мікродисперсного наповнювача: модифікатор малеїновий ангідрид – 0,3…0,5 мас.ч., карбідний титано-алюмінієвий порошок – 0,5…1,0 мас.ч. на 100 мас.ч. епоксидного олігомеру ЕД-20. Введення до епоксидного зв'язувача таких інгредієнтів дозволяє підвищити показники ударної в'язкості композитів від $W = 7{,}4$ кДж/м^2 до $W = 15{,}8…16{,}8$ кДж/м^2. Отримані матеріали доцільно використовувати у вигляді захисних покриттів для підвищення експлуатаційних характеристик деталей устаткування і відновлення засобів транспорту.

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COMPETENCY-ORIENTED PARADIGM OF THE ORGANIZATION OF PROFESSIONAL TRAINING OF INFORMATION TECHNOLOGY SPECIALISTS

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Paradigm is the term of the American philosopher and methodologist Thomas Kuhn. The very concept of "paradigm" comes from the ancient Greek word "paradeigma" and means "example, sample". T. Kuhn borrowed this term from grammar, where a paradigm is a set of grammatical elements that form a single rule. According to T. Kuhn, a paradigm is a set of methods and techniques used by a particular scientific or philosophical community united by a common scientific or philosophical ideology, as opposed to other communities united by a different ideology and, accordingly, having their own paradigms. In modern pedagogy, the term "paradigm" is used as a conceptual model of education. There are many educational paradigms.

The competence-oriented paradigm assumes that the educational process will be aimed at the formation and development of the basic competences of the individual, which is an urgent task for a modern higher education.

The competence-based approach is an approach to education that is expressed in the formation of foreign language communicative competence, that is, the ability to carry out foreign language interpersonal and intercultural communication with native speakers, and involves real

practical knowledge of foreign languages [2, p. 107]. The implementation of the competence-based approach is one of the components of the improvement of the modern education system. The competence-based approach directs the educational process towards the formation of a number of individual competences that students must master while studying at higher educational institutions.

Professionally oriented training is important in the training of future specialists in information technology, as we are training a professional worker who will possess all the knowledge, skills and abilities characteristic of such specialization and will be able to use them in his future work.

Professional competence is a basic concept in professionally oriented education. In our opinion, the most complete and accurate definition of the term "professional competence" was given by scientist O. Yu. Yefremov. According to his definition, "professional competence" is a personality characteristic that determines the ability and readiness to solve professional problems and tasks that arise in real situations of professional activity, using knowledge, skills, abilities, professional and life experience, values and culture. Its content includes a set of key, basic and special competences. Key competences are necessary for any professional activity related to the success of an individual in the modern world. They are manifested, first of all, in the ability to solve professional tasks based on the use of information; communication, including using a foreign language; social and legal foundations of individual behavior in public society. Basic competences reflect the specifics of a certain professional activity (management, engineering, pedagogical, medical, etc.). Special competences reflect the peculiarities of a specific subject or extra-subject area of professional activity. They can be considered as the implementation of key and basic competences in a specific area of professional activity.

Professional competence includes knowledge and erudition, which allow a person to make a qualified judgment about issues in the field of professional activity, to be knowledgeable in a certain area, as well as personality qualities that enable a person to act responsibly and independently. Professional competence is manifested in the successful solution of a certain class of professional tasks, which is the basis of various types of competence (social-perceptive, communicative, organizational, etc.). Interprofessional competence is the possession of knowledge and personal qualities (ability to plan, motivation to achieve, flexible professional thinking, ability to design professional activities, ability to professional training), necessary for the performance of a number of professions.

The process of formation of professional competence begins with the system of professional education, which is provided by higher educational institutions, and continues to develop directly at the specialist's workplace.

According to the standard of higher education in the specialty 122 “Computer Science” of the field of knowledge 12 “Information Technology” for the first (bachelor’s) level of higher education, the professional competence of an information technology specialist consists of the following competences: integral, general and special (professional, subject). Integral competence is the ability to solve complex specialized tasks and practical problems in the field of computer science or in the learning process, which involves the use of theories and methods of information technology and is characterized by the complexity and uncertainty of conditions. General competences include the ability to think abstractly, analyze and synthesize; the ability to apply knowledge in practical situations; knowledge and understanding of the subject area and understanding of professional activity; the ability to communicate in the state language both orally and in writing; the ability to communicate in a foreign language; the ability to learn and acquire modern knowledge; the ability to search, process and analyze information from different sources; the ability to generate new ideas (creativity); the ability to work in a team; the ability to be critical and self-critical; the ability to make well-grounded decisions; the ability to evaluate and ensure the quality of performed works; the ability to act on the basis of ethical considerations; the ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine; the ability to preserve and increase moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technique and technologies, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle. Special (professional, subject) competences include a number of general professional and specialized professional knowledge and skills [3].

In addition, every professionally competent specialist must possess eight key (basic) competences, regardless of the field in which he or she works. According to the European Reference Framework, a specialist must possess the following key competences for lifelong learning [1]:

1) Communication in the mother tongue is the ability to express and interpret concepts, thoughts, feelings, facts and opinions in both oral and

written form (listening, speaking, reading and writing), and to interact linguistically in an appropriate and creative way in a full range of societal and cultural contexts; in education and training, work, home and leisure.

2) Communication in foreign languages broadly shares the main skill dimensions of communication in the mother tongue. Communication in foreign languages also calls for skills such as mediation and intercultural understanding. An individual's level of proficiency will vary between the four dimensions (listening, speaking, reading and writing) and between the different languages, and according to that individual's social and cultural background, environment, needs and/or interests.

3) Mathematical competence and basic competences in science and technology. Mathematical competence is the ability to develop and apply mathematical thinking in order to solve a range of problems in everyday situations. Competence in science refers to the ability and willingness to use the body of knowledge and methodology employed to explain the natural world, in order to identify questions and to draw evidence-based conclusions.

4) Digital competence involves the confident and critical use of Information Society Technology for work, leisure and communication. It is underpinned by basic skills in information and communication technologies: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet.

5) Learning to learn is the ability to pursue and persist in learning, to organize one's own learning, including through effective management of time and information, both individually and in groups.

6) Social and civic competences include personal, interpersonal and intercultural competence and cover all forms of behavior that equip individuals to participate in an effective and constructive way in social and working life, and particularly in increasingly diverse societies, and to resolve conflict where necessary.

7) Sense of initiative and entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives.

8) Cultural awareness and expression include appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media, including music, performing arts, literature, and the visual arts.

The professional competence of information technology specialists consists of important competences for this profession, which are formed during training and which will contribute to the further successful professional activity of students.

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