KNUTD
Kyiv National University of Technologies and Design

COMPUTER SCIENCE

Educational programmes → Master's Degree Programs

Faculty of Mechatronics and Computer Technologies

Specialty 122 **«Computer Science»**

Educational program **«Computer Science»**

Educational degree «master»

DEPARTMENT OF COMPUTER SCIENCE

Address: 2, Nemyrovych-Danchenko St, Kyiv, 01011, Educational building 4, Room 4-1108

For more information: +38044-256-84-14

e-mail: kitp@knutd.edu.ua

Level of education:

The second (master's) level of higher education.

Training is conducted by state order and at the expense of individuals or legal entities.

To become the 1st-year student of a master's degree program of full-time or part-time study forms, entrants take an external examination in a foreign language and a professional exam in Computer Science.

Upon successful completion of their studies, graduates receive a diploma of higher education of the established state standard in the specialty 122 Computer Science, qualification "Master of Computer Science". The course length is 1 year and 4 months (full-time or part-time study forms).

Students of the Department of Computer Science and Technology, based on the results of the master's degree have the opportunity to continue their postgraduate studies in the educational program "Computer Science" and receive a doctor of philosophy in the specialty 122 Computer Peripherals of Science in the relevant program of Doctor of Philosophy.

Admission to a master's degree program is carried out in accordance with *«Rules of Admission to Kyiv National University of Technologies and Design»*.

Phones and contacts of the Admissions Committee:

Address: 2, Nemyrovych-Danchenko St, Kyiv, 01011, Educational building 4, 2nd floor.

Phone for inquiries: +38044-256-29-75

e-mail: pk@knutd.edu.ua

Students majoring in Computer Science receive a master's degree in computer science and can be employed in organizations and institutions involved in software development and maintenance, as well as in those organizations that generally use computer technology. Emphasis is placed on the formation and development of professional competencies in the field of information technology; study of theoretical and methodological provisions, organizational and practical tools in the field of computer graphics, systems analysis, modeling of information systems, database management, design of complex objects and systems, IT project management, computer information protection, computer architecture, and computer networks.

The educational programs develop individual perception and creative thinking of students, and highly qualified teachers of the Department with practical experience provide an educational and professional program by qualifications corresponding to the profile and direction of the courses; have the necessary experience in pedagogical work and experience in practical work. In the process of organizing training, professionals with experience in research/management/innovation/creative work and/or work in the specialty are involved.

After completing their studies, students gain such skills:

- Analyze intermediate results of development or research in order to determine their compliance with the requirements; develop tests and use verification tools to verify the quality of decisions made.
- Analyze the subject area of development or research, using the available documentation, consultations on stakeholders; develop documentation, record both functional and non-functional requirements for development or research.

- Model the object of development or research in terms of functional components (subsystems) in such a way as to facilitate and optimize the work on the project; use available technologies and methods of dynamic and static analysis of programs to ensure the quality of the result.
- Identify, evaluate and compare different technologies (methods, languages, algorithms, work schedules) in order to set priorities according to different performance and quality criteria that are defined by the task.
- Know the principles, techniques, and tools of development or research used in the subject area of development or research; prototype software to ensure that it meets development requirements; perform its testing and static analysis to ensure compliance with the task of development or research.
- Develop and provide measures for monitoring, optimization, maintenance, fault detection and the like.
- Demonstrate the ability to participate in teamwork, and use collaborative development or research tools.
- Use documentation and reference materials, textbooks, or software development manuals; be able to write technical reports and present the results of their work in both state and foreign languages.

Students are provided with modern educational and methodical literature and information about the latest technologies in computer science.

The place of professional activities of the Master of Computer Technologies is:

enterprises, organizations, and institutions operating in the field of light industry and other areas. The graduate is suitable for employment in enterprises, organizations, and institutions engaged in the development and maintenance of software and in those that generally use computer technology. Positions: computer systems analyst, computer systems architect, programmer, tester, technical team leader, software development manager.

All students of the Faculty of Mechatronics and Computer Technology, living in cities and towns outside of Kyiv and the Kyiv region, are provided with accommodation in a hostel located near the educational buildings.

Teachers of the Department and students during the educational process and defense of diplomas