European Project: EASTEM

The EASTEM 2019-2021 project "Euro-Asia Collaboration for Enhancing STEM Education" (funded for 1 million Euros over 3 years), focuses on "Capacity Building" with Universities in South East Asia on STEM (Science, technology, engineering, and mathematics). This project, supported by the Computer Science Department in Brest and its System Modelling Lab (inc. his CDIO network correspondant), involves IMT Atlantique in the European and ASEAN ecosystem for higher STEM & engineering education.

Kosa Pan statue inaugurated 'Rue de Siam' in Brest, 15th February 2020, aside the 1st Euro-Asia STEM Education Conference
Photo credits to Ggal under CC BY-SA 4.0

EASTEM supported transformations of STEM higher education systems in 10 reactive universities in 3 partner countries: Vietnam, Thailand and Indonesia. As part of the internationalization of higher education, this project aims to strengthen the visibility of research and innovative educational actions of IMT Atlantique with South East Asia, and share experiences in student centered learning, University-Business-Industry collaboration models, and STEM center management (with and for CARÆ, the Centre d'Appui et de Ressources pour l'Apprentissage et l'Enseignement). As ASEAN universities are recognized for their reactivity in adapting to changing contexts, and knowing that weight of traditions remains sometimes in the old Europe, each EASTEM partner is to learn from each other good pratices, inspire others, and reinforce the visibility of adaption and innovation in pedagogy, educational sciences and STEM ducational programmes.
**10-14th January 2022:** Final Dissemination week, all the week. After 3 years of sustained collaborative efforts, the European project EASTEM came to its end mid-January 2022. Plenary talks, invited speakers, and roundtables made it possible to disseminate good practices capitalized for the improvement of STEM education systems and to prepare future changes and transformations in line with EU and ASEAN strategies. 
https://eastemproject.eu/eastem-final-dissemination-week/

**12-14th October 2020:** Virtual meeting dedicated to *Industry-University collaboration in STEM education*, by IMT Atlantique, with more than 40 representatives from the 13 partner Universities, industrial partners (Amadeus, Bookeo, Orness, Nokia, Thales), and IMT Group direction in order to reference good practices on Industry Engagement for better aligned STEM education with new professional skills and Industry 4.0 needs (news in French): next coming plenary meeting 15-17 February 2021

5mins **Summary video here**

- The 6th-10th meetings took place virtually.
- The fifth meeting took place at UGM, Yogyakarta, Indonesia, virtual, June 2020.
- The fourth took place at ChiangMai University, Thailand, in February 2020, to formalize STEM centers guidelines, inc. their management and operation. A panel on Challenges in STEM Education (from 1696 diplomatic visit of Kosa Pan in France -Brest & Versailles- to 2020 and future) took place at the Science Park during the 1st Euro-Asia STEM Education Conference.
- The third meeting took place at Vilnuis University in October 2019 to discuss and decide on a detail roadmap for the development and set up of Centers for Excellence in STEM Education. The 10 universities from Asia – Indonesia, Vietnam and Thailand presented the results of a survey on insights on what has already been achieved in their institutions and the challenges they face in preparing for the centers. Reference models were conceptualized with shared missions and main activities / good practices selected.
- The second meeting took place at Uppsala University in May 2019 to design a training offer for teachers & faculty in STEM on competency and student centered learning via project-based and active learning models.
- The kick-off meeting was held in Saigon at HCMUTE at the end of February 2019, with nearly 50 participants, mainly directors of STEM Schools studies (Science, Technology, Engineering, & Maths). A / Prof. Sr. Rouvrais (Dpt INFO Brest) and Dr. G. Jacovetti (CARAE) were able to present the model of integrated internships to the curriculum "à la Francaise" for the development of professional skills then animate a first collaborative
session on models of improvement continues to strengthen skills and training approaches in STEM to stimulate a truly flexible culture of quality assurance (news in French)

**Objectives of EASTEM:**

- Improve the quality, relevance and governance of higher STEM training in partner countries;
- Strengthen the capacity of higher education institutions and their cooperation plans;
- Improve the employability of graduates with regard to Industry of the future and 4.0, by reinforcing the interdisciplinary and transdisciplinary character of STEM training

**EASTEM 2019-2021 priorities & tasks:**

- **Workpackage 2:** Accelerate the implementation of the competence approach to realign STEM curricula to professional needs;
- **Workpackage 3:** Initiate and / or strengthen the management and administration of STEM Learning Labs & Centers at Asian partners;
- **Workpackage 4 (piloted by IMTA):** Propose the implementation of a continuous improvement approach for competence-oriented training programs and Industry collaboration in partner STEM programmes.
  - *Euro-Asia Collaboration for Enhancing STEM Education. A. Berglund, V. Dagiene, M.*


Partners:
- Uppsala Universitet (EU), leader of WP on Competence integration reference
- IMT Atlantique (EU), leader of WP on Industry collaboration & Governance references
- Vilnius University (EU), leader of WP on STEM centers reference
- Ho Chi Minh City University of Technology & Education, (ASEAN) Vietnam
- Hue University, (ASEAN) Vietnam
- Hung Yen University of Technology & Education, (ASEAN) Vietnam
- Del Institute of Technology, (ASEAN) Indonésie
- Udayana University, (ASEAN) Indonésie
- Institut Teknologi Bandung, (ASEAN) Indonésie
- Universitas Gadjah Mada, (ASEAN) Indonésie
- Chiang Mai University, (ASEAN) Thailand
- Mahidol University, (ASEAN) Thailand
- Prince of Songkla University, (ASEAN) Thailand
Contact: Dr. Siegfried Rouvrais, EASTEM workpackage 4, Dpt INFO, Brest, http://srouvrais.free.fr/

Project Web site

Source URL: https://www.imt-atlantique.fr/international/projects/eastem