In recent years, there has been a focus on promoting the uptake of STEM subjects in schools. This has been driven by the need to ensure that young people gain the knowledge and skills essential to help them participate in a society in which mathematics, science and technology are increasingly important. Nevertheless, reform efforts, including curriculum development have treated the STEM subjects mostly in isolation. Recognizing that education within the individual STEM disciplines has great value and that efforts to improve discipline-centered teaching and learning should continue, this conference considers the potential benefits and challenges of an explicit focus on integration. In order to prepare students to address the problems of our society, it is necessary to provide students with opportunities to understand the problems through rich, engaging, and powerful experiences that integrate the disciplines of STEM.

The conference provides a platform for dissemination of best practice in teaching and learning in Greece, and will inspire and empower STEM educators to improve teaching quality, to increase engagement in STEM education and career pathways, to connect students with real life industry relevancy, and to drive creativity, inquiry based learning, problem-solving & project based learning.

The conference will contain four strands:
1. STEM Practice will include 15’ presentations from individuals and teams from K-12 schools who implement STEM programs and learning approaches
2. STEM Education Research will include 15’ presentations from STEM education researchers who examine integrated curriculum challenges in STEM education
3. STEM Projects and preliminary results at conception or early practical stages in 5’ flash presentations
4. STEM Resources will include invited organizations and other community partners that have resources available to support STEM education.

Topics of interest include but are not limited to:
- Computational Intelligence
- Innovative teaching in STEM Disciplines
- Mobile computing
- Modelling and model-based reasoning
- Ubiquitous and pervasive computing
- Curricular programs that integrate STEM
- Serious games
- Project based learning
- Robotics
- Conversion of knowledge
- Smart educational technology
- Women and STEM disciplines
- Human Computer Interaction
- Didactic transpositions
- Public understanding of Science
- Pedagogical aspects of educational technology

Conference attendees will learn how to:
- Make ICT real world relevant but still cover curricular outcomes
- Understand the different types of projects they can implement
- Design a project-based Maths and Science learning unit
- Run assessments in a project based learning setting
- Use the right assessment tools for project based learning
- Explore best practices for mentoring and training STEM students to develop the knowledge and skills necessary to connect their learning to real-world problems
- Identify institutional practices for integrating the values and traditions of STEM disciplines with other campus domains to fully capture the distinct characteristics and comprehensive nature of scientific solutions.