**ORGANIZED BY:** 







# Innovations in Smart Agriculture: a Training Program for digital skills and Entrepreneurship

**SPEAKERS** 



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Aspire to be an Entrepreneur?

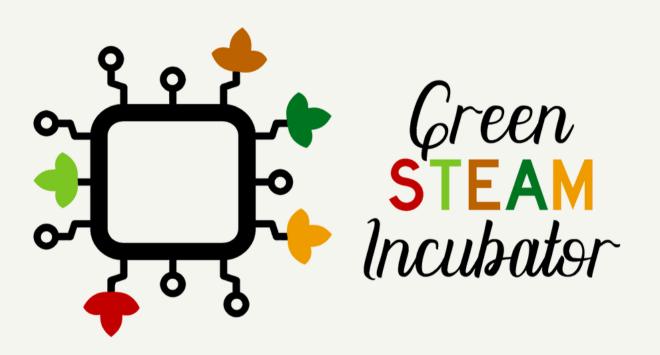
Develop your next sustainable idea in our mini-hackathon on the final day! MONDAY - THURSDAY 8TH-11TH NOVEMBER 9AM - 5PM YOUTH MAKERSPACE LARNAKA

Co-funded by the Erasmus+ Programme of the European Union



## The Green STEAM Incubator

A KA2 Erasmus+ Project that investigates the common boarders of STEAM and entrepreneurship





GREEN STEAM INCUBATOR NOVEMBER 2021

#### Partners

THE CONSORTIUM Collective Expertise in various ramifications of STEAM and social/agro-entrepreneurship









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#### What we want to solve

There is a growing need for strengthening "collaborations between formal, non-formal and informal education providers, enterprise, industry and civil society. We need to ensure relevant and meaningful engagement of all societal actors with science and increase uptake of science studies and science-based careers to improve employability and competitiveness."

Science Education for Responsible Citizenship (EC, 2015)

Scientific knowledge and scientific thinking is particularly important in decision-making, in domains such as health, the environment, food, energy, and consumption.

### Objectives

WHAT WE WANT TO ACHIEVE







Provide youth organizations with a comprehensive framework on how to design, materialize, manage, coordinate and sustain collaborative affiliations with agro-entrepreneurs to foster educational activities. Provide youth organizations with STEM-oriented theoretical knowledge frameworks, through the provision of essential STEAM material and curriculum.

Modernise the pedagogical approaches of non-formal learning in agriculture/agroentrepreneurship, thus teaching them how to prepare the next generation of agroentrepreneurs.

### Objectives

WHAT WE WANT TO ACHIEVE



Establishing ongoing collaborations with agro-enterprises and farms that will thrive within the project's materialization period, thus promoting the selection of professions (amongst youth) that fall in agriculture and entrepreneurship.



Endow youth organizations with gamified methodologies (board game, treasure hunts, and quests) that will allow them to approach environmental STEAM-oriented knowledge activities that relate to agroentrepreneurship with environmental education.

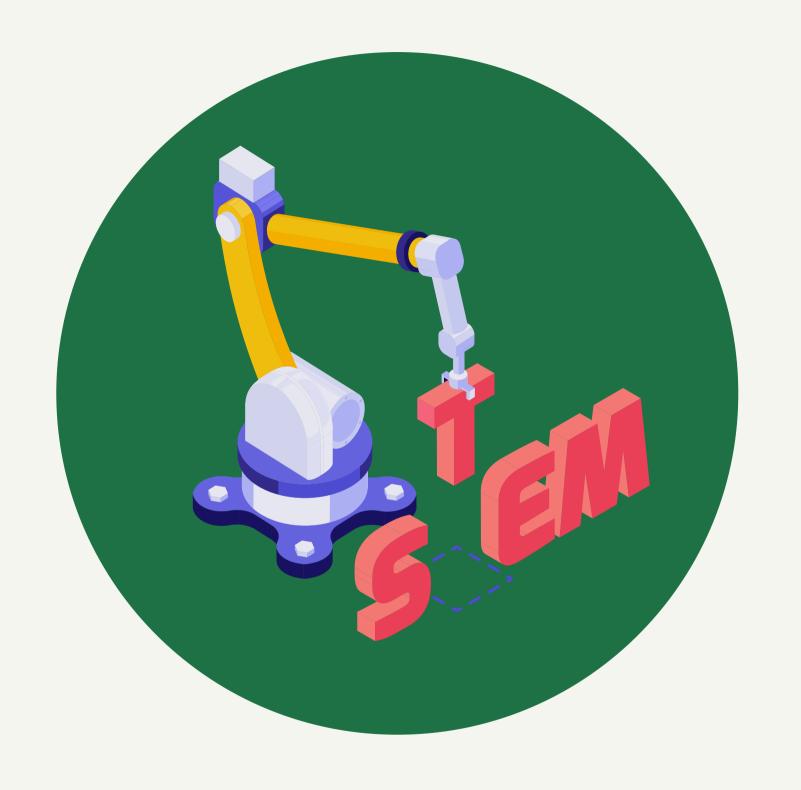


Endow Youth organizations with STEAM-oriented knowledge on Microcontrollers and 3D-Modelling with the ultimate goal of the applicability and utilization of knowledge to create ecofriendly solutions & products.

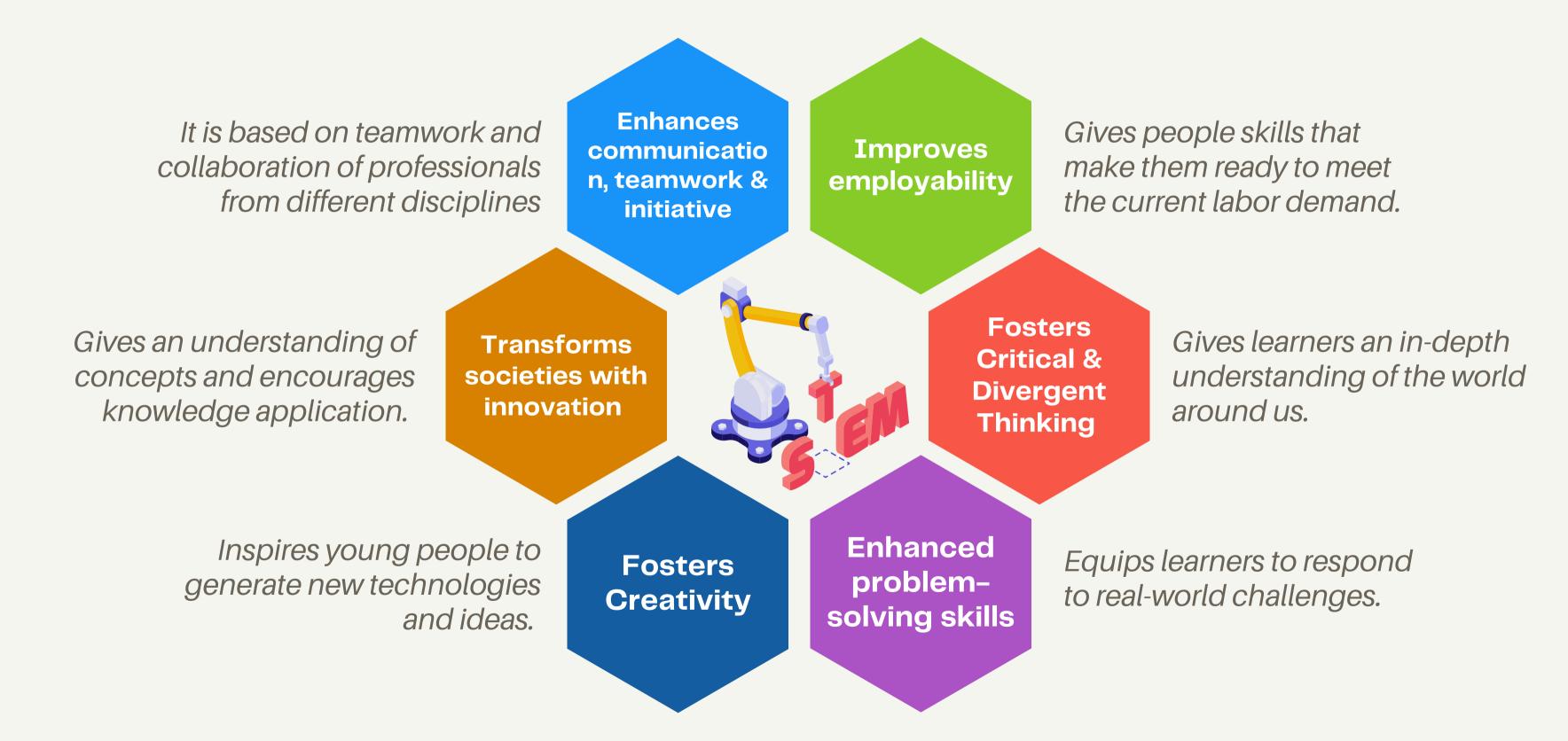
#### STEM Education

#### PREPARES FOR THE FUTURE

STEM is an educational approach aimed at providing students with the ability to communicate in an inter disciplinary way, to do team work, to think creatively, to research, to produce and to solve problems, focusing on the integration of knowledge and skills.



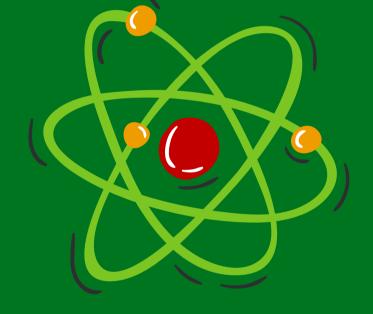
#### What is the effect of STEM education in societies?





- O2 The on-the-spot gamification of " Green STEAM Incubator"
- O3 Green STEAM Incubator; Module: Microcontrollers
  - O4 Green STEAM Incubator; Module:3D modelling and Design
- **05** Green STEAM incubators; the exhibition of final products and services





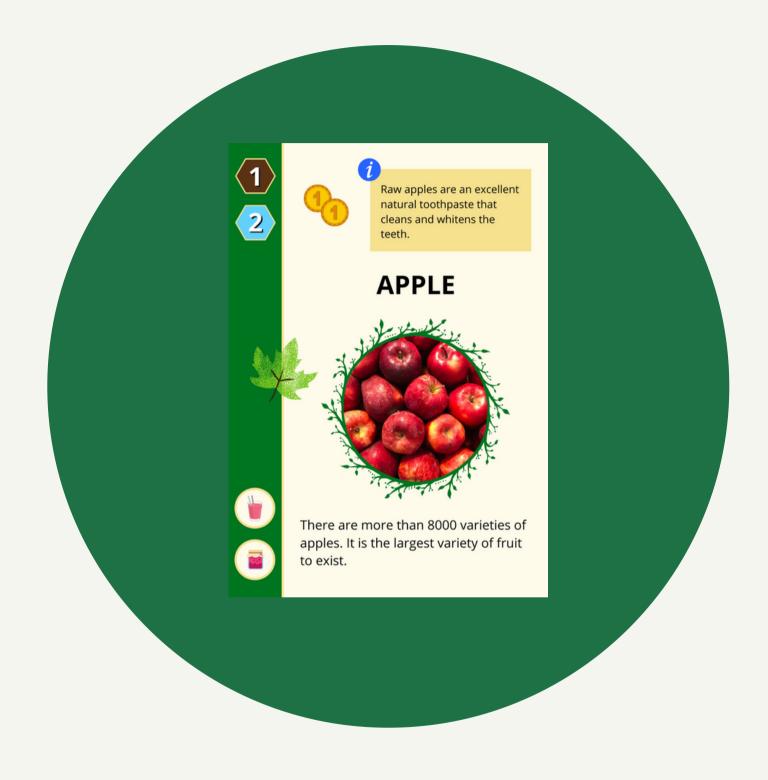
## The "Green STEAM Incubator" Manual

How to create collaborative affiliations among youth organisations, relevant stakeholders and agro-businesses with the ultimate goal to foster activities interwoven with the sector of permaculture and organic farming, thus promoting a cross-sectoral, collaborative scientific learning experience for young people (18-35 years old).



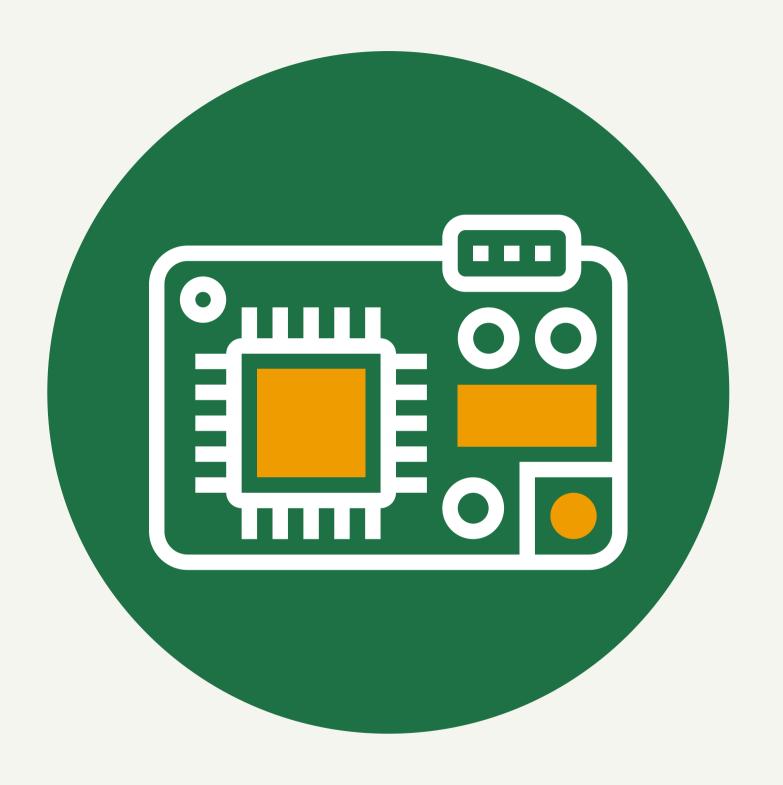
# The on-the-spot gamification of "Green STEAM Incubator"

Offers games (i.e. treasure-hunts, quests and a board game, along with its manual), that aspire to interlink permaculture, green-entrepreneurship and environmental education, and which make extensive references to tangible ways of conserving, protecting and restoring the local communities, thus encouraging positive environmental behaviours.



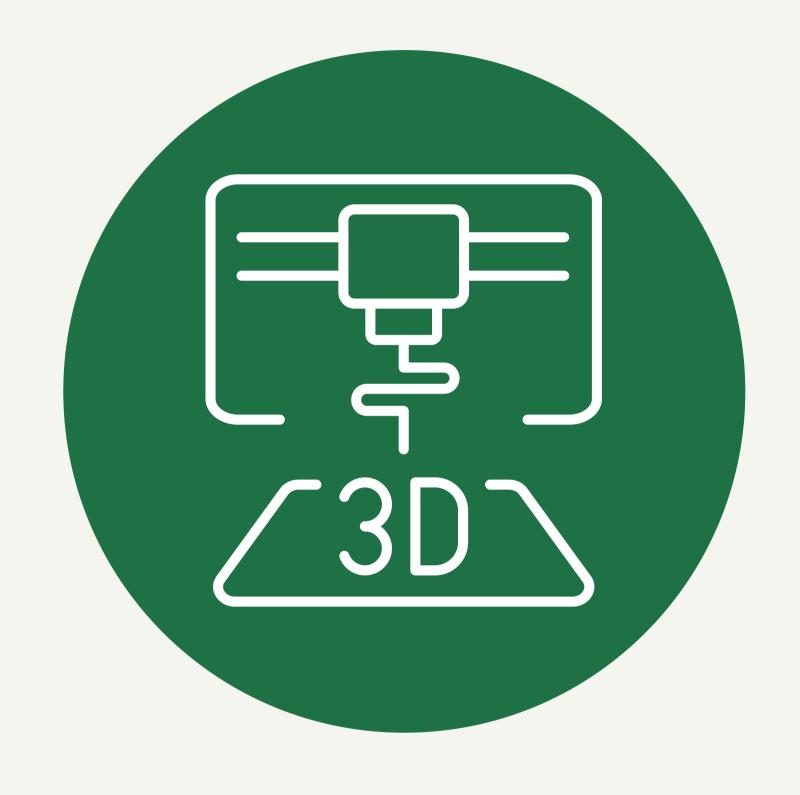
## The development of Module: Microcontrollers

An introductory 30-hour Handbook on Microcontrollers (Robotics, Basic Software e.g. Arduino, Scratch, Micro-bits, logic gates, Internet of Things and Raspberry PI), containing eco-friendly projects providing high-tech green solutions in the form of non-formal workshops, which could be accomplished by young participants within the context of a laboratory.



# The development of Module: 3D modelling & Design

An introductory 20-hour Handbook on 3D-Modelling (3D Objects, creation and printing) with proposed interlinked environmental projects in the form of workshops and a Methodological Guide on how to employ "Design Thinking Models" in order to prototype, test and improve the final products of the projects.



### Thank you!

**QUESTIONS?** 









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