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NEW METHODS OF KNOWLEDGE MONITORING OF MASTERS IN INFORMATION SYSTEMS IN THE INTERNATIONAL PROJECT “MASTIS” OF ERASMUS + PROGRAM

Key words: knowledge monitoring, method, masters' training, information systems, MASTIS project, ERASMUS + program.

According to the conditions of Vinnytsia National Technical University (VNTU) participation in the European Union international project "MASTIS" of the program ERASMUS +, the training of masters in information systems should correspond to innovative methods of teaching and knowledge control [1]. To fulfill the obligations of VNTU to ensure the objectives of the "MASTIS" project, the Scientific Council of VNTU approved the relevant educational program aimed preparation of masters in the specialization "Information systems and Internet of things" from the 1st of September 2017 in framework of the specialty and the license 151 – Automation and computer-integrated technologies. The objective of this research is to substantiate a new methods for knowledge monitoring of students studying in the specialization "Information systems and Internet of things" in accordance with the requirements of "MASTIS" project. Important difference of the experimental program that promotes student mobility practically, is parallel teaching all courses in English and Ukrainian. Master students will receive all study materials in both languages, but they will choose language in exams, tests and other monitoring activities at will. Participating in the competition to obtain a master's degree by the program "Information Systems and the Internet of Things" in accordance with applicable requirements of "MASTIS" is open to all those with a bachelor's degree without limitation on specialty. By this time the European partners of the international project “MASTIS” conducted the following trainings on the innovative teaching methods developed and implemented by them:

- Paolo Spagnoletti and Silvia Menegazzi, LUISS – Innovation tools and platforms to create competencies, Digital tools for open, collaborative and adaptive learning: current trends in online education;
- Agnius Liutkevičius, Ramūnas Kubiliūnas, Gytis Cibulskis, KTU – Experiences from study programmes' self-evaluation; Information Technologies of Distance Education; Advanced Learning Technologies in Higher Education;
- Tero Päivärinta, Oskar Gedda, Peter Parnes, Ali Awad, LTU – Learning Diaries as a form of learning and examination; Virtual teaching environment; Demonstration / Participation in InfoSec Lab;
- Muhammed Geuad (WWU Münster), Tero Päivärinta (LTU) – Pedagogical basics and values (practice-based teaching vs. science-based teaching); Experiences with industry cooperation in teaching;
- Robert Leskovar, Andrej Skraba, Gregor Lenart, Borut Jereb (Maribor University) – Real-time e-lecture; System dynamics with practical examples; Teaching by design thinking; Gamification + case studies.

Most of the training methods considered assumes the use of the team style of the work of students and an assessment of the results of their training on the basis of the final result of the overall project team. The project method of monitoring students' knowledge characterizes: the possibility of independent decision-making by each participant; the need to coordinate his actions with the actions of other team members; the responsibility for a certain stage of work; the possibility of assessing the contribution of each participant to the overall result. At the last "MASTIS" meeting in Bled (Slovenia), authors of the program "Information Systems and the Internet of Things" together with authors of trainings answered the numerous questions and took part in discussions. In general the meeting passed interesting, in a relaxed atmosphere, and the new program aroused considerable interest at the European partners of "MASTIS" project. So, we recommend the project method for knowledge monitoring to students studying at VNTU in the specialty "Information Systems and Internet of Things" as being most in line with the experience of European partners of the “MASTIS” project in the preparation of masters in information systems field.

List of sources

1. Establishing Modern Master-level Studies in Information Systems / MASTIS. – Available: www.mastis.pro.