## ABSTRACT

**Relevance**. Construction of individual educational plans for students in higher education is one of the fundamental problems of education.

Especially it is critical in IT education. Today IT develops extremely rapidly and Technology studied the first courses a student may not be relevant at the time of graduation. Another important factor is to determine the specific area of student of where he plans to work after zakinchynnya universities. For example, we can consider two IT: e-Commerce and VR (Virtual Reality). Requirements for professionals of these branches are completely different. If a student wants to work in e-commerce it is unlikely to require knowledge of low-level programming languages. That is, we need to give the student a set of disciplines that are necessary to work in his chosen field of study and minimize the subjects that will not be wastes in the future and not fundamental. Also necessary is the ability to change the curriculum of the student. The change may be initiated stake holders, such as in the case vyneknennya need for additional technology knowledge or replace the original stack technology. Also, changing the curriculum may be initiated by the student desire to change the direction of development. That is, if a student after one year of studying a particular industry wants to change, then it will be able to build a new curriculum based on those dystsypnin to be offered a new hazuli and those which he has already mastered for the first year if they surf ' related to the new direction of development.

Relationship with academic programs, plans, themes. Work performed at the Department of automated processing systems of information and National Technical University of Ukraine "Kyiv Polytechnic Institute named Igor Sikorsky" within those "Partner interaction between IT education and IT Industry in Ukraine "( $N_{2}$  0117U000917).

**Goal.** The goal is to increase the quality of education based on the requirements of stakeholders and the personal wishes of the student.

To achieve the goal must perform the following tasks:

- perform review of known results in building curricula;

- perform the analysis of the formation of the university curriculum;
- to analyze the factors affecting the quality of professionals;
- familiar with the construction of the university curriculum based tree specialist training purposes;
- familiar with the construction of the university curriculum based on the connections between modules;
- make a mathematical formulation of the problem synthesis university curriculum;
- Develop software implementation task of building individual training plans that take into account changing student preferences;
- to analyze the results.

**Object of study** is the process of developing individual training plans.

**Subject of study** is method of constructing a directed priority disciplines graph, whereby subjects based on a set of student preferences and built individual curriculum.

**Research methods** – method of constructing a directed priority subjects graph.

The scientific novelty of the results is to create an algorithm that solves the disadvantages and saves the advantages of existing methods of constructing individual training plans.

**Publications.** Materials published in the Student Conference abstracts NTUU KPI them. Igor Sikorsky "Information and computer technology ICT - 2017" and International scientific conference "Theory and practice of modern science."

## CURRICULUM, DISCIPLINE, COMPETENCE, PRECEDENCE GRAPH