

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**

**Teaching internship: 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;

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**Choose one module:**

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

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**Choose one module:**

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

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**Choose one module:**

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

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**Choose one module:**

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

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- Scientific-research work of graduate students-7 credits;
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60 CREDITS

**2 COURSE**

- Cloud technologies-5 credits;
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**Choose one module:**

- Digitalization of education -5 credits;
  - Big Data-5 credits;
  - The Internet of Things and Intelligent Systems-7 credits;
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**Choose one module:**

- Data analysis -5 credits;
  - Parallel Computing -5 credits;
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- Academic writing and research integrity- 7credits;
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- 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**