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# The importance of STEM training for companies

***STEM disciplines in support of an "agile" workforce able to adapt to the current digital revolution.***

According to a recent report by the McKinsey Global Institute, by 2030 as many as 375 million workers (around 14% of the global workforce) may have to change jobs. The current **digital revolution** is radically changing many economic sectors and, with them, the world of work.

In particular, it is estimated that in the coming years a large part of current tasks will be processed entirely by technology: Artificial Intelligence, Machine Learning and Robotics will be able to perform the most repetitive tasks independently, allowing people to focus on the most **value-added decision-making processes** (Deloitte). The increasing use of smart working is also changing the organisational culture and relationship management.

Never before, therefore, have companies been called upon to invest in the skills of their workforce to increase both the **technical skills** needed to cope with the technological changes taking place and the **soft skills** needed to develop an "agile" workforce capable of adapting more easily to an ever-changing landscape.

And, in this context, STEM training will play a crucial role in enabling companies to manage change.

## What is STEM training?

The acronym STEM stands for a four-discipline approach to learning:

- Science
- Technology
- Engineering
- Mathematics

What differentiates STEM training from traditional science and mathematics is the different approach. In STEM, in fact, these four disciplines are not considered as separate subjects, but integrated with each other in order to relate knowledge and know-how, theoretical and practical problems.

## Advantages of STEM training for companies

One of the most important aspects of STEM training is that the fundamentals learned through these training programmes extend well beyond the industries specialising in those fields.

STEM training stimulates people to develop a different approach to work and inspires the creativity needed to implement modern and innovative business systems.

The connection of these four disciplines enables the development of a wide range of **transversal skills** that can be used in a wide variety of sectors and that can offer companies a clear competitive advantage.

In particular, STEM training:

**Promotes ingenuity and creativity**, because it is based on experiential learning and experimentation, which are effective ways to develop individuals' creativity.

**It builds resilience**, because it highlights the value of failure as part of the learning process.  This enables people to develop trust and resilience.

**It encourages experimentation**, because it encourages individuals to experiment and take risks during learning.

**It encourages teamwork**, as it emphasises the importance of establishing steps and procedures for each team member to follow. This encourages the construction of a group oriented environment in which each resource plays a specific role and works with others to achieve a common goal.

**It encourages the use of technology** because it highlights the power of technology and innovation.  In this way, when individuals come into contact with new technologies, they will be ready to welcome them, instead of being hesitant or fearful.

**It teaches how to solve problems**. STEM education develops critical thinking, which is fundamental to problem solving.

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