

ABSTRACT

Actuality Modern education can not cope with growing business needs for skilled workers. Given a set of requirements of stakeholders, which are estimated kopetentsiyi given professions IT sector, should decide to set dystsyplil that will meet CIM requirements. Such decisions are especially important today, as technology develops very quickly, so there are new competencies that IT professionals need to master the field. In this regard, the actual scientific task is to develop efficient software that will solve the problem of building complex educational trajectories, which will help increase the quality of education based on the requirements of stakeholders. Construction is the main educational trajectories of the important issues arising in education.

Modern courses are based intuitive method vrahuvuyuchi their compliance with the law of Ukraine "On Higher Education", based on the competence approach to meet the requirements to a specialist, proposed international project of the European Commission "Harmonization of educational structures in Europe» (Tuning Educational Structures in Europe, TUNING).

Relationship with academic programs, plans, themes. Master's thesis performed in accordance with the plan of the department of automated data processing systems and management faculty of Computer Science, National Technical University of Ukraine "Kyiv Polytechnic Institute named Igor Sikorsky" within the research theme "Information support interaction IT-education and IT-industry in Ukraine "(state registration 0117HU000917).

The goal is increasing the quality of education based on the requirements of stakeholders.

To achieve this goal should perform the following **tasks**:

- perform a review of the known results to build a set of educational disciplines;
- perform formalization of the problem of building a set of educational disciplines, taking into account the change in estimates submitted competence;
- develop a model definitions set of educational disciplines;

- develop a software implementation of the task of building a set of educational disciplines;
- develop a model to analyze the results of construction disciplines.

Object of research – the formation training plans of university students in IT.

Subject of research – modeling and information technology support individual educational trajectories. Construction of educational disciplines.

Research methods – clustering methods, classification methods, artificial neural network, elimination of gross errors.

Publications. Materials published in the abstracts of scientific conference of students, masters' Information and computer technology ICT-2017 "[1] and V International scientific and practical conference" Modern trends in science "[2].

EDUCATIONAL TRAJECTORIES, CLUSTERING METHODS,
CLASSIFICATION METHODS, ARTIFICIAL NEURAL NETWORK,
ELIMINATION OF GROSS ERRORS

