

O10

Technological, pedagogical and instructional design aspects of teaching CT for STEM teachers/trainers/researchers

When future teachers have developed their Computational Thinking competence, they also need to know how to apply it in everyday teaching by designing relevant lesson plans, learning tasks, learning resources and assessment.

This module focuses on practical aspects of instructional design guidelines and digital tools that can help teachers to integrate Computational Thinking into everyday learning and teaching activities in any subject area. The module is based on agile instructional design framework SAM and task-centered instructional strategy. A set of free digital authoring tools will be introduced and put into practice during the practical and collaborative instructional design activities that will take place during the module.

This module aims at development of practical instructional design skills of future teachers to prepare them for designing relevant learning activities, resources and assessments that support the development of Computational Thinking competence among students.