

EP 7M01525– "STEM Education" in the direction "Training of teachers in natural sciences". In the 2020-2021 academic year, admission to the study will be carried out.

2020 ADMISSION **Typical period of study:** 2 years **Qualification level:** 7 NQF, 7 EQF

The educational program is aimed at providing high-quality education due to the large volume of professional disciplines.

Awarded degree: Master of Pedagogical Sciences in the educational program «7M01525–STEM education»

Language: English – 100%

Amount of modules to be studied: 14 Amount of subjects: UC-7; EC-8 Theoretical classes: 68 credits SRWG (Scientific-research work of graduate students): 24 credits Research practice:12 credits Teachinginternship: 4 credits Final assessment: 12 credits Total: 120 credits (Total amount in hours: 3600)

The name of courses that form the results of training (units of competences):

1 COURSE

- Higher school pedagogy 4 credits;
- Management psychology 4 credits;

Choose one module:

- Introduction to STEM 5 credits;
- STEAM-education as a universal teaching tool -5 credits;
- STEM Education in Computer Sciences -5 credits;

Choose one module:

- STEM Learning Policy -5 credits;
- STEAM education -5 credits;
- Science and STEM-5 credits;
- Scientific-research work of graduate students-7 credits;
- Foreign language (Professional) 4 credits;
- History and Philosophy of Science 4 credits;
- Programming microrobots -5 credits;
- Programming robots on the platform Mindstorms-5 credits;

Choose one module:

- Methods of teaching Computer Science using STEM-5 credits;
- Maintenance and support of STEM projects-5 credits;

Choose one module:

- Methods of teaching natural science subjects using STEM -5 credits;
- Management and support of STEM projects for science disciplines -5 credits;

The European Commission's support for the production of this document does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained there in.

Scientific-research work of graduate students-7 credits;

60 CREDITS

2 COURSE

- Cloud technologies-5 credits;

Choose one module:

- Digitalization of education -5 credits;
- Big Data-5 credits;
- The Internet of Things and Intelligent Systems-7 credits;

Choose one module:

- Data analysis -5 credits;
- Parallel Computing -5 credits;
- Academic writing and research integrity- 7credits;
- Teachinginternship 4 credits;
- Scientific-research work of graduate students-4 credits;
- Research practice 12 credits;
- Scientific-research work of graduate students-6 credits;
- Accomplishment and defense of Master's degree thesis 12 credits

60 CREDITS

Total 120 CREDITS