



Coordinator



Vilnius University

# Future Teachers' Education: Computational Thinking and STEAM

Objectives of the project:

- to improve pedagogical skills and competencies of future teachers, that are related to the teaching and training of various aspects of CT;
- to develop a deeper understanding of future teachers in CT.

The project focuses on curriculum development activities for the education and training of future teachers who are involved in STEAM education and in particular those who concerned with CT aspects and appropriate curriculum development, also future teachers of preschool

institutions, primary schools, lower and upper secondary schools of various subjects.

CT is considered as an integrative skill within the developed STEAM model. The primary role of computational models in modern scientific research and, therefore, in research-oriented education is emphasized.

The project methodology is based on the ongoing European reform of approaches to STEAM education and the needs and importance of the educational aspects related to CT.

Partners



Radboud Universiteit Nijmegen



# TeaEdu4CT

General Introduction of CT:  
a basic module suitable for all teachers

## Module 2

Framework for the support of the modules:  
CT&STEM for future teacher education

## Module 1

Technological, pedagogical and  
instructional design aspects  
of teaching CT for STEAM

## Module 10

## Module 9

Using Constructivism, and Project and Challenge Driven  
Pedagogy for learning CT

## Module 8

Educational environments for CT:  
design and aspects of integration

## Module 3

CT for pre-school (kindergarten) prospective teachers:  
specific features, approaches and practical solutions

CT for primary education prospective teachers:  
specific features, approaches and practical solutions

## Module 4

## Module 5

CT for STEM prospective teachers:  
specific features, approaches  
and practical solutions

## Module 6

CT for informatics (computing) prospective teachers:  
specific features, approaches and practical solutions

## Module 7

CT for languages, arts and humanities prospective teachers:  
specific features, approaches and practical solutions

The project website:

<https://www.fsf.vu.it/ct4teachers>