



EASTEM
EURO-ASIA COLLABORATION FOR ENHANCING STEM EDUCATION

STEM CENTRE COMMON MODEL

Description of this document:

This document contains a STEM Centre Common Model. Each University takes this model as inspiration, and shall create and implement its own STEM Centre, or enhance an existing unit to a STEM Center to fit to this model.

Therefore, a „STEM Centre“ of a university could be a new unit, or an existing unit enhanced by the features of this common model.

Documen summary

This document describes main characteristics of the Centre: Vision, Mision, Functions, Target groups, and Milestones.

Version and Release History

Document version v0 : first draft

Release: 3 October 2019, Vilnius Meeting

Documen version : v1.0 – this document

Release : 14 October 2019

Revision :

1. Title of document („model“ instead of Framework)
2. Vision statement; Mission (as explicit statement separated from Vision); Functions (instead of Activities);

1 Definition

A STEM center is a **functional unit of the university** where a group of people working together to **improve education, research and community services** through **multidisciplinary activities**.

TO BE DEFINED : Each STEM Centre should defines : rationale, strategies, and 'internal' stakeholders.

2 Vision

- To become a **hub & platform** for improving education, research and linkage to industry in an integrated environment of Science, Engineering, Technology, Art, and Mathematics.
- To be a vehicle to the employability of graduates.

3 Mission :

- To promote **Studen Centered Learning** STEM education.
- To stimulate **pedagogical innovation** in STEM education.
- To train **future mentors of STEM education** (faculty members, K-12 teachers)
- To foster **inter and cross disciplinary cooperation** within the university, with industry, **STEM regional partners and K-12 schools**.

4 Functions

1. Education and Training
 - a. Training for faculty members
 - b. Training for K-12 teachers
2. Research
 - a. Interdisciplinary research
 - b. Pedagogical research related to STEM
3. Community services
 - a. STEM based Projects for the society
4. Promotion
 - a. Promotion of STEM education
 - b. Promotion of Student Centered Learning
5. Networking
 - a. University - Industry
 - b. University - Government
 - c. University – K-12

Note : each function has activities. Universities could define other activities within the “common” function.

5 Target Group

- K-12 teachers and school
- Vocational School teachers
- Higher Education Faculty members
- Industrial partners
- Government partners
- Parents
- University leaders

6 Milestones

- 2020 : Establishment (training, etc...)
- 2021 : Start Running activities
- 2022 : Running activities; Planning sustainability
- ...
- 20XX : sustain as a team [defined by each university]