• SO-SAPHA Course - IPS</li> <li>• UAS Open Remote Pilot Category - A1+A3</li> <li>• UAS Open Remote Pilot Category - A2</li> <li>• UAS Remote Pilot Specific Category</li> <li>• Promotion of ethnic-racial equality at the Polytechnic Institute of Setúbal</li> <li>• Technology and vestibular rehabilitation</li> <li>• Technology-oriented management of chronic neurological diseases</li> <li>• Professional development and monitoring of clinical outcomes</li> <li>• Prescription Exercise in Physical Therapy</li> <li>• Infection prevention and control</li> <li>• Health Ethics and Bioethics</li> <li>• Evidence-Based Practice and Results</li> <li>• Strategies for Intervention in Occupational Health Physiotherapy</li> <li>• Language Skills Promotion Programme (Meta) for Speech Therapists</li> <li>• Training in (target) language skills</li> <li>• Training for communication skills and language difficulties</li> <li>• Awareness-raising training in communication and language difficulties</li> <li>• Stuttering and stuttering awareness training</li> <li>• Technical and Relational Intervention with the Elderly</li> <li>• SO-SAPHA Course - IPS</li> </ul>
<p>MERIDES Consortium:</p>	<p><b>Post graduate studies</b></p>

upskilling and reskilling systemic solutions for accelerating the digital, energetic and circular transitions

Polytechnic Institute of Portalegre

- Geographic Information Systems
- Circular economy
- Innovation, Digital Technologies and Sustainability
- Mediterranean Diet and Sustainability
- Precision Farming Technologies
- Sustainable Tourism and Welfare
- Wine tourism
- Motorization of electric and hybrid vehicles
- Cybersecurity
- Data Science and Machine Learning
- Data Science and Machine Learning in Health
- Vector drawing and digital production
- Digital Innovation
- E-business and digital marketing
- Information Technology Management
- Networks and infrastructure
- Software development and low-code platforms
- Strategy and Digital Transformation in Sport
- Animation Cinema
- Cloud and cybersecurity
- Data Science
- Tourism and Digital Communication
- H2 electrolytic production technologies
- Introduction to Hydrogen Technology
- Production of renewable gases
- Hydrogen energy vector
- Sustainable Fuels
- Sustainable management of the olive sector
- Sustainable Tourism and Welfare
- Environment and Technology Pedagogical Training

**Master's**

- Animation Cinema
- Tourism and Digital Communication

**Microcredentials**

Circular Economy

- Circular Economy and Sustainability
- Circular Economy in the Agrifood Sector
- Energy Efficiency in Agriculture and Agribusiness
- GIS and Remote Sensing in Agriculture
- Intelligent Agriculture
- Water use efficiency in agriculture
- Precision Agriculture and Equipment- Ecology and Conservation of Natural Resources
- Food and wine
- Hygiene and Food Safety
- Integrated Animal Production
- Application of Phytopharmacology and Plant Protection Products
- Post-harvest and industrial processing
- Sustainable Development, Energy and Environment
- Technology Management and Irrigation
- Processing of Plant and Animal Products
- Appreciation of Regional Gastronomy Products
- Water treatment technologies
- Construction Quality and Economics
- Conservation and rehabilitation
- Eco Design
- Integrated Waste Management and Environment
- Sustainable construction and technological innovation
- Organic Production
- Integrated Plant Production
- Active Cybersecurity Operations
- Digital marketing
- Occupational noise

- Course of Agricultural Machinery Operators
- Irrigation and environment
- Innovation and entrepreneurship
- Building safety and occupational safety training
- Big Data

In addition to the list of courses presented, the proposal foresees that, throughout the implementation of the project, other post-graduate and/or microcredentials courses can be developed, duly integrated in the three technical and scientific fields identified in the proposal, taking into account any needs education/training of industry and project partners.

**Digitization**

- Cybersecurity fundamentals
- Databases
- Engineering of software
- Audiovisual and Multimedia Technologies
- Interaction Male
- Computer on the Internet of Things
- Information Technologies for Business Support
- Advanced topics in computer networks
- Augmented Reality- Computer-Assisted Design
- Data analytics and machine learning
- Fundamentals of Computer Networks
- Information and Software Security
- Internet of Things and Embedded Systems
- Introduction to Java Programming
- Mobile computing
- Security
- Quality of software
- Web and Mobile Technologies
- User interface design
- Virtual reality
- Cybercrime and computer expertise
- Digital Educational Resources
- e-Learning and Collaborative Networks
- Automatic information extraction
- Analysis of data
- Data Management and Analytics on the WEB
- Digital communication platforms
- Internet Information Services
- Mobile Apps and Web Services
- Software and Information Security
- Educational Context Programming and Robotics
- Digital Lab

**Renewable energy**

- Advanced solar thermal and photovoltaic radiation conversion applications
- Energy storage for mobile and stationary applications
- Integration of renewable energy and storage in the energy system
- Renewable gas technologies and production
- Efficiency and rationality in the use of electricity
- Energy audits and energy management systems
- Energy consumption in industry and transport
- Energy performance of service buildings
- Simulation of energy
- Thermal of buildings
- Bioenergy
- Wind and Geothermal Systems
- Hydroelectric Systems
- Hydrogen and fuel cells
- Introduction to H2 electrolytic production technologies

	<ul style="list-style-type: none"> <li>• Solar and photovoltaic systems</li> </ul>
<p>IP Alliance</p> <p>Nursing School of Oporto</p>	<p><b>Post Graduate studies</b></p> <ul style="list-style-type: none"> <li>• Technological Innovation in Health</li> </ul> <p><b>Masters</b></p> <ul style="list-style-type: none"> <li>• Community Nursing, in the area of Family Health Nursing</li> <li>• Mental and Psychiatric Health Nursing</li> <li>• Medical-Surgical Nursing, in the area of Nursing to the Critical Person</li> <li>• Rehabilitation Nursing</li> <li>• Medical-Surgical Nursing, in the area of Nursing to the Person in Palliative Situation</li> <li>• Medical-Surgical Nursing, in the area of Nursing to the Person in Perioperative Situation</li> </ul> <p><b>Short courses</b></p> <ul style="list-style-type: none"> <li>• Rapid Laboratory Diagnosis in Clinical Microbiology</li> <li>• Molecular Diagnosis in Pathology and Oncology</li> <li>• Basic Course of Oncobiology Research</li> <li>• Microbiological quality and environmental safety in healthcare facilities</li> <li>• Telemedicine and electronic health</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>• Nursing and chronically ill</li> <li>• Adaptation to pregnancy</li> <li>• Adaptation to parenting</li> <li>• Prenatal care</li> <li>• Self-care and self-management of chronic disease(s)(s)</li> <li>• Care design in a community nursing context</li> <li>• Child and Paediatric Health Care Design</li> <li>• Design of care in the context of maternal and obstetric health</li> <li>• Care design in a chronic situation</li> <li>• Child and teenager with special needs</li> <li>• Chronic diseases: Pathophysiological fundamentals</li> <li>• Epidemiology and Biostatistics</li> <li>• Epistemology and nursing ethics</li> <li>• Health promotion strategies in groups and communities</li> <li>• Chronic disease management</li> <li>• Case Management</li> <li>• Research in nursing</li> <li>• Obstetrics and gynecology</li> <li>• Parenting in the developmental pathway</li> <li>• Pediatric pathology</li> <li>• Health planning and Programme and project management</li> <li>• Health care infection prevention and control plans</li> <li>• Postpartum and newborn</li> <li>• Management Principles in Advanced Nursing</li> <li>• Psychology and sociology of childhood and adolescence</li> <li>• Therapeutic relationship and communication in the context of a chronic situation</li> <li>• Relationship and therapeutic communication in the context of child and pediatric health</li> <li>• Child and adolescent responses to disease</li> <li>• Health of groups and communities</li> <li>• Public and community health</li> <li>• Sexual and reproductive health</li> <li>• Labor in labor</li> <li>• Transition of child and adolescent development</li> </ul>
<p>Alcoitão School of Health - AHED - Longlife Health Education</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Cardiac Rehabilitation for Physical Therapists</li> <li>• Mental Health - Pedophiliatria</li> </ul>

	<ul style="list-style-type: none"> <li>• Nutrition for health professionals</li> <li>• Management of social equipment</li> </ul> <p><b>Short courses</b></p> <ul style="list-style-type: none"> <li>• Functional intervention in mechanical head and neck injuries</li> <li>• Structured observations of motor sensory integration and exhaustive observations of proprioception</li> <li>• Physiotherapy in users Post-covid and long COVID</li> <li>• Advanced practical training for operating theatre nurses</li> <li>• Advanced practical training in special examination nursing</li> <li>• Approach to people in critical situations</li> <li>• Hands-on training in invasive and non-invasive monitoring</li> <li>• Hands-on training in invasive and non-invasive ventilation</li> <li>• Magnetic Resonance Imaging</li> <li>• Computed Tomography</li> <li>• Post-image processing in radiology</li> <li>• Safety of medicines</li> <li>• Practical training in handling blood and blood components</li> <li>• Neurological diseases - Food safety</li> <li>• Implications of the pandemic on the development of children's language</li> <li>• Neurodevelopment - Writing performance</li> <li>• Neurodevelopment - Play: The risks and benefits</li> <li>• Lifelong nutrition</li> <li>• Communication Techniques in Teams</li> <li>• Physiopathology of aging in integrated podiatry</li> <li>• Telerehabilitation for neurological patients</li> <li>• Sensory, motor and cognitive development during early childhood - prevention of disorders</li> <li>• Sensory, motor and cognitive development during school age - prevention of disorders</li> <li>• Basic practices for informal caregiver</li> </ul>
<p>Tourism International Academy</p> <p>Estoril Higher Education Institute for Tourism and Hotel Studies</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Competitiveness and Growth Strategies for Tourism Companies</li> <li>• Tourist Guidance Office</li> <li>• Post-graduate multidisciplinary courses for the new challenges of Tourism and Hospitality</li> </ul> <p><b>Specialized training</b></p> <ul style="list-style-type: none"> <li>• Tourist Guide</li> <li>• Train to train in Tourism Management</li> <li>• Digital Transformation and Innovation in Tourism, Hospitality and Food Production</li> <li>• Multidisciplinary training for the new challenges of Tourism and Hospitality</li> </ul> <p><b>micro-credit certification</b></p> <ul style="list-style-type: none"> <li>• Distance learning degrees</li> <li>• Master's and Master's Degrees</li> </ul>
<p>Blue Design Alliance</p> <p>ESAD/CIFAD - Centro de Investigação e Formação em Artes e Design, Lda</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Water Resources Design, Marketing &amp; Management</li> <li>• Water Culture and Literacy</li> <li>• Logistics, Shipping &amp; Shipbuilding</li> <li>• Health &amp; Wellbeing: Tourism, Sport &amp; Biotechnology</li> </ul> <p><b>Short courses</b></p>

	<p>Digital arts and photography of water systems Customer service in the tourism sector   Food science and technology   Environmental sciences and sustainability   Advanced nutrition sciences   Communicating the biodiversity of ocean and river ecosystems   Communicating and disseminating Community science  Shipbuilding   Curating and educational service applied to nautical and underwater domains   Food packaging design  Design of spaces and equipment for maritime and river fronts  Interior design of boats  Design of water products and services  Product design: reuse and recycling of waste   Design of products and experiences for tourism  Design and technologies of wood for the creation of equipment and cultural artefacts related to the nautical and river heritage  Design Thinking, creativity and innovation  Green boat design   Documentary film of the nautical and underwater heritage associated with traditional crafts  Entrepreneurship and innovation in the context of the circularity and sustainability of the blue economy  Strategies and competitiveness in the economy of the sea   Extraction of bioactive compounds from microalgae  Extraction of phycoloids from macroalgae  Physiotherapy and water therapies  Creative photography applied to food production  Communication management applied to nautical and aquatic depots   Strategic innovation management   security guard and communication in water sports  Port management  Management, marketing and entrepreneurship  Advanced hydrobalneotherapy  Hygiene and safety in thermal facilities and spas  History, heritage and documentation systems: nautical and underwater  Pressure identification and requalification of river and lake systems  Intermodal maritime logistics  Logistics and maritime transport  Visual mapping of blue ecosystems  Visual mapping and water literacy  Machinery and maritime systems  Marketing of outdoor tourism and the sea  Digital marketing in the sea economy  Materials and sustainability: circularity and efficiency  Nutrition and life cycle  The sea as a promoter of health and well-being  Healthy environmental practices  Strategic marketing principles and marine economy  Production of new seafood products  Educational resources related to the decorative stucco inspired by nautical and river heritage  Educational resources related to weaving and tapestry using materials-raw materials of nautical and river origin  Salutogenese via water  Integrated Water Resources Management Systems  Information and Support Systems in Water Resources Management  Basic Life Support with DEA on board  Advanced Techniques in Hydrokinesitherapy  Technology and Economics circular  Waste water treatment and reuse   Guided regional tourism for wellbeing.</p>
<p>Platform For a Global Health - Qualification of Human Health Resources  Polytechnic Institute for Health – North - CESPU</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Palliative and Extended Care</li> <li>• Infection Prevention and Control</li> <li>• Safety of the Patient</li> <li>• Intensive Care and Emergency</li> <li>• Stomatology Nursing</li> <li>• Longevity Support Response Management</li> </ul> <p><b>Master's</b></p> <ul style="list-style-type: none"> <li>• Rehabilitation Nursing</li> </ul>

	<ul style="list-style-type: none"> <li>• Medical-Surgical Nursing</li> <li>• Child and Pediatric Health Nursing</li> <li>• Physical therapy</li> <li><b>Specialisation/advanced training courses</b></li> <li>• Civil Protection Agents and Healthy Communities</li> <li>• Antibiotic Therapy in Outpatient</li> <li>• CBHFA</li> <li>• Common mental Disorders in Primary care</li> <li>• Health Communication</li> <li>• Project Design and Management</li> <li>• Informed Consent</li> <li>• Management Control and Financial Analysis</li> <li>• Critical Care, Emergency and Patient</li> <li>• Advanced Course in Operations Management and Logistics for Health Organizations</li> <li>• Advanced Course in Human Resources Management and Leadership</li> <li>• Advanced Course in Strategic Health Management</li> <li>• Basic Course on Palliative Care</li> <li>• Customer Relationship Management</li> <li>• Early interactions and Infant and Early Childhood mental health</li> <li>• Obstetric Emergencies</li> <li>• Nursing of Digestive Endoscopy</li> <li>• Scientific Writing for Health Professionals</li> <li>• Executive Master in Health Quality Management Systems</li> <li>• Advanced Patient Advocacy Training</li> <li>• Advanced training in Patient and family Engagement in Patient Safety</li> <li>• Clinical Governance</li> <li>• Healthcare-Associated Infection</li> <li>• Innovative technologies in the management of cognitive decline</li> <li>• Introdução à Saúde - Organização, Humanização e Desafios Futuros</li> <li>• ITLS Provider</li> <li>• ITLS Pediatric</li> <li>• ITLS Provider Advanced</li> </ul>
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	<ul style="list-style-type: none"> <li>• ITLS Provider Basic</li> <li>• ITLS Duty to Respond</li> <li>• Leadership Profile</li> <li>• Perinatal Mental Health</li> <li>• Measuring Healthcare Quality and Safety – the importance of designing and understanding indicators</li> <li>• Non-pharmacological interventions to prevent cognitive decline</li> <li>• Non-Tuberculous Mycobacteria: From Diagnosis to Treatment</li> </ul>
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**Table 3 b) - Offer in Consortia led by Universities**

<p>CONSORTIA</p> <p>HEI APPLICANT AND CO-SPONSORS</p>	<p>New or updated courses 2021-2026</p>
<p>UTAD - skills for life</p> <p>University of Trás-os-Montes e Alto Douro</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Advanced Gardening.</li> <li>• Prevention of fires</li> <li>• Nature sport, sustainability and health</li> <li>• Technologies and digital transformation in sport</li> <li>• Sports management and organization</li> <li>• Environment and Health</li> <li>• Digital design</li> <li>• Sales and e-commerce management</li> <li>• Data science</li> <li>• Security and Information in Master Organizations</li> </ul> <p><b>Master's</b></p> <p>Climate Action</p>



	<p>Master's/post-graduate degrees for updating teachers in the various areas (STEM, languages, etc.).</p> <p>Qualification for teaching in disciplinary areas</p> <p><b>Short-term training for adults</b></p> <ul style="list-style-type: none"> <li>• Non-elector degree courses for digital skills training</li> <li>• Training courses for teachers of Primary and Secondary Education, in various areas</li> <li>• Transition to circular economics: Short course for policy makers</li> <li>• Good Practices for Climate Change Mitigation: Short Course for Policy Makers</li> <li>• Refresher/Knowledge Initiation Courses for Winemakers and Other Audiences</li> <li>• Course in gastronomic sciences.</li> <li>• Training Courses in Forensic Veterinary Sciences</li> <li>• Training courses in the field of wild and exotic animals</li> <li>• Training courses in animal welfare</li> <li>• Short-term courses (which may evolve to postgraduate courses) in the following areas: Leadership/administration and school management; organizational learning; Education, culture and territorial (local) development; organizational learning; Animation, culture and territory; Adults education and training; community education and local/territorial development</li> </ul>
<p>Ulisboa post-graduation school and Youth impulse STEAM Programme University of Lisbon</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• STEAM Education</li> <li>• Health in all policies: multidisciplinary contribution in master's health promotion</li> </ul> <p><b>Master's</b></p> <ul style="list-style-type: none"> <li>• Applied Data Science in Agronomy, Environment and Forest</li> <li>• Innovation in Food</li> <li>• Aerospace Engineering</li> <li>• Technological Physical Engineering</li> <li>• Computer Engineering and Computers</li> <li>• Applied Mathematics and Computing</li> <li>• Biomedical Engineering</li> <li>• Engineering and Industrial Management</li> </ul> <p><b>Short Courses</b></p> <ul style="list-style-type: none"> <li>• 5G and IoT: from technology to applications</li> <li>• Alliance "New Generation of Housing" (training project with 4 courses)</li> </ul>

- Active Childhood in a Digital World
- Adapted Sport
- Advanced Analytics
- Advanced Materials and Additive Manufacturing
- Agile Leadership
- Mechanization and Agricultural Machinery
- Agro-Food Ecosystems
- Animal Health Law
- Animal Health Act -Training of technicians
- Animals and Society
- Climatology applied to municipal planning and planning
- Applied Entomology
- Basic Mycology and Application
- Management of Invasive Aquatic Species
- Art and Nature
- Artistic methods for research and social intervention
- Artificial intelligence (AI) applied to laws and regulation
- Intelligent Automation
- Artistic practices, mediation and community building
- Artistic research practices - Pgdipl IA
- Assisted Reproduction Technologies
- B-Learning Course on Digital Technologies in Dental Prosthesis
- B- Digital Technologies Course in Dentistry
- B-Learning Course on Digital Technologies in Oral Hygiene
- Big data and exploration of socio-spatial patterns in tourism
- Aquaculture biomarkers: new practical tools
- Biosystematic of Bryophytes
- Biosystematic of Insects
- Biosystematic of Vascular Plants
- Business Intelligence and Advanced Data Analytics
- Mapping and spatial modelling with unmanned autonomous vehicles
- Children's Studies
- Cinema and social sciences
- Circular Design: cultural, systemic and material
- Circular Economy -Management, Frameworks

	<ul style="list-style-type: none"> <li>• Climate Risk Management</li> <li>• Collaborative methodologies in art and design</li> <li>• Communication and Innovation in Quality Management and Food Safety</li> <li>• Veterinary nursing of pet animals</li> <li>• Counselling and lifelong career education: conditions and interventions in different groups</li> <li>• Art'Asia Course: Artistic, Social and Scientific Analyses to Work Asia in the 21st Century</li> <li>• Introduction to the conservation and exhibition of photographic collections</li> <li>• Chromatic Reintegration Cultural Goods</li> <li>• Information Technologies and Cybersecurity for Lawyers</li> <li>• Hazard, vulnerability and risks in the territory</li> <li>• Data analysis in psychology</li> <li>• Data Protection and Security for Non-technological Professionals</li> <li>• Data Science for Engineers (Dash)</li> <li>• Engineering of the Decision</li> <li>• Methodologies to support decision-making in Agricultural Sciences</li> <li>• Demographic Studies</li> <li>• Exhibition Design and Implementation, Individual Monographs</li> <li>• Design thinking Innovation</li> <li>• Development of affordable digital solutions</li> <li>• Digital Process Accelerator</li> <li>• Prevention of Doping</li> <li>• DXD</li> <li>• Ecological modelling and data analysis</li> <li>• Ecological Quality Assessment of Transitional Waters under the Water Framework Directive</li> <li>• Economics for Engineers</li> <li>• Ecosystem Restoration and Nature-Based Solutions</li> <li>• Educating on the sustainability of the marine environment: how to go from theory to practice?</li> <li>• Electric Mobility and Electrification of the Economy</li> <li>• Environmental risk and health in the ecological and digital transition</li> <li>• Ergonomics in Resilience of Labour Organizations</li> <li>• FABRICADEMY: executive training in textiles, materials and digital manufacturing</li> </ul>
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	<ul style="list-style-type: none"> <li>• Family Mediation</li> <li>• Finance for Engineers</li> <li>• Financial literacy and decision-making in the context of economic recovery</li> <li>• Fire Control System</li> <li>• Food analysis: nutritional profile, authenticity and food security</li> <li>• Food Quality and Safety Management</li> <li>• Food Security</li> <li>• Geographic Information Systems applied to the Ocean and Coastal Zone</li> <li>• Geological Heritage</li> <li>• Geomarketing</li> <li>• Historical Gardens and Garden Design</li> <li>• Instrument of the Humanities Programme</li> <li>• Illustration and Visual Narrative</li> <li>• Industrial and Collaborative Robotics</li> <li>• Communication and Innovation in Gastronomy</li> <li>• Plants and Innovation for Sustainability</li> <li>• Innovation in Public Policy</li> <li>• ISO 27001 implementation</li> <li>• Justice and international arbitration: new challenges</li> <li>• Laboratory Animal Sciences</li> <li>• Lead: Low-Code Application Development</li> <li>• Letters Summer Institute</li> <li>• Lifelong Psychological Health</li> <li>• Com@living in childhood and adolescence: prevention of (cyber)bullying and promotion of socio-emotional skills</li> <li>• Management for Engineers</li> <li>• Management of research data</li> <li>• Management systems in medical and clinical laboratories</li> <li>• Artistic encounters between Mathematics and Nature</li> <li>• Frontier Medicine: Artificial Intelligence and Digital Health</li> <li>• Microplastics: everything we (don't yet) know!</li> <li>• Modelling and simulation of spatial dynamics of land use and occupation</li> <li>• Multimethods</li> <li>• Municipal geographic information systems</li> </ul>
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	<ul style="list-style-type: none"> <li>• Museums and Education</li> <li>• Museums and Social Inclusion</li> <li>• Museums and Welfare</li> <li>• Museums, Ethics and Colonial Collections</li> <li>• Parental Intervention for the Promotion of Self-regulation and Prevention of Violence</li> <li>• School of Parents</li> <li>• Performance Installation</li> <li>• Pest Management</li> <li>• Photography</li> <li>• Physical Literacy, Environmental Citizenship and Sustainability</li> <li>• Physics and Chemistry for Teaching (IE)</li> <li>• Fish identification course of the Portuguese coast</li> <li>• Quality living</li> <li>• Digital Technologies in Dental Prosthesis</li> <li>• Digital Literacy in Adults Education</li> <li>• Robotics and Emerging Technologies in Primary Education</li> <li>• Precision Agriculture</li> <li>• Precision Watering</li> <li>• The post-pandemic era Covid 19 and the preparation for new pandemics</li> <li>• Food Production and Processing in Organic Production Mode</li> <li>• Programme Letters</li> <li>• Language Programme</li> <li>• Software Systems Programming and Engineering (PROGRESS)</li> <li>• Engineering Project Management</li> <li>• Promoting Healthy Eating Behaviour in Kindergartens</li> <li>• Promotion of Healthy Schools: Intervention with students, teachers and parents</li> <li>• Evaluation and Psychological Intervention in an Educational Context</li> <li>• Promotion of Physical Activity in Preschool Education and in the 1st Schooling Cycle</li> <li>• Psychology and Law</li> <li>• Psychosomatic and Binding Psychology</li> <li>• Qualitative data analysis</li> <li>• Quantification of Food and Nutrition Security in Development</li> </ul>
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	<p>Projects</p> <ul style="list-style-type: none"> <li>• Radiological Protection and Safety - Level II</li> <li>• Radiological Protection and Safety - Level III (Medical and Industrial Area)</li> <li>• Regional and Local Governance and Development</li> <li>• Communication and Personal and Interpersonal Development for Engineers</li> <li>• Remote detection and GIS applied to land use planning</li> <li>• Remote Ocean Applied Detection</li> <li>• Responsible management of strategic mineral raw materials</li> </ul>
<p>Uminho education alliance – skills for a better future University of Minho</p>	<p><b>Uminho Education alliance - Skills for a Better Future</b></p> <p><b>Master’s degree</b></p> <p>Management of Health Units</p> <p>International Business</p> <p>Social Economy</p> <p><b>Educational Programmes in the form of short-term courses</b></p> <p>Business management and innovation</p> <p>Public procurement</p> <p>Management of Public Property</p> <p>Public Management Training Programme</p> <p>School of Ceos - advanced training for new Ceos</p> <p>Top Management in Public Administration</p> <p>Master’s Degree in Health Unit Management</p> <p>Master in International Business</p> <p>Master in Social Economics</p> <p>Statistical Models for Data Analysis</p> <p>Numerical tools and simulation statistics and data analysis</p> <p>Evaluation and Project Management</p> <p>Hospital Operations Management - Lean Healthcare</p> <p>Distribution Management</p> <p>Fashion &amp; Business</p> <p>Lead high-performance teams I</p> <p>Lead high-performance teams II</p> <p>Stress Management for High Performance I</p> <p>Stress Management for High Performance II</p>

	<p>School leadership</p> <p>Executive IPSS - Executive Programme</p> <p>Family Business Management and Governance</p> <p>Business Restructuring</p> <p>Preparation of Applications for Funding Programmes</p> <p>Innovation and Entrepreneurship</p> <p><b>Architecture and Built environment</b></p> <p>Building Facade and Enclosure Technology Construction and Sustainable Rehabilitation</p> <p>Management of Works</p> <p>Project Management for Construction</p> <p><b>Communication, culture, society and inclusion</b></p> <p>Accessibility and Inclusive Design</p> <p>Translation and Communication Methodologies and Practices</p> <p>Cultural and Business Communication between Portugal and Asia</p> <p>Artistic Practices and Professional Contexts in the Performing/Performing Arts</p> <p>Promoting the role of educators and training skills for the future</p> <p>Transversal competences in communication</p> <p>History and Heritage of Minho</p> <p>Paleography and Diplomacy</p> <p>Digital registration and treatment methodologies applied to Archaeology, History and Heritage</p> <p>Gender, Language and Inclusion</p> <p>Gender, Labour and Employment: Inclusion Policies</p> <p>Employability and Active Labour Market Policies</p> <p>Competences of Intercultural and Community Mediation</p> <p>Educational Technology and Communication</p> <p>Diagnosis and Intervention in Reading and Writing: Strategies for the 1st Cycle of Basic Education</p> <p>Laboratory and Field Activities for Science Education</p> <p>Bullying and Challenging Behaviors in Socio-educational Contexts</p> <p>Pedagogical Supervision and Professional Development: Principles and Practices</p> <p>Didactics and Evaluation of Learning</p> <p>Autonomy and Curricular Flexibility for Innovation</p> <p>Inclusive Pedagogical Devices in Intercultural Education</p> <p><b>Engineering and Manufacturing</b></p> <p>Design and Manufacture of Multifunctional Components</p>
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	<p>Metrology 4.0</p> <p>Advanced Materials based on Fibers and Composites</p> <p>Engineering of Polymers and Composites</p> <p>Principles of Aerospace Engineering and Management</p> <p>Management of Engineering Projects</p> <p>Sustainability in the Fashion Industry - Strategies</p> <p>Sustainability in the Fashion Industry - Technologies</p> <p>Product Design and Textile Processes</p> <p><b>Social protection and integration</b></p> <p>Child Protection against Violence and Crime</p> <p>Prevention and Response to Violence against the Most Vulnerable</p> <p>Rehabilitation of Juvenile and Adults Offenders</p> <p>Forensic Psychological Evaluation</p> <p>Gender-Based Violence: Basic Notions, Approaches, Intervention Strategies</p> <p>Development of Intervention Projects in Educational Gerontology</p> <p>Socio-emotional Skills for Social Professionals</p> <p>Aging, Functionality and Health Quality Management</p> <p><b>Health and well-being</b></p> <p>Bioprocesses and Bioproducts</p> <p>Community intervention and Infodemia management</p> <p>Clinical Supervision in Nursing</p> <p>Family Planning and Contraception</p> <p>Health, Transition and Post-partum Adaptation</p> <p>Breastfeeding Promotion and Social Sustainability</p> <p>Promotion of New Models of Childbirth Care</p> <p>Chemical Characterization and Analysis</p> <p>Safety and Sustainability in Chemical Laboratories</p> <p>Techniques of Molecular Diagnosis</p> <p>Radiological Protection and Safety</p> <p>Optometry and Vision Sciences</p> <p>Food Safety: from implementation to certification</p> <p>Molecular Biotechnology Techniques</p> <p>Psychosocial Health Promotion for Health Professionals</p> <p>Integrated Approach to Health Care Delivery for Health Professionals</p>
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	<p>Food, Health, and Sustainability</p> <p>Improving Implementation of Psychological Treatments</p> <p><b>Health Promotion and Healthy Lifestyles</b></p> <p>Environmental Sustainability and Land Management</p> <p>Vine, Wine, and Viticulture Management</p> <p>Biology for Sustainable Agriculture</p> <p>Tools for the Integration of Natural Resources in the Territory Integrated Management of Mineral Resource Extraction Areas</p> <p>Techniques for Managing Geological Materials</p> <p>Water-Energy Nexus in Industry</p> <p>Environmental Sustainability and Risk Management</p> <p><b>Digital Transition</b></p> <p>Computer Programming</p> <p>Content Creation in Digital Environments</p> <p>IT Management and Omnichannel</p> <p>Design Thinking and Digital Innovation</p> <p>Cybersecurity</p> <p>Solutions for digital business Creating Intelligent Environments</p> <p>Intelligent Manufacturing</p> <p>Executive Program in Digital Marketing and E-Business</p> <p>Digital Marketing &amp; E-commerce</p> <p>e-Commerce/International E-Commerce</p> <p>Innovation and Digital Transition in Business</p> <p>Local Public Governance and Data</p> <p>E-Work and Intelligent Organization</p> <p>Robotic Manufacturing in Design, Architecture and Construction</p> <p>Collaborative and Flexible Robotics for the Factory of the Future</p> <p>Production Management in Industry 4.0</p> <p>Digital Navigator for Healthcare</p> <p>Medical Informatics</p> <p>Mechatronic Systems 4.0</p>
<p>U.porto Programme for multidisciplinary education and training – Youth Impulse STEAM &amp; Adults Impulse University of Oporto</p>	<p>Training in the areas of <b>environment and sustainability, arts and humanities, science and technology, social sciences, education, teacher training and professional guidance and health</b>, including:</p> <p><b>Microcredentials</b></p>

The courses offered in this area are part of the non-conferring grade offer, integrating 1-9 ECTS and up to 60 ECTS courses, organized in training units with concrete and autonomous learning objectives, capable of modular frequency.

**Continuing training units and courses**

- Agrigenomics and Sustainability for the Agri-food sector
- Sustainable aquaculture - for a greener blue economy
- Algae as a new sustainable resource for Portugal
- Welfare of pet animals
- Training course for sustainable soil management
- Production processes in the compound food industry
- Protection of citrus fruit
- SEA - Sustainability and blue economy: an approach to ocean literacy
- Food safety in the production of compound feeding stuffs
- Sustainability in compound feed production
- Family architects
- Design, Editing and Management of Digital Publications and Online Communication
- Involvement of communities in the enhancement of local heritage
- Formation of caretakers of monuments
- Photography of artworks
- Housing: Strategy for 1 Law
- Introduction to emergency management in cultural institutions
- Photographic document preparation methodologies for digitisation
- MVAD - Modelling and Visualization of Architecture and Design
- Constructive Practices
- Design Principles for Effective Communication
- Precision agriculture and digitization
- Databases
- Data science in R
- Know and Fight Emerging Pests and Diseases
- Development of software
- Artificial Intelligence and Data Science
- Laboratory Manipulation of Biology, Biotechnology and Molecular Biology
- Advanced Methods of Biodiversity and Ecosystem Monitoring
- Methods of Chemometric Analysis
- Living Cell Imaging Methods
- Practical Update on Applied Next Generation Sequencing
- Programming in Python
- Quality in Chemical Analysis
- Scikit Earn and Tensorflow

- Security, ethics and privacy
- Advanced Analysis Techniques
- Validation of Analytical Methods
  
- Visualization of data
  
- Business Analytics
- Competitiveness - Policy and Strategy
  
- Challenges of Competition in the New Digital Economy
- Sustainable Development and Natural Resource Management
- Misinformation, Infodemics and Fact checking
  
- Digital + Green Summer School
  
- Digital Business Transformation
  
- Entrepreneurship
  
- Future of Business & Work Summer School
  
- Social Innovation
  
- Management Tools for Health Services
  
- Price Policies
  
- Portugal and the space sector: actors, regulation and economic potential
  
- Environment, Sustainability and Education
  
- School self-assessment: designing processes, building realities
  
- Catastrophe and Emotional Help
  
- CLIL in the 1st Cycle of Basic Education
  
- How to Develop Effective Teams?
  
- How to awaken, maintain or change and renew the quality of motivation?
- Skills of employability
  
- Digital Skills and Social Participation
  
- Da (trans)vocational training: supervision in teacher training
  
- Teaching challenges in foreign language education
  
- Development of Leadership Skills
  
- Personal Skills Development
  
- Difference and discrimination: towards an anti-racist education
  
- Dynamization of classes through the representation of geographic information
  
- Environmental Education and Participatory Methodologies - Water Circle Strategy
  
- (for trainers & teachers)
  
- Education and vocational training in open and remote environments
  
- Education for climate change through community profiles and intervention partnerships (for technicians & teachers)

	<ul style="list-style-type: none"> <li>• ENACTING - The role of students in building knowledge on how to promote the study of the socio-political nature of sustainability challenges in the training plans of engineering courses</li> <li>• Curricular flexibility: pedagogical-didactic pathways</li> <li>• Training of trainers - Collaborare</li> <li>• Training of teacher trainers in climate change education in schools</li> <li>• Critical information management and fact checking</li> <li>• Management of age diversity in work contexts</li> <li>• Stress management and Burnout prevention</li> <li>• Identity and activism as didactic for the prevention of gender violence in school organization</li> <li>• INTER-ACTION - Participatory methodologies in the approach to interdependence and collaborative action for the management and efficient use of water resources</li> <li>• English Language for CLIL Teachers Youth Impulse STEAM and Adults Impulse</li> <li>• Health Literacy</li> <li>• Mentoring for the inclusion and digital participation of vulnerable people</li> <li>• Plan and implement consulting projects for Career Education: activating partnerships between psychologists and teachers/trainers</li> <li>• Reconstruction of Professional Paths</li> <li>• Responding to pedagogical-didactic challenges for an inclusive Portuguese class</li> <li>• Educational uses of video games: an experiential proposal</li> <li>• Microbiological Analysis in the Food Chain for the Catering and Food Collective Sector</li> <li>• Toxicological Analysis</li> <li>• Laser Application in the Area of Dentistry</li> <li>• Legal and Forensic Aspects in Health Sciences</li> <li>• Delivery assistance in an ambulance</li> <li>• Update for Dental Assistants</li> <li>• Feeding training for the elderly: training for informal caregivers</li> <li>• Smoking cessation in dentistry</li> <li>• Health Communication and Digital Media: Smart Big Data Analytics and Visualization</li> <li>• Construction of multi-victim scenarios in virtual reality environment</li> <li>• Cross Cultural Health Care</li> <li>• Diagnosis and treatment of heart failure patient</li> <li>• Endodontics in Current Clinical Practice: Tools for Success</li> <li>• Clinical trials</li> <li>• Microbial genome exploration: from infection control to research for new molecules/enzymes</li> </ul>
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	<ul style="list-style-type: none"> <li>• Pharmacokinetics</li> <li>• Oral health training for health professionals from other areas of Health</li>   <li>• Airway management and ventilation</li>   <li>• Food service management in particular social solidarity institutions (people management and cost management)</li> <li>• Pre-hospital management of the shock victim</li> <li>• Implementation of clinical exercise Programmes in the community</li>   <li>• Food and nutrition information in the restaurant and food industry (Food and Nutrition Literacy)</li>   <li>• Composite Resin Inlays and Onlays</li>   <li>• Thermal Medicine</li>   <li>• Neurotox: from theoretical to practice neurotoxicity biomarkers</li>   <li>• Artificial nutrition in critical patient</li>   <li>• Nutrition in general and family medicine</li>   <li>• Chemical Hazards in the Food Chain</li>   <li>• Dental Medicine Business Perspective</li>   <li>• Portuguese for Specific Health Purposes</li>   <li>• Pre-qualification in surgical cancer patient</li>   <li>• Preparation of biological material in ciliopathies</li>   <li>• National Programme for the Promotion of Oral Health and the Clinical Use of Dental Check</li>   <li>• Health promotion at work</li>   <li>• Cardiac rehabilitation: how, for whom and why?</li>   <li>• Reformulation and suitability of food products for promotion of a healthy and desirable diet</li>   <li>• Bacterial resistance to antimicrobials: origins, laboratory detection and implications on antibiotherapy</li>   <li>• Adhesive Partial Ceramic Restorations in the Previous Sector</li>   <li>• School Meal Planning and Evaluation System+ (SPARE+)</li>   <li>• Sustainability in meal production</li>   <li>• Acute and Chronic Pain Pharmacological Therapeutics in Dentistry</li>   <li>• Anti-aging Therapy: Pharmacological and non-pharmacological approaches</li>   <li>• Benign Tumors and Ulcerations of the Oral Mucosa: Diagnosis and Therapeutic Possibilities</li>   <li><b>Specialization courses</b></li>   <li>• Alliance for Scientific Training and Technical Support to Hospital</li> </ul>
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	<p>Pharmacy</p> <ul style="list-style-type: none"> <li>• Health Communication</li> <li>• Communication in Systems of Promotion and Protection and Participation of Children</li> <li>• Preventive conservation of graphic and photographic documents</li> <li>• Automotive Engineering 5.0</li> <li>• Civil Engineering</li> <li>• Industrial Systems Engineering and Logistics</li> <li>• Electrical and Computer Engineering</li> <li>• Computer Engineering</li> <li>• Mechanical Engineering</li> <li>• Chemical Engineering</li> <li>• Green space management and maintenance</li> <li>• HCD &amp; UX - Human Centred Design &amp; User Experience</li> <li>• Postgraduate Diploma in Business Innovation</li> <li>• Postgraduate in Sustainable Management</li> <li>• Promoting Citizenship Education and Sustainability Skills</li> <li>• Integrated Quality and Environmental Systems</li> <li>• Environmental Technologies: Gas Emissions</li> <li>• One Health</li> </ul> <p><b>Courses of advanced studies</b></p> <p>Architectural Heritage</p> <p>Urban Policies masters (60 or 120 ECTS) Management of Change*</p> <p>Public Policies*</p> <p>Retail Management*</p> <p>Artificial Intelligence</p> <p>Medical Informatics**</p> <p>*to be submitted for prior accreditation **grants programs for accomplishment of the non-teaching component in a business context</p>
<p>UAB Impulso2025 Aberta University</p>	<p><b>Post graduate studies in distance learning</b></p> <p>Transition and Digital Transformation of organizations (30 ECTS)</p> <p><b>Short training courses for distance learning (4ects)</b></p>

	<p><b>Microcredentials mode of distance learning (1 to 6 ects)</b></p> <p>Microcredentials will be offered to three specific target audiences: Tourism and Hospitality, Local Authorities and Public Security Police, in the areas of Digital Transition and Transformation, Languages and Communication, Sustainable Development Goals and Distance and Digital Education</p>
<p>More Digital</p> <p>ISCTE- University Institute of Lisbon</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Data science, applied to different disciplinary domains</li> </ul> <p><b>Master's degrees</b></p> <ul style="list-style-type: none"> <li>• Data Science</li> </ul> <p><b>Professional master's</b></p> <ul style="list-style-type: none"> <li>• Applied Management</li> <li>• Digital Innovation for Design Practices</li> <li>• Digital Technologies for the Business.</li> </ul> <p><b>Microcredentials</b></p> <p>Microcredentials Programme through the project MAIS DIGITAL: Knowledge. Training. Employment</p>
<p>Aveiro Education and Social Alliance</p> <p>University of Aveiro</p>	<p><b>Professional master's degree</b></p> <p>Industry and Materials: Industrial Maintenance</p> <p>Competitiveness Support Areas: Competitiveness and Business Development</p> <p><b>Post-graduation ( 12 ects)</b></p> <p>Sea and Estuary: Coastal Geology</p> <p>Agrofood and Forestry: Innovation and Sustainability in Food Chains; Soil quality and sustainability of agricultural systems</p> <p>Industry and Materials: Industrial Automation; Ceramic Engineering; Mineral resources for the ceramic industry; Mineral resources for the ornamental stone industry; Materials deposition, processing and microstructure techniques in a clean room environment; Optical Technologies</p> <p>TICE: Data Science; Quantum Computing; Data and Artificial Intelligence; Mobile Application Development; Industrial Intelligence; Robotics and Intelligent Systems</p> <p>Areas to support competitiveness: Excellence in Organizations; Management and leadership in health; Languages and Cultures for business (short duration); Languages and Business Relations (short duration); Languages and Business Relations (medium duration); Digital Marketing; Omnichannel Marketing; Knowledge Transfer and Enhancement; Digital Transformation in Accounting and Auditing</p> <p><b>Microcredentials (&lt; 12 ects)</b></p> <p>Sea and Estuary: The sustainability of artisanal fishing and small</p>

	<p>fishing; The turns that water takes in a channel; Coastal Protection; Monitoring and modelling of water quality</p> <p>Agrofood and Forest: Biodiversity and Ecosystem Services; Biostimulants in Agriculture and Forestry: opportunities and challenges; Diversity and Animal Ecology – Invertebrates; Animal Diversity and Ecology - Vertebrates; Plant Diversity and Ecology; Impacts of phytosanitary practices on health and agro-systems; Minimization of the negative environmental impacts of sustainable agriculture; Pests and diseases in plants; Protection of agricultural soils: prevention and recovery of degraded soils; Environmentally sustainable use of pesticides and fertilizers (including the use of agricultural waste); Use of bioactive substances in the context of animal production</p> <p>Industry and Materials: Programmable Automatos and Tactile Consoles (HMI); Advanced Welding Course; Quality Management Course in Welding; Initiation Course in Welding; Welder Course and Welder Machine Operator; Additive Manufacturing and 3D Printing; Fire Resistant Buildings; Geotechnical Modelling; High-end Energy Efficient Buildings (Evaluation, Prediction, control systems); Inspection and Diagnosis of existing Buildings and Infrastructure; 3D Metrology; Parametric and Direct CAD Modeling; Modeling and Simulation for Industry; CAM Programming - 2, 3 and 5 axis machining strategies; Professional qualification in safety and radiological protection - level III (technical operator); Resilient Structures; Industrial Robotics; Materials Characterization Techniques; Additive Manufacturing Techniques &amp; Design for Additive Manufacturing; Technologies &amp; Resources Bioplastics; Laser Technologies; Artificial Vision</p> <p>TICE: Digital Accessibility; Computer Applications Support Advisory; Applied Machine Learning; Digital Subscription with Citizen Card and Digital Mobile Key; Usability Assessment and Web Usage Experience; Strategic Communication in Digital Media; Digital Audiovisual Creation; Creation of Serious Games;</p> <p>Specialization course in automatic differentiation; Introduction course to data analysis and computational learning for particle physics and gravitation; Course in deep Learning and computational vision; Course in quantum machine Learning; Relational database design; Interaction and Experience Design; Script Writing for New Media; Graph Database; Implementation</p> <p>Database Programming with SQL; Emerging Music Industries and Career Management; Tangible Interfaces; Introduction to JavaScript Programming; 3D Game Modeling; Programming using Java Cryptographic API; Smart Digital Construction; Storytelling in Digital Media; Contemporary Jazz Composition and Arrangement Techniques; Contemporary Songwriting Techniques; Studio Techniques for Mixing and Mastering Sound; Live Looping Techniques; Emerging Photographic Techniques; Digital Storage Technologies Sound and Image; Digitalization Technologies technologies; Phonogram Digitization Technologies; Moving Image Digitization Technologies; Audiovisual Recording Technologies for Documentaries; Field Sound Recording Technologies; Studio sound recording technologies; Digital technologies to support the project; User Interfaces for Web with React</p> <p>Areas to support competitiveness: Occupational Risk Assessment; Circular economy in construction; Digital Communication; Intercultural Communication in Organizations; Internal Communication; Terroir Design; Design Thinking in Communication; Digital and Business Contract Law; Circular economy; English for Customer Service; English for International Trade and Communication; Writing for the Web; Professional Writing; Local strategies for climate change mitigation and adaptation, including</p>
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	<p>decarbonization; Ethics and Social Responsibility; Classical Quality Tools; Environmental management tools; Management and Prevention Tools; Prevention Management; People Management and Team Management; Internationalization in Organizations; Introduction to Environmental Management; Lean Office and Information Flows; Organization of Meetings and Travel in a Professional Context and Management of Events; Organization and Representation of Information; Preparation and Management of Electronic Mail; Protocol in Organizations; Reception and Service; Digital Reputation; Environmental Management Systems ISO 14001 and EMAS; Sustainable transportation infrastructure; Translation in Digital Assistance; Water efficient buildings.</p>
<p>fosteam@south  University of Madeira</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• STEAM Education - for Elementary and High School Teachers</li> <li>• MBA Blue</li> <li>• Coastal Tourism</li> <li>• Active Aging and Welfare Promotion</li> <li>• Innovation and Entrepreneurship.</li> </ul> <p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Atmosphere, Ocean and Climate</li> <li>• Optimization of sports performance and applied technologies.</li> </ul> <p><b>Professional master's degree</b></p> <ul style="list-style-type: none"> <li>• Aquaculture</li> <li>• Biodiversity, Fishing and Marine Conservation</li> <li>• Data Science for Sustainable Development and Tourism Security</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>• Tourism and Sustainable Agriculture Courses (7 courses)</li> <li>• Agriculture Sustainability Courses (16 courses)</li> <li>• Heritage Courses (26 courses)</li> </ul>
<p>“civic” and “global”!  Nova University of Lisbon</p>	<p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Art and Technology</li> <li>• Data Based Marketing</li> <li>• Computational Biology and Bioinformatics</li> <li>• Maritime Logistics</li> <li>• Maritime Technology</li> <li>• Aerospace</li> <li>• Geomaterials and Geotechnologies</li> <li>• Sound, Image and Lighting Engineering</li> <li>• Communication and Digital Innovation</li> <li>• Advanced Digital Production Engineering</li> <li>• Digital Product Development</li> <li>• Technology of Facades</li> <li>• Quality of Materials</li> <li>• Marine Life Resources</li> <li>• Biomaterials and Nanomedicine</li> </ul> <p><b>Short term courses (microcredentials)</b></p> <ul style="list-style-type: none"> <li>• Courses under the Digital Healthcare Partnership for the Active Population</li> <li>• Courses under the Biopharmaceutical Industry Innovation and Learning Partnership</li> <li>• Courses under the Advanced Surgical Learning and Innovation Center</li> </ul>

	<ul style="list-style-type: none"> <li>• Microcredentials courses in the areas: Green Transition, Data&amp;steam 4All, Digital Transition</li> </ul>
<p>Ubimpulso University of Beira Interior</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Tourism and Innovation in the digital world</li> <li>• Small Business Management</li> <li>• Management and Finance for Family Businesses</li> <li>• Teaching Foreign Languages</li> <li>• Development of the preparation chromatography process</li> <li>• Humanitarian Crisis and Development</li> <li>• Gender and social transformation</li> <li>• Clinical practice</li> <li>• Entrepreneurship and sports career management</li> <li>• Sports management</li> <li>• Clinical exercise/exercise and health</li> <li>• Management of non-profit organizations</li> <li>• Training of adults in exercise and health</li> <li>• Health, well-being and active aging</li> <li>• Entrepreneurship and Innovation in Bio Health</li> <li>• Medicinal Chemistry</li> <li>• Life Sciences</li> <li>• Thermal hydrogeology</li> </ul> <p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Sustainable Fashion Technology and Product</li> <li>• Technology and Sustainable Fashion Product</li> </ul> <p><b>Specialized training</b></p> <ul style="list-style-type: none"> <li>• Digital Teaching &amp; Learning Programme</li> <li>• Cisco Academy</li> </ul> <p><b>Short and Microcredentials courses</b></p> <ul style="list-style-type: none"> <li>• Courses through the Ubi4microcredentials Programme (e.g. Machine Learning; Data Science; Database Management Systems; Engineering Optimization; Aerospace Materials; Aircraft Safety Operations; Data Acquisition; Computational Fluid Dynamics; Advanced Structural Calculation; Electronic Engine Control Systems, UAV Design, Flight Optimization Control Project, in Python Language; "Open-Badge" in Computational Mechanics for Industry 4.0).</li> </ul>
<p>Prometheus University of Évora</p>	<p><b>Post graduate studies</b></p>

	<ul style="list-style-type: none"> <li>• Knowledge Management and Organizational Change in Health</li> <li>• Planetary and environmental health</li>   <li>• Health and well-being for the Elderly</li> <li>• Determinants of food consumption and health</li> <li>• Integrated care planning for people with multi-functionality</li>   <li>• Health, Society and Food</li>   <li>• Promotion of self-care literacy and skills</li> <li>• Active and Healthy Aging</li> <li>• Tele-care for people with multi-functionality</li>   <li>• Aeronautical Technology (with Ipsetúbal)</li>   <li>• Data management and AI (with Univ. Atlantic)</li>   <li>• Cultural and Artistic Mediation (Professional Master's Degree after 2023)</li>   <li>• "Knowledge Brokering" (Professional Master's Degree after 2023)</li>   <li>• Big History - from the Universe to us</li> <li>• Preventive Conservation and Risk Management</li> <li>• Cultural and Creative Entrepreneurship</li> <li>• Heritage(s), Tourism and Communities</li>   <li><b>Master's degree</b></li>   <li>• Sports and Health Technology</li>   <li>• Public Health for the Elderly</li>   <li>• Neuroscience and Human Behavior</li>   <li>• Digital Health</li>   <li>• Environmental and planetary health</li>   <li>• Quality and evaluation in Health Technologies</li>   <li>• Aerospace engineering</li>   <li>• Mediterranean studies</li>   <li><b>Professional masters</b></li>   <li>• cultural and artistic mediation</li>   <li>• Knowledge Brokering</li>   <li><b>Microcredentials</b></li>   <li>• Occupational Health (3 courses)</li> <li>• Health Technologies (6 courses)</li>   <li>• Pharmaceutical Sciences (3 courses)</li> <li>• Physiology and Exercise (2 courses)</li>   <li>• All areas of health (12 courses)</li>   <li>• Aeronautical Management (15 courses)</li> <li>• Engineering and Production (9 courses)</li>   <li>• Simulation (5 courses)</li>   <li>• Space (5 courses)</li> </ul>
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	<ul style="list-style-type: none"> <li>• Information Technologies applied to aeronautics (23 courses)</li> <li>• Quality and Regulation (4 courses)</li> <li>• Transdisciplinary Health and Arts (4 courses)</li> <li>• Transdisciplinary Humanities and Sciences (4 courses)</li> <li>• Transdisciplinary Science and Management (4 courses)</li> </ul>
<p>Living the future academy University of Coimbra</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Web Design, Communication, and Development (Reskilling)</li> <li>• Python Programming for Data Analysis (Reskilling)</li> <li>• Web Design and Front-End Development</li> <li>• Interactive Multimedia</li> <li>• Data Science</li> <li>• Big Data Engineer</li> <li>• Communication Services and Technologies</li> <li>• Trusted Software Development &amp; Services</li> <li>• Strategic Management of Information Systems</li> <li>• Computational Statistics and Data Analysis</li> <li>• Secure Software Development</li> <li>• Human-Centred Artificial Intelligence</li> <li>• Strategic Thinking for Digital Transition</li> <li>• Intelligent Systems Design and Implementation</li> <li>• Logistics and Industrial Management</li> <li>• Health Communication. New Paths to Health Promotion (Interprofessional)</li> <li>• Global Health, Cultural Competence and Sustainable Development (Interprofessional)</li> <li>• Evidence-Based Clinical Orthotics (Interprofessional)</li> <li>• Person-Centered Integrated Care (Interprofessional)</li> <li>• Clinical Nursing Supervision</li> <li>• Early Childhood Intervention</li> <li>• Doctor-Patient Communication. Knowing To Listen, Knowing To Speak!</li> <li>• Care of the Elderly at the End of Life</li> <li>• Geriatric Palliative Care</li> <li>• Health Technology Assessment: Access to the Drug Market</li> <li>• Intervention in Emergency and Disaster Contexts</li> <li>• Palliative Pediatric Care</li> </ul>

	<ul style="list-style-type: none"> <li>• Promoting Active and Sustainable Lifestyles in Low Density Territories</li> <li>• Food Heritage and Territorial Development</li> </ul> <p><b>Professional Master's/Short Term</b></p> <ul style="list-style-type: none"> <li>• Software Engineering Processes</li> <li>• Construction in wood</li> <li>• Concrete structures: From design to rehabilitation</li> <li>• Plastics and Sustainability</li> <li>• Cannabis</li> <li>• Phytotherapy and Food Supplements</li> <li>• New Technologies for Digital Transition in Dentistry</li> </ul> <p><b>Other Training Courses (no Degree awarded)</b></p> <ul style="list-style-type: none"> <li>• Software and Economics Academy 4.0 (ASE) (31 courses)</li> <li>• Health and Longevity Academy (ASL) (46 courses)</li> <li>• Academy for "Intelligent Territories ": Sustainability and Circular Economy (ATI) (10 courses)</li> </ul> <p><b>Teacher training academy (Afp)</b></p> <ul style="list-style-type: none"> <li>• Offer of 8 courses</li> </ul>
<p>Skills4all</p> <p>University of Algarve</p>	<p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Creation Processes</li> <li>• Communication and Media</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>• "Ualg+Skills4life" Programme, in conjunction with employers. Ualg will promote joint work with partner entities under the "Adults Impulse" and "Youth Impulse STEAM " Programmes, as well as with existing partner networks and consortia, including in the framework of collaborative laboratories and R&amp;D projects, to build flexible (tailor-made) training paths which may consist of existing or to be set up isolated course units, which may be grouped together and subsequently credited in short cycles, first cycle degrees and/or graduate courses.</li> </ul>
<p>A Head_L</p> <p>Lusófona University / COFAC</p> <p>COOPERATIVA DE FORMAÇÃO E ANIMAÇÃO CULTURAL, CRL - HEAD_L – “Aliança do Ensino Superior para o Desenvolvimento da Educação, Formação e Investigação no Espaço Lusófono”</p>	<p><b>Post graduate studies</b></p> <ul style="list-style-type: none"> <li>• Security and Ethical Hacking</li> <li>• Leadership in Digital Transformation</li> <li>• IT governance</li> <li>• Entrepreneurship and social innovation</li> <li>• Marketing and commerce</li> </ul>

	<ul style="list-style-type: none"> <li>• Hotel Management</li> <li>• Entrepreneurship for creative industries</li> <li>• Management of Third Sector Organizations</li> <li>• Digital Marketing</li> </ul> <p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Data Science</li> <li>• Communication, Marketing and Digital Media</li> <li>• Video games</li> <li>• Communication, Networks and Technology</li> <li>• Fashion Design and Production</li> <li>• Game Design and Playable Media</li> <li>• Physical Exercise and Well-being</li> <li>• Business Law</li> <li>• Public Law</li> <li>• Media and Information Literacy and Digital Citizens</li> <li>• Industrial Engineering and Management</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>• Virtualization and Data Centres</li> <li>• Knowledge Management and Business Intelligence</li> <li>• Inclusive Education: Challenges, Potential and Practices</li> <li>• Leadership in Digital Transformation</li> <li>• Implementation of a microcredential-based training catalogue, consisting of short-term postgraduate courses designed in partnership with consortium partners</li> </ul>
<p>MAIÉUTICA - COOPERATIVA DE ENSINO SUPERIOR</p> <p>CRL / University of Maia</p>	<p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>• Digital Transformation (already approved by A3ES)</li> <li>• Cinema and Digital Culture (already approved by A3ES)</li> <li>• Informatics (e-learning only, approved on 16-Sep-2021 by A3ES)</li> </ul> <p><b>Microcredentials</b></p> <p>ISMAI is already working on standardisation and interoperability with existing international micro-accreditation solutions (e.g., Open Badges), notably in the context of the Erasmus TRUE project which is coordinated by ISMAI.</p>

<p>Universidade Católica portuguesa - Training for resilience</p>	<p><b>Postgraduate studies</b></p> <ul style="list-style-type: none"> <li>Public Health Communication   Organizational Communication - PACO   Artistic Practices and Social Inclusion   Digital Transformation   Graduated Internal Innovation   Service Design - Transformation and Innovation   Artificial Intelligence Ethics   Management and Museology   Biomedicine Data Science   Health Quality Management   Clinical Supervision in Nursing   Non-invasive Ventilation   Intensive Care Nursing   Sports Nursing   Pediatric Oncology Nursing   Neurodevelopment in Pediatrics   Oncology Nutrition   Nutrition and Psychology   Digital Oral Rehabilitation   Periodontology   Dentists - Community Health   Care Management in Residential Structures for Older Persons   Social Gerontology   Pedagogical Innovation and Educational Change   Interdisciplinary Course on Human Rights   Local Education Management   Capacity Building for Professionals in Justice   Sustainability Local and Leadership   Innovation for Sustainable and Regenerative business   Security, Crime and Society   Citizenship, Cultures and society   (list not exhaustive)</li> </ul> <p><b>Master's degree</b></p> <ul style="list-style-type: none"> <li>Business Analytics (new)   Finance (International - new)   Medical Education (new)   Applied Biomedicine (new)   Set of Executive Masters for experienced professionals (new)   Corporate Communication (new)   Culture Studies (reinforcement)   Communication Sciences (reinforcement)   Sound and Image (reinforcement)   Economy (reinforcement)   Management (reinforcement)   Business (reinforcement)   Gerontolo-Gia and Geriatric Care (reinforcement)   Biomedical Engineering (reinforcement)   Biotechnology and Innovation (reinforcement)   Applied Microbiology (reinforcement)   Applied Management (reinforcement)</li> </ul> <p><b>Microcredentials</b></p> <ul style="list-style-type: none"> <li>Awarded in the framework of training to be provided by the Catholic Health Education School of Non-graduate Training and the School of Executive Training in Management and Innovation in Retail</li> </ul>
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**Table 4: Adults Impulse- list of "alliances" and "graduate schools"**

**Table 4 a) - Offer in Consortia led by Polytechnics**

<p>CONSORTIA</p> <p>Lead Institution of the Consortium</p>	<p>Description</p>
<p>STEAM Skills Mountain Knowledge Campus - Mountain Alliance for Knowledge and Co-Creation</p> <p>Polytechnic of Bragança</p>	<p>IPB Business School: a hub for graduate courses and lifelong learning.</p>

Skills4Future Polytechnic of Leiria	Health Innovation Hub: investment in retraining for training, namely postgraduate courses and advanced short courses aimed at health professionals.
To Boost People and Territory Polytechnic of Coimbra	New school, the School of CTESP and Post-graduation that will receive mainly, Professional Higher Technical Courses, postgraduate courses and microcredentials.
BAITS Polytechnic of Viana do Castelo	Post Graduate School (Alto-Minho Business School).
MERIDIES Consortium Polytechnic of Portalegre	Construction of a Post Graduate School supported in the digitalization agendas, decarbonisation for climate transition and according to more innovative pedagogical conditions, with structures adapted to real conditions.
A23 Polytechnic Network Polytechnic of Castelo Branco	The Polytechnic Network A23 will give priority to the realization joint training offerings, based on harnessing network synergies in terms of know-how, infrastructure and equipment. Offering post-graduate tailor-made, in the areas of software development, software engineering, networks and cloud, interactive systems, mobile communications, robotics and automation, cybersecurity.
IPV Região Impulsiona e inclui Polytechnic of Viseu	The Regional Alliance brings together local, regional and national bodies, ensures the alignment of training Programmes with current and future demand for skills and competences in the labour market, attracting students (especially adults) and territorial cohesion and interinstitutional cooperation. The Programmes will be developed in partnership with Aberta University, with the involvement of other entities located in the region.
SKILLS BOOST 2025@IPCA Polytechnic of Cávado e do Ave	This project aims to contribute to the foreseen PRR objectives in the IMPULSO ADULTOS Programme, through the increase and reformulation of the offer of postgraduate education, advanced short-term Programmes, short-term courses designed in partnership with companies and professional master's degrees, among other Programmes.
Consórcio Entre o Tejo e o Mar - CETM Polytechnic of Santarém	Establishment of partnership agreements with companies and professionals and secondary schools in the region for post-graduate training.
Resilient P.PORTO Polytechnic of Oporto	Digital Skills Academy, which will focus on short-term training in initial and postgraduate higher education, as well as in lifelong learning, in conjunction with the existing course portfolio. P.PORTO's leadership at the University Advanced Technology Higher Education Network Alliance (ATHENA) will promote international collaborations and provide a framework to discuss the curriculum of the new courses, looking at not only for a broader European vision, but also trends in European industry, anticipating some of the future needs of international companies.
Tourism International Academy Escola Superior de Hotelaria e Turismo do Estoril	Tourism International Academy, which is an alliance between ESHTe, Aberta University, Nova University of Lisbon, Turismo de Portugal and other partners in the tourism sector and hospitality for the provision of graduations and post-graduate training, providing students with adequate education and training, in close relationship with employers, both in terms of with the participation of business partners/employers.
Platform For a Global Health - Qualification of Human Health Resources Instituto Politécnico de Saúde do Norte/CESPU	Hub for Global Health. The aim is to build infrastructure for the development of classroom training activities as well as to create the necessary conditions for the multimedia production of content to be used for the promotion of b-learning actions. This new structure will bring the world of learning closer to the world of work, thus ensuring that advanced skills of health professionals.
Blue Design Alliance	Blue Design Alliance, Network of 4 schools that integrates the ESAD,



ESAD/CIFAD	the IPB, located in the North of Portugal (NUTS III Douro, Terras de Trás-os –Montes e Alto Tâmega), the IPVC, located in a low density area ( NUTS III Alto Minho ) and the ESB of Universidade Católica Portuguesa
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**Table 4 b) - Led by Universities**

<p style="text-align: center;"><b>CONSORTIA</b></p> <p style="text-align: center;"><b>Lead Institution of the Consortium</b></p>	<p style="text-align: center;"><b>Description</b></p>
ULisboa Post-Graduation School and Youth Impulse STEAM Programme University of Lisbon	Installation of a Graduate School, in collaboration with employers for post-graduate training in 2022.
Skills for Life  UTAD – University of Trás-os-Montes e Alto Douro	ALV UTAD: It addresses the development of adults training, mainly from the perspective of updating and retraining skills. It includes degree conferring (master’s) and non degree conferring (post-graduate and advanced training) courses, in particular in the areas of Management, Health, ICT/Digital Skills, Climate Action and Technologies for Industry.
UMinho Education Alliance – Skills for a Better Future  University of Minho	"Alliance for Education" in close interaction with society and businesses. International Mentoring Programme, in collaboration with the Foundation for the Advancement of Higher Education (IMFAHE), which brings together an international network of research and innovation and promoting the linking of doctoral students to alumni members of this international network.
U.Porto Programme for Multidisciplinary Education and Training  University of Oporto	Alliance for the significant reinforcement of a culture of lifelong learning within the U.Porto training offer, based on the integrated action of its faculties, through the diversification of the initiatives of continuous and post-graduate training, flexible and innovative, contributing to the reskilling and upskilling processes of the adult population living in Portugal, especially in the northern region.  The programming and implementation of these new proposals, lecturers and non-conference of degree, is complemented by a network of partnerships with more than 100 cooperating entities (such as companies, municipalities, secondary schools and training centres, or other public and private entities, of local, regional and national importance), whose experience in the contemporary labour market will contribute to a better articulation  of the training component with the needs of a market and changing society and the skills to be developed in various areas of knowledge, in a context of digital and ecological transition.
Aveiro Education and social Alliance  University of Aveiro	Increasing the number of master’s degrees linked to the corporate fabric and the number of non-conferential training offers, in particular short-term postgraduate offers and very short-term and flexible offer which give rise to microcredentials.
“CIVIC” and “GLOBAL”!	Proposal of 3 partnerships for post-graduate training, which comprise:

<p>Nova University of Lisbon</p>	<p>Digital Healthcare Partnership for Population Active with the CUF;</p> <p>Pharmaceutical Industry Innovation and Learning Partnership with Hikma Pharmaceuticals;</p> <p>Arts &amp; Tech for Social Innovation with the Ministry of Culture.</p>
<p>UBImpulso, Green and sustainable growth in a digital world</p> <p>University of Beira Interior</p>	<p>Proposal of 4 alliances with civil society entities, entities of the region and employers, for post-graduate training:</p> <ol style="list-style-type: none"> <li>1. Alliance for Digital Transition and Innovation</li> <li>2. Green Deal Alliance</li> <li>3. Alliance for the third sector and society</li> <li>4. Alliance for Health and Wellbeing</li> </ol>
<p>Prometheus</p> <p>University of Évora</p>	<p>Alliance with the Higher Education Institutions of Alentejo region, Ipportalegre and Ipsetúbal, and that extends beyond this through cooperation with HEI that can aggregate complementary knowledge, experiences and competencies in the areas of Health and Wellbeing (focusing on active aging and digitalization), Aerospace (focusing on productive systems) and Sustainability, namely Atlantic - University Institute and the Association Campus SUL (NOVA and UALG).</p>
<p>Living the Future Academy (LFA)</p> <p>Universidade de Coimbra</p>	<p>LFA proposes 8 academies / alliances for short training and post-graduated in collaboration with employers and socio-economic organizations.</p> <p>UC Factory-Academy integrates 7 Learning Alliances with employers, with potential for employability.</p> <p>The Software Technical Training Alliance and Lean Management develops in low-density territories within the country (Guarda and Viseu) in coordination with companies in the region (namely Stellantis) (Aliança UC / IPG / IPV).</p>
<p>Skills4All</p> <p>University of Algarve</p>	<p>Reinforcement in short and postgraduate courses, in articulation with employers. These study cycles will help to retrain adults by giving them digital skills, management, and digital arts and communication, needs identified by the labour market. They have the collaboration of all partners, with particular emphasis on business associations and related entities</p> <p>culture, creative industries and digital arts for others</p> <p>2 cycles of study. These partnerships have contributed to the design of study plans and support education in specific areas and training in the professional environment.</p>
<p>UAb Impulso2025</p> <p>Aberta University</p>	<p>Partnership with the market and public and private entities (Microsoft, Porto Editora, Turismo Portugal, ANAFRE, IP Viseu, PSP, ANQEP, etc.).</p>
<p>HEAD_L - “Aliança do Ensino Superior para o Desenvolvimento da Educação, Formação e Investigação no Espaço Lusófono” Universidade University /COFAC</p>	<p>Implementation of a specific school for post-graduate training in the areas of cultural and creative industries within the framework of the European University Filmeu.</p>
<p>Training for Resilience</p> <p>Universidade Católica Portuguesa</p>	<p>The Escola de Formação não-graduada Católica Health Education will be focused on postgraduate and microcredentials courses for professionals, contributing to the updating of their competencies. It will be equipped with a high-tech infrastructure that will support a digital learning</p>

	<p>environment, leveraging immersive learning and customized development, according to the student's needs.</p> <p>The new School of Executive Training in Management and Innovation in Retail, based on the new Centre for Sustainable Consumption and Innovation in Retail, will provide a Programme specific postgraduate and microcredentials candidates industry, as well as new students entering the university, should result in the development of a sector in which Portugal holds a leading position.</p>
<p>JIT4NSTEAM</p> <p>University of Maia</p>	<p>Network of training and training Programmes and to be promoted personalized learning, both in person and online, in conjunction with employers and companies (CISCO, NOKIA...).</p>
<p>IP Alliance – Plataforma Integrada para Aprendizagem ao Longo da Vida e Formação para Profissionais ESEP – Nursing School of Oporto</p>	<p>The IP Alliance is an alliance between the Nursing School of Oporto, the University of Oporto – Faculty of Medicine and the Polytechnic Institute of Oporto - School of Health, for the provision of an interprofessional platform of education and training lifelong learning for health professionals. The IP Alliance enables the sharing of human, technical and scientific resources and materials, aimed at providing lifelong education and training for health professionals, based on clinical simulation, in line with the main societal challenges.</p>
<p>Lifelong Health Education</p> <p>Alcoitão School of Health</p>	<p>The Alcoitão School of Health (SCML ) with the objective of boosting a differentiated and innovative training offer has allied itself to the co-promoters: i) Nursing School of Lisbon; ii) Nursing School of Cruz Vermelha Portuguesa - Lisbon; iii) School of Health Egas Moniz ) and iv) University Institute Egas Moniz and partners: i) LHEA Association for Lifelong Health Education ; ii) CUF, S.A e iii) National Association of Pharmacies</p>

**Figure 5: Location of "alliances" and "schools" of post-graduation in main Urban areas, including the areas of Lisboa, Porto, Coimbra, Barcelona and Aveiro.**

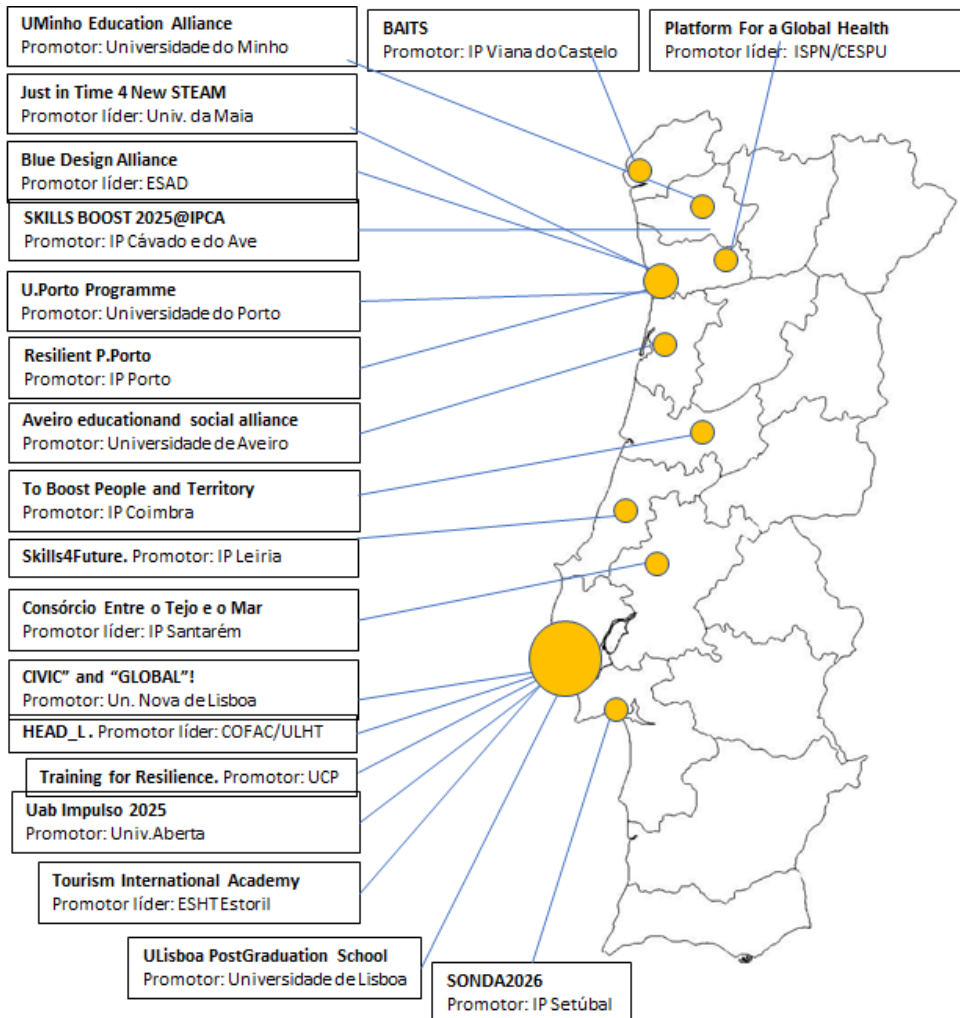
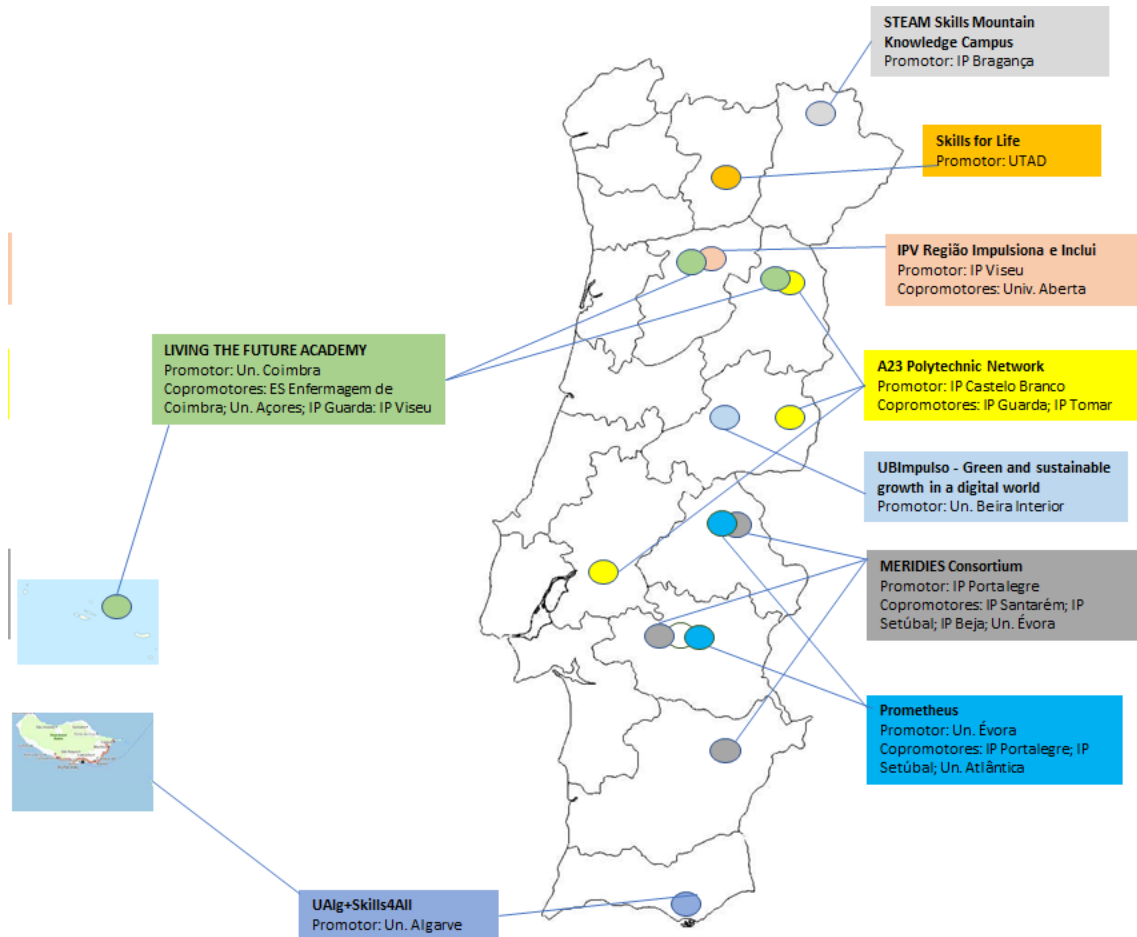


Figure 6: Location of "alliances" and "schools" of post-graduation in areas of lower population density in Portugal



## **PART 2:**

### **Characterization of Approved Consortia**

## **A23 Polytechnic Network**

### Description:

Project for the creation of a "school" (A23 Polytechnic Network/Polytechnic Network A23), oriented to the network training, in the thematic areas of Protection of Persons and Goods (PBB) and Digital Skills (CD).

This proposal prioritizes the provision of training Programmes tailored to the current needs of Public Administration, companies and other institutions, implemented through strong interaction with local and regional stakeholders associated with this consortium and other employers. Through the interaction with collaborative structures and networks of research, innovation and technological and scientific entrepreneurship, the RP-A23 consortium aims to become a "SKILLS Innovation Laboratory. Through innovative learning methodologies (for example, Project Based Learning), focusing on the integration of students in the business and organizational environment from the very first moment, and complemented with lifelong learning-oriented training and retraining of unemployed, this project aims to strengthen the A23 Polytechnic Network with learning, teaching and research spaces, stimulating interaction between citizens and local actors (dynamic approach of the quadruple propeller).

## **UTAD - SKILLS FOR LIFE**

### Description:

'UTAD - Skills for Life' is a joint endeavour to promote the upgrading and reconversion of skills of the active population, in particular at a higher level in the field of STEAM, reinforcing the need for continued lifelong learning and thus contributing to address the growing complexity of the challenges faced by professionals, public administration and different companies.

It has been defined in such a way as to leverage the individual contribution of each partner to strengthen both the achievement of the objectives and targets proposed and to ensure a significant contribution to the commitments of the Strategy for Equality and Non-discrimination 2018-2030 and the National Plan against Racism and Discrimination 2021-2025.

There is therefore a major concern to encourage young people and adults from disadvantaged areas to enter higher education, as well as women in STEM areas, thus counteracting the trend in the participation rates of girls and women in ICT.

The project is based on the implementation of two major Programmes or alliances: the "STEAM UTAD" and the "ALV UTAD", responding to the new needs of the labour market and the new challenges pre-felt in the region and in the country itself.

## **Ulisboa Post Graduation School and Youth Impulse STEAM Programme**

### **Description:**

The "Adults Impulse" Programme implies the reorganization of the entire post-graduate training offer, as well as its management structure, through the creation of a Graduate School (Ulisboa-PGS). Under this project, Ulisboa-PGS will create, between 2022 and 2025, 180 new courses, with the aim of attracting at least 10,000 new graduate students. All 18 Ulisboa Schools will participate in this huge effort to organize a post-graduate training offer.

The training offered by Ulisboa-PGS will foster its character of excellence, its inter- and cross-disciplinary nature, crossing the boundaries between the academic, technical and professional dimensions, and its connection to society and territory, and the promotion of a privileged environment for internal-nationalisation. This project is the result of a broad coordination and cooperation with 291 external entities, covering public and private entities, companies, other research and Higher Education Institutions, and professional associations from various sectors of activity.

Regarding the offer of undergraduate degree (Youth Impulse), Ulisboa focuses on the goal of reducing the high number of extremely talented students who cannot access the course that corresponds to their first choice. The strategic objective is to double by 2030 the number of graduates in nine engineering, arts and mathematics courses, from the current number of 1224 in 2020 to about 2300 in 2030.

## **Mountain Knowledge Campus: STEAM Skills - A Mountain Alliance for Knowledge and Co-creation**

### **Description:**

A training innovation Programme (The Mountain Consortium for Knowledge) is proposed, as well as the expansion and diversification of the current IPB offer, supported by two specific Programmes:

1) " Youth Impulse STEAM Programme": STEAM Skills Mountain Knowledge Campus: This Programme focuses on increasing the supply of CTESP in the STEAM areas and on developing, in existing courses, the skills needed to successfully meet the job requirements of the future, in particular for the public and private entities that are members of the consortium, achieving and surpassing impactful performances in the labour market, especially in the Czech regions. The Programme will be structured in three main areas or pillars: 1) Development of innovative master's degrees in STEAM areas, such as the Master's Degree in Product and Process Innovation; 2) Development of the new generation of CTESP in STEAM areas; and 3) STEAM skills development at all IPB training degrees (10% Choose TU! ).

2) Adults Impulse Programme: Mountain Alliance for Knowledge and Co-creation": is an alliance between the IPB and several main stakeholders, focused on the qualification and retraining of adults, especially in an environment of mountainous regions. It includes



the offer of undergraduate Programmes (p.e: postgraduate), microcredentials Programmes, qualification and requalification in the workplace, as well as the recognition of skills acquired in professional practice by obtaining badges. The Adults Impulse Programme is structured in three main areas: 1) offering micro-credentials for the formal recognition of qualifications obtained; 2) IPB Business School that offers post-graduate courses undergraduate, namely the Professional Master in Technologies for the Future and Innovation, oriented to the requalification and requalification of active audiences; and 3) recognition of informal skills and skills obtained in professional practice geared to the needs of companies (Competence Badges).

## **IPV Region Drives and Includes**

### **Description:**

The "IPV Region Drives and Includes" consortium led by the Polytechnic Institute of Viseu (IPV) aims to enable more than 3,000 young people and adults to benefit from their application for the Youth Impulse STEAM and Adults Impulse Programmes.

The proposal includes the construction of a new space (a Bright Lea Superior Agrarian of Viseu) and the adoption of innovative learning models, which will be applied in courses in areas such as climate transition, digital transition, industry and tourism. These areas are also cross-references in the PRR/RRP document, as well as other national and regional priorities, but also address inclusion, considering, for example, parity recruitment rules, and the specific educational needs of students.

Processes of rapprochement and dialogue were developed with stakeholders and other stakeholders, who share the territory of Viseu and Lamego with the IPV: companies and their associations, municipalities and inter-municipal communities, professional schools, and their existing network. As a result of these contacts, a number of training proposals covering various areas have been drawn up.

For young people and adults, the awarding of training grants, as well as the partnership with Aberta University, are also key instruments for the involvement of these individuals, mainly in depopulated areas of this region, who complete secondary education each year and do not continue their studies. A similar strategy will address adults, mainly active individuals whose employers have identified areas with training gaps; and/or companies and business associations who have expressed their willingness to specialize in their work-guns, and to obtain the skills and skills necessary for a selection of employees with more and better qualifications.

## **SKILLS BOOST 2025@IPCA**

### **Description:**

The SKILLS BOOST 2025@IPCA project is aligned with the IPCA strategy and the pedagogical and scientific project of its 5 schools and research units, in order to contribute to the achievement of the objectives Youth Impulse STEAM and Adults Impulse and the national goals, such as the increase in youth and adults in higher education, the increase in the number of graduates, especially in the STEAM areas, the increase in higher education Programmes in the STEAM areas, designed and redesigned in an interdisciplinary perspective and aligned with the labour market and the reality of the regional context, and the creation of consortia/alliances for post-graduate training with employers. To achieve the objectives and goals desired by 2025, the Project is organized in seven main Programmes:

- (1) TECH&ARTS PLUS, (2) Tesp PLUS, under Youth Impulse STEAM;
- (3) ADVANCED SKILLS; (4) LONGLIFE LEARNING within ADULT DRIVE;
- (5) PEDINNOV; (6) LESSISMORE; (7) SUSTENDEV, as a complementary and transversal Programme to the whole project.

All Programmes are interlinked to achieve the following objectives, among others: reinforce and redesign the educational offering in the STEAM and adults areas, adjusting them to the needs market values; align educational provision with advanced future skills and the reality of the regional context in which the IPCA is integrated; promote and strengthen skills upgrading and upgrading processes by increasing and adapting the supply of advanced postgraduate and specialisation courses, in partnership with companies, R&D units and local, regional and national public bodies; create more opportunities and conditions to attract more students to STEAM-area bachelors; create the conditions to promote gender equality in STEAM-area courses; increase basic training Programmes (TESP Courses) designed with and for industry, with part of the training taking place in the working environment, promoting co-creation and experimentation methodologies.

## **UMinho Education Alliance – Skills for a Better Future**

### **Definition:**

The "Uminho Education Alliance - Skills for a Better Future" is a major and structuring challenge for the University of Minho, which creates a robust portfolio of 112 short-term post-graduate, non-subject degree courses, credited and in close cooperation with employers - companies, public and private institutions, regional and national.

This Graduate Alliance includes 8 Higher Education Programmes in the following areas: Business Management and Innovation; Architecture and Built Environment; Communication, Culture, Society and Inclusion; Engineering and Manufacturing Industry; Social Protection and Integration; Health and

Welfare; Environmental Sustainability and Land Management; Digital Transition.

Responding to the needs of the country identified in conjunction with employers, the Graduate Alliance: Focus on strengthening the areas of engineering and manufacturing industry, digital transition and business management and innovation, providing technology transfer at the frontier of knowledge; focusing on integration, social protection and inclusion, improving human capital and enhancing its employability; promoting economic growth, international competitiveness and social cohesion through coherent development strategies on the path to environmental sustainability and coordinated land management.

### **Tourism International Academy**

Description:

The TIA - Tourism International Academy project, created through a consortium led by the Estoril Higher Institute for Tourism and Hotel Studies (ESHTE) in co-development with the Nova University of Lisbon (NOVA) and the Aberta University (Uab) and in partnership with Tourism of Portugal (TP) has as main objective the creation of a new reference centre of international character for education and training in online or face-to-face modalities and for the promotion of Innovation activities in the areas of Tourism and Hospitality (T&H) based on the trans and interdisciplinary experience and knowledge of the various institutions involved. The ultimate goal is to leverage the progress and development of activities associated with the T&H sectors both nationally and internationally.

The main objectives proposed by the consortium in the context of the development of this proposal are: To develop activities aimed at promoting education, training, research and innovation in the field of T&H in Portugal, in the Portuguese Official Language Countries, and other countries or regions of the world, contributing to the progress of tourism in its various strands, enhancing the national and international recognition of these sectors and making it more resilient to future changes and trends; developing specialised training courses, graduates and non-graduates, oriented to the specific needs of the labour market; Harnessing synergies between training areas, not specific to tourism, bringing a trans and interdisciplinary approach to address the current and future challenges of tourism (e.g., Medicine, Social Sciences, Engineering, etc.); Promote the digital transformation of T&H organizations; Promote the cultural, social, environmental and economic sustainability of T&H businesses; Promote the provision of specialized and qua-Hospitality; Develop skills focused on creativity, quality, innovation and entrepreneurship; Directly support the qualification, innovation and competitiveness of T&H companies; Strengthen the internationalization capacity of T&H companies.

## **U.Porto Programme for Multidisciplinary Education and Training – Youth Impulse STEAM & Adults Impulse**

### **Description:**

The Multidisciplinary Training Programme aims to contribute actively and significantly to the effort of (re)qualification of the Portuguese population in the most diverse domains of knowledge, including the areas of STEAM.

In response to the challenge of Adults Impulse, the integrated work of the Faculties, in collaboration with more than a hundred partner entities (including collaborative research centres and laboratories, secondary schools and training centres, associations and specialised enterprises, among other public and private employers), it has led to the creation of 153 short-term training courses - including specialisation, advanced studies and continuing training courses, as well as micro-redeployment training units - and four master's degrees (of which 3 are of a vocational nature) which will enable more than 2000 new graduates to participate annually in reskilling and upskilling initiatives in the following thematic areas: Environment and Sustainability, Arts and Humanities, Social Sciences, Sciences and Technology, Education, Teacher Training and Professional Guidance, and Health.

Already through the Youth Impulse STEAM, U.Porto will seek to consolidate and diversify its training capacity at the level of 1st cycle, by proposing, from the outset, the creation of a set of five undergraduate courses complementary to the existing offer, privileging interdisciplinary perspectives on all STEAM valences (from Bioinformatics and Digital Health to Applied Mathematics, including also Design and Literature and Interartes Studies). The number of vacancies available for selected undergraduate degrees will be reinforced, in which the potential for expansion to attract more and better students is recognized (Agronomic Engineering, Artificial Intelligence and Data Science, as well as some of the undergraduate degrees classified with excellence index). At the same time, we must not forget the cross-cutting aim of promoting a more inclusive academic culture, with a view to achieving a better balance in the distribution of students by gender and well-integrated successful higher education of students from disadvantaged socio-economic backgrounds.

### **Longlife Health Education**

#### **Description:**

This project advocates an innovative response to meet the new requirements of health professionals. Led by the Alcoitão School of Health (Essalcoitão), widely known for its work in the last 50 years in the areas of physiotherapy, speech therapy and occupational therapy, this initiative aims to provide non-medical health professionals, access to continuous education that allows you to update your theoretical and practical knowledge, with direct impact on your city-cover to provide the most appropriate healthcare to your patients.

With this project, we intend to: 1) Expand the current training offer, responding to the needs of retraining and updating health professionals not belonging to the medical class; within the scope of technical and behavioural skills, through post-graduate courses short- and medium-term graduates; 2) Strengthen Essalcoitão's technological

park to offer training Programmes that can be supported by new technologies. To this end, the following Programmes will be offered:

1. Technical skills for non-medical professionals
  
2. Transversal competences for non-medical professionals
  
3. Health literacy: Short-term Programmes aimed at participants dealing with older people and children, who seek to improve their technical skills for the exercise of their function.

The Alcoitão School of Health (Essalcoitão) of the Santa Casa da Misericórdia de Lisboa, as promoter of the initiative, co-sponsored by the School of Health of Cruz Vermelha-Lisbon, the Institute Egas Moniz, Egas Moniz Health School and the Lisbon School of Nursing propose to update the competencies of a total of 2210 students by the end of 2025, offering an average of 28 postgraduate courses per year

### **Next Level Higher Education for All @ Politécnico de Lisboa**

Description:

The "Nextlevel@ipl" project is based on 5 strategic pillars that include a set of measures to be implemented:

- (a) to grow, diversify and adjust the training offer to the needs of the labour market, in close collaboration and co-construction with strategic partners and relevant stakeholders such as employers and civil society, allowing the presentation of new undergraduate and master's courses.
- (b) To reach new audiences, offering a proposal of unique value at the level of postgraduate courses and in lifelong learning, accessible and inclusive.
- (c) new teaching-learning methodologies, including distinct and innovative scientific and pedagogical practices, tailored to the context, including distance learning and active learning methodologies.
- (d) Greater support for students through fixed strategies in terms of student uptake and integration (Mentoring); monitoring school dropout; promoting academic success, as well as integration into the job market, focused on STEAM areas.
- (and) Renovation and investment in new equipment and infrastructure of the teaching and investigation units, in order to improve the current working conditions of the academic community and offer adjusted teaching-learning conditions.

With the Nextlevel@ipl project we hope to achieve an increase in the number of students in higher education, more efficiency and more graduates, an appreciation of lifelong learning, more cooperation with companies and greater efficiency in society for better employment.

## UAb Impulso2025

### Description:

Uab leads this project, which will be driven by Uab's Interface Unit for Digital and Distance Learning Competencies (Uicead) and which is based on a technological alliance for the development and application of skills upgrading and upgrading actions.

The strategic objectives considered are: 1) To train educational agents (4.820) in the scientific, pedagogical and technological use of distance and digital learning and, through a cascading effect, to involve a large number of partners and other organisations; b) in-service training of active officials (for example, Police, Tourism and Parish Councils staff) in Transition and Digital Transformation elderly, Sustainable Development Goals and Languages and Communication, in order to be more efficient and provide a better service to citizens and society, and to provide the conditions for such persons to be assigned to higher value-added functions; c) design, through R&D activities, best practices in digital and distance learning and evaluation, reinforcing the use of distance learning as a reliable and safe medium, available to a very large number of users; e) contribute significantly to achieving the national adults training objectives identified in the Adults Impulse Programme.

## MAIS DIGITAL

### Description:

The project, led by ISCTE, involves a broad partnership for its implementation: business entities, city councils, educational establishments and associations. The included training Programmes - for young people and adults - all sign up for STEAM and meet the general goal of increasing the graduation of young people, women and adults in higher education in these areas.

As part of the strategic development plan of ISCTE, the project aims to continue and consolidate its trajectory through (1) the promotion and innovation of training in digital technologies applied to various sectors and organizational contexts, (2) improving the attractiveness and success conditions of new students, young people and adults (including M23, women, young professionals and foreign students), (3) boosting lifelong learning by renewing and enhancing the supply of post-secondary training graduated in digital and other technologies, oriented to the reconversion and retraining of adults and the deepening of the accreditation system and microcredentials. Boosting the supply of higher education in several municipalities in the Lisbon Metropolitan Area is a fundamental pillar of the project, contributing to addressing the lack of response in the region and thus promoting access to higher education for young people and adults.

At the same time, the project will provide a space of knowledge and innovation in the field of digital technologies, providing courses entirely new and distinct from those already existing at National level. That is, it will promote an innovative training, alternative to the predominant paradigm of engineering training, combining the disciplinary areas of digital technologies with the disciplinary areas of social sciences, business and humanities. In this way, the project develops a pre-emptive approach to the challenges of application, dissemination and appropriation of technologies, in a multidisciplinary environment of valorisation of the interaction between technology and society.

## Consórcio Entre o Tejo e o Mar – CETM

### Description:

The objective of CETM is to increase the initial training in higher education offered by the State in the municipalities of the industrial belt of Lisbon North, and also in the sub-regions of the Middle Tagus and Lezíria, through the relocation of Advanced Professional Technical Courses (CTESP) as well as Post-graduate Training and Advanced Short Term Courses. In this way, the aim is to contribute to the creation of the specialised senior management necessary for companies and institutions, requalify people for advanced and specialized qualifications and increase the number of students in higher education and those able to follow higher education for undergraduate degrees through CTESP.

Indeed, in order to increase the participation of 20-year-olds in higher education and to meet the targets set for 2030, it is also essential to increase the number of students going from secondary to higher education, particularly students enrolled in the Vocational Type of Secondary Education. However, it is also essential to produce strategies that enable retraining professionals and providing advanced qualifications, particularly through postgraduate studies and Advanced Short Term Courses.

There are four main objectives: I. Create a provision of CTESP Initial Higher Education Training; II. Create a post-graduate training provision; III. Create a short-term Advanced Course offering; IV. Promote innovation and entrepreneurship in the regional ecosystem in close cooperation with local authorities, businesses and other organisations.

## Resilient P.PORTO

### Description:

The Resilient P.PORTO Programme aims to strengthen and transform the activities of the Polytechnic Institute of Porto (P.PORTO), to promote the increase of graduates in the areas STEAM (Science, Technology, Engineering, Arts and Mathematics), and the requalification and requalification of the hand-adult labour. Under the "Youth Impulse STEAM", the Programme takes into account the labour market needs of some of the region's most dynamic economic areas, such as the tourism industry and the digital arts, and presents several projects/measures in the broad understanding of education and the liberal arts. The Programme will contribute to reducing student dropout by creating a "Year Zero" pilot project to assist students in the transition between teaching cycles. It will also create a network of experimentation and creation spaces that will allow a closer relationship between the P.PORTO and civil society, through the development of STEAM projects in secondary schools and city councils.

In the "Adults Impulse" strand, post-graduations, short courses and specialised training will once again meet the current needs of industry and society by preparing the unemployed, professionals, enterprises and industry sectors for the necessary economic recovery. The Programme is the result of a permanent dialogue with regional authorities, industry representatives and other partners, so it will not only empower candidates, but also respond to the direct needs of the labour market and regional development, creating a well-trained range of new professionals. This is a strong result, contributing to the Portugal 2030 strategy of i) reducing the percentage of adults, including young people, of productive age without secondary education; ii) reaching the level of 60% of 20-year-

olds in higher education, with 50% of higher education graduates in the 30-34 age group by 2030; iii) increasing the participation of adults in lifelong learning.

## **Aveiro Education and Social Alliance**

Description:

Within a framework of long-term institutional strategic development of the University of Aveiro, the Aveiro Education and Social Alliance embodies a vision, a comprehensive approach and a roadmap for a comprehensive and coherent transformation of the university's teaching and learning activities, strengthening its role with strategic stakeholders at local, regional and national level.

Aveiro Alliance combines a central vision and a cohesive set of Strategic and Operational Objectives. Aveiro Alliance incorporates, with total complementarity in terms of activities and investments, a well-established action plan aligned with: 1) The regional development strategy and its areas of expertise and needs; 2) Maximizing the involvement and commitment of different stakeholders (more than 230), including co-management of programs and activities; 3) Focusing on preferred target groups (young STEAM and adult requalification), including microcredentials; 4) the targets set at national level to be achieved by 2030, with the expectation of a direct impact of 6,436 individuals during the investment period and many more with side effects and after the investment period; 5) The establishment of scientific and academic priorities, intertwined with the strengths of the institution at the academic and research level, and with a strong STEAM focus; 6) The sustainability of the plan, during its implementation (principle of Do No Significant Harm) and the continuity of activities after 2026, ensuring that the method of monitoring programmes and activities is internalised in the AU after the end of this funding.

In terms of investment, the focus was placed on creating the necessary conditions to enhance the impact of the Aveiro Alliance: to aggregate training programs in partnership with stakeholders (146 programs), transforming the teaching and learning experience of the AU, modernizing teaching and learning spaces, and realizing a fundamental digital transformation.

## **Fosteam@South**

Description:

The University of Madeira (Uma), as a promoter of the partnership, the Fostering STEAM and Lifelong Learning at South -Fosteam@south project, together with the co-sponsors of the project, sets out the following objectives: to attract more students (national and international) for its institutions; attracting more students to STEAM areas; improving survey-based learning and project-based learning methodologies in higher education; re-qualification and re-qualification of adults who have already graduated in four thematic axes: Ocean in the South; Aging and Wellbeing, Creative Industries - Healthy Societies, Data Science; forming UMA and the Co promoters Universities, with human resources (teachers and non-teachers) in the areas mentioned above, in accordance with the re-request proportion of participation; cooperate with other institutions of Higher Education



in the areas of for-apples proposed in this project, capitalizing the different knowledge of the 4 institutions involved in the project for an excellent quality training; provide the organising institution with adequate infrastructure and equipment for the work to be carried out.

Our project aims to create and equip a Fablab (creative lab) at Uma that will regularly receive students from primary and secondary schools for projects in STEAM areas. The goal of this lab is to attract more students to the STEAM areas, as well as to make Uma known to students in the region in order to somehow keep students loyal to our institution. Regarding initial and postgraduate training, the project is developed around four main themes: Ocean in the South; Aging and Wellbeing, Creative Industries - Healthy Societies and Data Science. For each of these topics, several training courses are proposed, from Higher Professional Technical Courses, Post-graduation, Professional Master, Master and microcredentials or short courses. The conjunction with the Co promoters Universities will be carried out in the b-Earning mode.

## **Skills4Future**

Description:

The whole project has been developed around five pillars oriented to the competences of the future, which relate to the three transformative strategic agendas of the Polytechnic of Leiria: the green transformation, the digital transformation and the transformation by social innovation, as well as the long-term strategic vision of the Regional University Network (RUN-EU), the European University led by the Polytechnic of Leiria.

The pillars of the "Skills4future" project are: education, teacher training and the great challenges of social organizations; health and well-being for a resilient society; the future of industry, digitization and regional development; cultural centrality and "factory" of art; the hub of blue innovation and sustainability in tourism.

The STEAM youth formation is leveraged, not only by the creation of new TESP, but also by the strategy of proximity training, with the creation of a new training center in Pombal. In this context, 3 more TESP will be operational in STEAM areas by 2025.

On the other hand, adult training throughout their professional careers will be supported by the creation of advanced short courses, as modular structures with microcredits, which will function independently or inserted in postgraduations, master's degrees and doctorates in association. In this context, 4 postgraduate courses, 8 master's degrees will be created, including a joint master's degree, 4 doctorates in association and several advanced short courses, serving the rehabilitation and advanced qualification of professionals.

## **To Boost People and Territory**

Description:

This project was developed in accordance with the strategic alignment of the Polytechnic of Coimbra and taking into account the information collected from various regional and

national stakeholders. As a result of this diagnosis and this strategic alignment, the Polytechnic of Coimbra defined two areas of intervention: 1) creation and restructuring of higher education professional technical courses (CTESP) and micro credentials, mainly oriented towards Youth and STEAM skills, responding to new labour market needs; 2) creation and restructuring of Graduate Studies and Micro-redeployments, with the aim of strengthening and diversifying training, respectively ensuring, the conversion and upgrading of skills in order to meet the requirements of the labour market and the needs identified by employers in the region and at national level.

These areas of intervention are organized in the following five areas of training/training: Forests, environment and agrifood; Industry and digital technology; Health, aging, sport and tourism; Public administration and services; and Arts and Design.

The main expected results of the project are the following, among others: 1) Stimulate the experimentation and dissemination of innovative teaching and learning practices adapted to a mixed and differentiated education system at all levels of higher education; 2) Promote the development of post-graduate training in the professional field, in close collaboration with employers; 3) Deepen the dynamics achieved in recent years with short courses of higher education (CTESP) extending its scope to active adults and reinforcing collaboration with our stakeholders; 4) Stimulate short and modular courses of greater reach as micro redemptions, which promote the continuous learning and the acquisition of new skills.

This strategy culminates with the creation of a new school with the mission of revitalizing the major areas of intervention, the School of CTESP and Post-graduate Programs, which will receive mainly the Su-Professional experts and microcredentials for STEAM youth training and postgraduate and microcredentials courses for adult qualification and retraining.

## **BAITS - Business, Art, Innovation, Technology, Sustainability**

Description:

BAITS - IPVC - Business, Art, Innovation, Technology, Sustainability is a broad spectrum operation that operates in three key dimensions: Integration programs, monitoring, advice and guidance; Training programs; and Financial support and incentives. At the same time, the development of this operation foresees the implementation of the Recore - Collaborative Network for (Re)Qualification and Employability in Alto-Minho which, given its transversability, through the contributions and synergies established with local stakeholders, take a critical role in the technical and operational definition of the above dimensions.

Within the Youth Impulse Steam, IPVC presents a training plan that includes the implementation of 6 CTESP's and other training initiatives, namely "Year Zero IPVC" and other cross-cutting programs, such as Vocational Mentoring/Guidance/Career Management Programs, boot-Mps and STEAM Weeks aimed at motivating young people to train and prevent early retirement and also the Alto-Minho Ser+Iguar Programme aimed at encouraging young women to STEAM areas and reducing inequalities in professional choices, in particular in areas with greater asymmetry in the

IPVC.

Regarding the measure Adults Impulse: Graduate School (Alto-Minho Business School) the IPVC proposes to implement 25 training courses, which are divided into 16 Short-Term Actions, 7 postgraduate courses and 2 master's courses.

This operation foresees the participation of 240 new students through the STEAM CTESP; 40 new Masters students; an increase of 10% in the participation in CTESP, Undergraduate, Graduate and Master's degrees already existing in the IPVC; a 10% annual increase in the rate of graduates and a 5% reduction in the rate of withdrawal and reduction of gender inequalities.

### **Blue Design Alliance (BDA)**

Description:

Focusing on the water and ocean cluster, the BDA aims to meet the challenge of Un-water 2030, considering the National Strategy for the Sea 2021-2030 with the aim of increasing education, training, culture and ocean literacy (OE8)the National Water Plan and the relevance of the Portuguese Sea Cluster. This consortium is able to respond in an innovative, creative and effective way to the EU's challenge to design through the New European Bauhaus.

The training and research paths to be developed by BDA in the context of Adult Boost are: (1) Graduate courses; (2) Short Term Courses (including microcredentials courses - (MC); (3) Thematic workshops. The BDA proposes to offer the Graduate Diploma in Circular and Sustainable Water Design - where the epicentre of training is the Methodology of Design Thinking, Creativity and Innovation. It consists of 4 macro areas of training/ specialization: Design, Marketing & Water Resources Management; Water Culture & Literacy; Logistics, Maritime Transport & Shipbuilding and Health and Wellbeing: Tourism, Sports & Biotechnology - each encompassing sub-specific training areas.

Under the Youth impulse Steam program, the training to be given will be: (i) higher education professional technical courses (CTESP); (ii) Summer Courses and (iii) Outreach Actions, both aimed at secondary school students and professional schools. All CTESPs created under the BDA will take into account the following thematic areas: Economy and Design of the Sea (S); Materials and Production (T); Digital Technologies and Technical Design (D); Design, Creativity and Innovation (A) and Geometry and Statistics

(M). Due to its intrinsic characteristics, Design ensures an integrating action of knowledge and provides students the ability to identify and intervene in different contexts in a global way.

## **"CIVIC" and "GLOBAL"!**

Description:

"CIVIC" and "GLOBAL"! These are the pillars of NOVA's strategic plan for the next 10 years. CIVIC, because it promotes the values of inclusion, equal opportunities and sustainable development; because it serves local, national and global communities where it is present; and because it is a platform that enables organizations of all kinds to develop collaborative agendas with impactful impact; and GLOBAL, because it promotes global citizenship; because it has no boundaries between geographies, languages or cultures; and because it is a factor attracting talent from all over the world.

NOVA's application to Component 6 (C6), "Qualifications and Competencies", of the Recovery and Resilience Plan (RRP) through a consortium of national and international companies and public authorities led by NOVA is tributary of this vision. It directly addresses three of the main challenges facing modern Western societies: (1) Climate change and environmental degradation;

(2) Sustainability of health systems in the context of population ageing; and (3) Social exclusion.

In close cooperation with a number of relevant partners, the aim is to prepare junior and adult students and students throughout their lives, who are already or soon to join the active national and international population, to contribute to the formulation of solutions to such challenges. This is considered the best way to respond to the cross-cutting concern of RRP with sustainable employability in a rapidly evolving world.

## **SONDA2026 - Smart Open Networks for Development Acceleration**

Description:

The SONDA2026 - Smart Open Networks for Development Acceleration project has the following strategic objectives: to create a training offer for Professional Higher Technical Courses in the north of Lisbon, with the creation of the Higher Education Platform, responding to a market failure in the public offering; create a School of Higher Education in the Alentejo Coast, in Sines, the only NUT III in Portugal without this facility, providing CTESP, Undergraduate and Master's Degree courses, in addition to lifelong learning; strengthen significantly the supply of postgraduate courses and microcredentials in the area of health, where the South of the Tagus is lacking in some specialties (speech therapy or physiotherapy) or scarce in others; considerably increase the digital skills of the population, particularly active people, through post-graduate and microcredentials training; create 17 new training programs (10 CTESP and 7 Masters); build the building for the School of Health; train 6317 people: 700 in CTESP, 594 in Masters, 1470 in Post-Graduation and 3553 through microcredentials and short courses.

The SONDA2026 project creates a CTESP training offer in the north of Lisbon, through the integration of IPS in the Higher Education Platform, together with the Polytechnics of

Leiria, Santarém and Tomar, in the municipalities of Amadora, Arruda dos Vinhos, Mafra, Loures, Odivelas, Sintra, Torres Vedras and Vila Franca de Xira. The project materializes in the creation of the sixth IPS school in Sines, with an offer in the areas of energy, information technologies, logistics and tourism, from CTESP to Masters. In the area of health, a wide range of training will be offered at the level of master's and post-graduate degrees, as well as an expressive bet on microcredentials. Lifelong learning is also the subject of an ambitious programme in the field of digital skills, with a post-graduate and monthly offer, as well as microcredentials and the launch of the Reskilling and Upskilling Academy, in partnership with employers. The project envisages an ambitious programme of support for the most disadvantaged students, but also for women, in order to combat the existing gender inequality in the area of digital skills. At the same time, a structured program will be developed to pro-move academic success.

### **UBImpulso, Green and sustainable growth in a digital world**

Description:

The University of Beira Interior (UBI) is committed to its responsibility to carry out green and sustainable growth, providing added value to students, businesses and national and European communities.

The Youth Impulse Steam programme will focus on raising awareness of higher education among high school students, health sciences and technology, strongly emphatically emphasizing the attractiveness of high school higher education, in these areas, as well as the number of graduates, while improving the quality of teaching, broadening the range of skills of these students. To achieve these objectives, the creation of tools to support the development of skills of teachers and students is foreseen, namely digital skills and the reinvention of learning & teaching experiences (ex.: through the innovative cross-cutting skills laboratory). Our application includes different interventions that will promote and encourage youth in relation to STEAM areas, under the motto "without leaving anyone behind" (#no-1-left-Behind).

The Adults Impulse programme will focus on adult education by taking advantage of the context provided by the region, the use of microcredentials (and innovative courses with topology adapted to specificities) through learning motivation, the promotion of professional recognition of their qualifications, the encouragement to advance to the 2nd cycle of studies, as well as resorting to innovative learning experiences based on individualized projects to achieve their objectives. Academia Andromeda is an example of these innovative instruments. All initiatives will make use of a broad network of UBI partners, coming from previous partnerships, providing the bosses with what companies and public authorities require of workers today.

## **HEAD\_L – “Aliança do Ensino Superior para o Desenvolvimento da Educação, Formação e Investigação no Espaço Lusófono”**

### **Description:**

Our Alliance operates around three programs called "Archipelagos" as a reference to the Ecological Partnership that we want to implement, which seeks to capture the multiple relationships between the different cost factors that contribute to innovation and transformation in a higher education ecosystem. The three / archipelago programs are named: STEAM / ADULTS / INTERNATIONAL. Within each Archipelago we find a set of activities that correspond to specific actions that will be carried out in order to ensure the foreseen transformations and the achievement of the Alliance's objectives.

The specific objectives of the Alliance are: 1) To design and implement at least 45 new graduate courses in partnership with different stakeholders; 2) To involve external partners in its forces to attract, retain and promote the employability of a greater number of students and graduates of higher education; 3) Create and implement at least 35 new educational programs in the STEAM areas across the Alliance by 2025; 4) Attract at least 450 new international students to graduate courses taught in Portugal, including Erasmus Mundus Masters; 5) Integrate at least 1,500 new participants in short-term or postgraduate initial courses in STEAM areas; 6) Implement dedicated programs across the Alliance that promote gender equality and the inclusion of minorities in STEAM areas; 7) Identify priority areas of intervention in the context of microcredentials deployment; 8) promote the integration of technology and new infrastructure with a view to designing and implementing new modes of teaching, learning and promoting innovation in institutions and society; 9) Promote alignment between the activities of the Alliance and the various transformational initiatives currently under development in the European context, in particular the "European Union" initiative and Agenda 2025; 10) Ensure synergies with national reforms of higher education systems.

## **Prometheus**

### **Description:**

The PROMETHEUS project is embodied in the strategic orientation of the Uévoira Anchor Areas: Mediterranean; Heritage and Creative Industries; Health and Welfare; Aerospace and Digital Transition, capable of anchoring internal skills and affirming Uévoira as a Leading Partner whose contribution is sought and valued, and a driver of innovation and regional development in these areas, promoting greater involvement with the community and the creation of skilled jobs in the region. In this context, the PROMETHEUS project aims to create an interinstitutional ecosystem with cooperation mechanisms in the scientific community of Uévoira, between this and society and between this and other national institutions with the ultimate goal of strengthening and broadening the educational portfolio in strategic areas for the Alentejo Region: 1. Health and Welfare Sciences and Technologies; 2. Aerospace Engineering; 3. Trans-disciplinary studies.

With these strategic areas, the University of Évora wants a new commitment to society, by offering a wide range of training opportunities in line with the proclaimed European

Pillar of Social Rights and the vision of the European Commission for a European Education Area in 2025 embodied in the European Competence Agenda and the role of educational institutions support not only for higher education training, but also lifelong learning and a wider population.

The PROMETHEUS project is an integrated approach that covers different levels of formal educational training courses, including undergraduate, master's and specialization programs, and short-term courses aimed at lifelong learning microcredentials for training and inclusion of different target populations, including young, unemployed and public administration. PROMETHEUS Consortium partners including companies, municipalities and public and private entities will play a central role in the planning, development and development of training activities and programmes, creating a genuine regional ecosystem to promote education and competitiveness.

### **IP Alliance**

Description:

The Alliance aims to create an integrated platform for lifelong learning of professionals and students, in close connection with the advancement of knowledge and the development of society. As a result, this proposal will develop two main centres: CHE - Health Education Centre; CCS - Clinical Simulation Centres.

The Health Education Centre will enable the creation and provision of inter-professional lifelong learning training activities. The CES addresses the educational and training needs of health professionals, namely doctors, nurses and senior diagnostic and therapeutic technicians. The CSC - Clinical Simulation Centres, hosted in each of the consortium's institutions, will (i) update their competencies, responding to the educational needs of students from CTESP (higher education professional technical courses) enabling best practices and strengthening the decision-making process; and (ii) in upgrading, intending to create the ideal conditions (in immersive biennials) for an integrated training of knowledge, skills and attitudes of health professions, both individually and as a team.

The CSC will make it possible to hold several courses: 1) The ESEP Simulation Centre will support 6 master's degrees, 33 micro accreditations, as well as 3 inter professional courses in health 2) The FMUP Simulation Centre will support 5 new short courses graduates, as well as several existing undergraduate and non-graduate degree courses, which will benefit from the inclusion of simulation modules; 3) The IPP Simulation Centre will support 2 CTESP courses and a postgraduate course in technological innovation in health.

## Living the Future Academy

### Description:

Project Living the Future Academy (LFA) assumes, as a strategic purpose and legacy for the future, the preparation of people, organizations and territories for the implementation of smart decisions, in a sustainable and strategic way, inspiring the paradigmatic change necessary for cooperative leadership and the transition to a Society 5.0. In this sense, the Project aims: a) to create cooperative opportunities for young STEAM and professionals, through the promotion of innovative training programs and courses, adapted to different segments of the population and in coordination with the feeders and relevant socio-economic organisations; b) promote a close connection between empowerment, research and knowledge sharing with people, territories and organisations; c) build processes of proximity and coordination between the Academy, the labour market, territories and populations in order to foster innovation processes and scalable learning ecosystems.

The project is structured in thematic academies and transversal strategic initiatives. Thus, in addition to the proposal of 9 degree courses in STEAM areas, the project integrates 8 thematic academies, with a total of 102 short courses. Within the framework of "Youth Boost STEAM", the project includes, in addition to several impulse measures, 4 skills promotion academies aimed at both increasing knowledge and the participation of young people in higher education in STEAM areas, the minimisation of inequalities of access.

Within the framework of the "Adult Boost" are planned 87 short training for upskilling and reskilling (plus courses on request and customizable), distributed by 4 thematic academies in the areas of digital skills and economy 4.0, health, territorial sustainability and teacher training. The project also includes an Alliance (UC/IPG/IPV), in the interior of the country, oriented to technical training in technological applications in industry and in Lean management, in conjunction with companies in the regions. Assuming as strategic motto a synergistic and proximity relationship with local territories, the project is framed as a transversal initiative of capacity building for endogenous development processes and territorial cohesion, in cooperation with the five partner Cims, around large options associated with "Smart Digital and Green Tran". The project also includes a cross-cutting and international strategic training initiative for pedagogical innovation.

## Skills4All

### Description:

Ualg, together with the collaboration of public and private entities, regional and international, is focused on strengthening its program portfolio, in short cycles, 1st and 2nd cycles in STEAM areas, and others aligned with the RIS3 of the region and the country, to meet the identified training needs. Ualg+Skills4life will provide flexible training courses in all areas, through Curricular Units (UC), assigning ECTS, through classroom and distance education, built according to the needs identified with the partners. The UC will also be available in transversal and multidisciplinary areas and in the field of digital (basic and advanced digital skills), life skills, languages, culture, ecology and sustainability, digital arts, among others, to be



available within the FLV, but also to students who attend Ualg programs, as an optional or extracurricular, to be included in the diploma supplement.

Ualg+Skills4steam aims to increase the competitiveness of Ualg, in particular in the STEAM areas, establishing existing practices for the dissemination of curricular provision between secondary and professional students and coordinating with partners existing activities and creating new activities to clearly disclose possible pathways for transition to education superior and help professional choices, in conjunction with secondary and professional schools and through the implementation of specific lectures, workshops and activities, particularly in the STEAM areas to increase the interest of young people in these.

The Ualg+Skills4success and Ualg+Skills4innovation projects will promote educational efficiency, increase academic success and reduce school dropout. Various actions will be undertaken, such as: identification of school dropout risk and personalized response and support for continuing education; integration of new students with training in study and mathematics, as well as peer mentoring actions.

The Ualg+Studygrants project will support young people and adults studying in Ualg through scholarships and incentives, contributing to school success and the reduction of school dropout.

## **MERIDIES Consortium**

### **Description:**

The MERIDIES consortium brings together all the institutions of the Alentejo strongly committed to the development of the region, a performance that is evidenced by the numerous and successive partnerships and strategic initiatives commonly developed in the areas of training, R&D and knowledge transfer, both within the framework of structuring projects to the territory and through joint participation in networking training offers.

Levels and types of training followed an interdisciplinary approach in line with current and future social challenges. In this regard, the proposal is organized in three areas, namely: i) Digitization and New Technologies; ii) Circular Economy and Sustainable Production; and iii) Renewable Energy and Decarbonisation. The training offer comprises a set of different study cycles, 11 short cycles, 2 undergraduate, 27 post-graduate and 74 microcredentials cycles respectively, which could be extended in line with the specific future training and education needs of the public and private partners in this proposal, in line with the three previously identified areas.

The proposed training model is closely linked to the installed capacity of all the IES that make up the Consortium, on the one hand through the existence of a teaching staff and qualified researchers, recognized nationally and internationally, in areas of knowledge converging with the areas of training established by the Consortium; and, on the other hand, the existence of infrastructures dedicated to research and knowledge transfer, which constitute, as a whole, an important strategic vector for quality assurance, providing the ability to anchor the training offering in accordance with the STEAM Youth

Boost and Adult Boost programs. The implementation of the consortium's strategy is based on a policy of active partnerships and cooperation agreements with a wide range of partners, including public and private entities, namely variable-scale companies and policy areas, both national and international, operating in the region, together with a vast network of secondary and professional schools

### **Platform For a Global Health – Qualification of Human Health Resources**

Description:

With the aim of attracting students to higher education, including health courses, and promoting post-graduate training of human resources involved at different levels in the provision of public-sector healthcare, private and social, through recycling and specialization actions, in a lifelong learning perspective, a Consortium was created consisting of the Polytechnic Institute of Health North (IPSN-CESPU) (promoter) and 8 IES (see below), together with the Public Health Institute of Oporto (ISPUP) as an R&D institution.

This group was joined by more than 120 other institutions through partnership contracts (sectoral associations, non higher schools, municipalities, Ipsss, etc.) which, directly or more peripherally, inter-come in the sector, and whose experience, link to the territory and regional coverage are essential to ensure the coherence of these proposals and their alignment with the objectives of the Impulse Programs. It covers all NUT III in the Northern Region (and also the Lisbon Metropolitan Area), which will ensure intervention in less favoured regions and where the pandemic has had the greatest impact. Together, we created a program that we call "For a Global Health - Qualification of Human Resources" subdivided into five sub-programmes that, although closely related, have specific objectives.

We hope to meet the challenge of the STEAM Youth and Adult Impulses programs through CTESP's, Master's and Graduate Programs of long, medium and short duration in the following areas of training: Social Intervention, Aging, Health Care Support Services, Health and Welfare, Emergency and Relief, Digital Transition in Health and Biotechnology applied to Health.

Of this training offer we highlight about 3980 vacancies in CTESP's and 680 vacancies in Masters to be made available between 2021 and 2026, thus contributing to the fulfilment of the proposed goals

### **JIT4NSTEAM - Just in time for new steam**

Description:

In close partnership with secondary and professional schools, companies, research laboratories, the municipalities of Maia and Vila do Conde, and other entities of the Porto

Metropolitan Area, try to attract more students to pursue STEAM studies in higher education. A special effort will be made to try to reduce the gender bias that exists in technical areas. The select-das schools will be supported by the project, particularly with regard to their STEAM classes, human resources, equipment, consumables and motivation.

Short-term courses will be co-worked with employers and potential employers, reducing the gap between what is taught in higher education and the current and future labour market needs. At the same time, the qualification and retraining operations are applied to the workforce of the project partners and to other entities that subsequently decide to join the project. Short term courses are articulated in Formative Paths that teach the missing skills, and will have assigned microcredits measured in ECTS, motivating and paving the way for the continuation of studies in CTESP, Bachelor or Master.

STEAM students will be supported with merit grants and other types of grants and will work in a PBL - Project Based Learning environment, where they will deal with real-life problems provided by the project partners. Selected international students, business incubation projects and technical start-ups will also be supported. Special care has been taken to ensure that following the completion of the project in 2025, similar initiatives continue to be undertaken and funded by ISMAI and IPMAIA until at least 2030, thus ensuring a lasting contribution to the high-level objectives of the Youth Impulse and Adults Impulse Programmes: by 2030, 60% of 20-year-olds participate in higher education, 50% of higher education graduates among the population of 30-34 years, increase five times the number of adults in lifelong learning in all Higher Education Institutions, together with employers.

## **Training for Resilience**

Description:

Taking advantage of new opportunities to improve education, the UCP is aligned with the challenges of the present time. Four Academies of Knowledge are now proposed with the intention of reinforcing the existing undergraduate programs, and extending their access, while proposing new training programs. They are designed to attract more students to superior teaching and help them develop the skills to manage the increasingly complex learning tools at their disposal. With the help of innovative teaching-learning methodologies, students should be trained to develop critical thinking, how to integrate emerging knowledge and develop communication and collaboration capabilities. Through the creation of laboratories experienced in partnership with industry, and in collaboration with the consortia of organizations/companies established in each of the areas outlined in this presentation, students will be inspired to be autonomous and to solve complex real-world problems with direct interaction with the professional world.

In Youth STEAM, UCP proposes three strategic Academies of Knowledge:

Arts, Humanities and Creative Industries; Health Sciences and Technologies; and Management.

In Adults Steam, UCP is creating four strategic Academies of Knowledge: Arts, Humanities and Creative Industries; Health Sciences and Technologies; Management; and Governance and Ad-Ministering.

The training programme proposed by the CPU is ambitious, robust and consistent and will make a substantial contribution to the achievement of the objectives outlined by the Portuguese Government for the Recovery and Resilience Plan.

## **Annex 1: HIGH LEVEL SELECTION AND MONITORING PANEL**

### **STEAM YOUTH IMPULSE AND ADULTS IMPULSE PROGRAMMES (appointed by Order 6577/2021 of 22 June)**

1. António Rendas, former rector of the New University of Lisbon and former President of the Council of Rectors of the Portuguese Universities (coordinator of the Panel);
2. Conceição Bento, former president of the Escola Superior de Enfermagem de Coimbra (co-coordinator);
3. Luís Braga da Cruz, former President of the General Council of the University of Minho;
4. Helena Nazaré, former rector of the University of Aveiro, former President of the European University Association and former Chairman of the Coordinating Council for Higher Education;
5. Carlos Salema, President of the Lisbon Academy of Sciences, former President of the Telecommunications Institute;
6. José Carlos Marques dos Santos, former rector of the University of Porto;
7. Anabela Romano, former vice-rector of the University of the Algarve;
8. Pedro Guedes Oliveira, former president of the Institute of Computer Systems Engineering, Technology and Science - INESC TEC;
9. Luís Soares, former president of the Polytechnic Institute of Porto;
10. Carlos Faro, associate professor at the University of Coimbra, former director of BIOCANT;
11. João Ferrão, retired coordinator of the Institute of Social Sciences of the University of Lisbon;
12. Andrée Sursock, FR; member of the Coordinating Council for Higher Education, CCES;
13. Han Brezet, NL; member of the CCES;
14. José Manuel Fonseca de Moura, member of the CCES;
15. Ruaidhri Neavyn, IR; member of CCES;
16. Wilhelm Krull, DE; member of CCES.

## **Annex 2: Coordination and monitoring team at DGES**

1. Maria da Conceição Bento - Director General of Higher Education
2. António Bob Santos - Executive Coordinator of the STEAM Youth Impulse and Adults Impulse Programs
3. Raquel Oliveira - DATA, Head of Technical and Administrative Support Division
4. Inês Vasques Branco - DSSRES, Director of Higher Education Network Support Services
5. Pedro Rosa - Information Technology Coordinator
6. Ricardo Lucas - NAIPA, Innovation Support Centre, Projects and Evaluation

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