

## BIM TECHNOLOGIES IN EDUCATION

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### ABSTRACT

*By implementing the national digital school project, the state will have a chance to catch up with the advanced countries in terms of the quality of education and human capital as the main engine of socio-economic development. The ability to work with information is one of the priority areas of modern society. Information education contributes to the formation of the student's ability to think critically starting from school: analysis and assessment of the information received, knowledge and comprehension. The project provides for the creation on the territory of a modern specialized IT school of a sports zone with a football and basketball field, tennis court, gymnastics grounds, as well as educational buildings for additional optional classes.*

**KEYWORDS:** *Information Technology, Education System, School Education Digital School.*

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### INTRODUCTION

In the modern world, the importance of information technology is undeniable. In recent years, all sectors of society have been using computer programs. Technologies make it possible to translate into reality any wishes, apply new directions in any industry, including architecture, design, landscape design.

Information technologies are of great importance in the life of society, as they are increasingly used in industry and management, as well as contribute to the development of the socio-cultural sphere.

A special role is assigned to the education system in the informatization of the learning process itself and the acquisition of the necessary skills in the preparation and training of qualified graduates of schools and institutes at different stages of the educational process. The ability to work with information is one of the priority areas of modern society. Information education

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contributes to the formation of the student's ability to think critically starting from school: analysis and assessment of the information received, knowledge and comprehension. The ability to navigate a huge flow of information helps a prepared person throughout his life. These skills are valuable for a developing society. Therefore, the informatization of education is one of the priority directions of informatization of society.

School education is also of great importance because the involvement of students in the learning process of informatization allows you to effectively master new technologies and software products for modeling, design and design, carry out individual and group projects, prepare for technical Olympiads and competitions, and easily integrate into innovative approaches. to learning. The informatization process actualizes the development of approaches to using the capabilities of IT (information technology) for the development of the personality of schoolchildren and increases the level of activity and reactivity of students.

Today's schoolchildren in the future will have to make scientific discoveries, create works of art, achieve sports victories, transform the world, make it better, cleaner and kinder, strengthening the glory of their native land.

One of the serious problems of the modern school is the growing lag behind the digitalization requirements of the main spheres of public life. Schools do not use effective digital tools that are already actively used by children and adults in many other areas of activity. Schools do not use the possibilities of digital technologies for individual learning (choice of direction, variety of educational materials, assistance with educational difficulties), increasing the motivation of schoolchildren (interactive teaching materials, educational games), facilitating the routine activities of teachers. New digital technologies make it possible to solve key educational problems that cannot be solved or poorly solved by a modern school based on traditional technologies.

In his address to the Oliy Majlis on January 24, 2020, the President of the Republic of Uzbekistan Shavkat Mirziyoyev paid special attention to digitalization issues in all areas, including education. In order to train highly qualified specialists in the field of information technology, the project "1 million programmers" was launched jointly with foreign partners. The President noted that modern information technologies must be introduced at all stages of the education system.

And in the presidential decree, adopted on 06.10.2020, No. PP-4851 "On measures to further improve the education system in the field of information technology, a phased construction and the main directions of activity in schools: creation of specialized schools on the basis of existing schools in the republic with in-depth study of computer science and information technologies. [1]

In this regard, it was determined:

- Creation of conditions for the creative development of schoolchildren, the organization of in-depth training of students in information technology and the basics of computer programming;
- Introduction of modern teaching methods and assessment of students' knowledge using digital means and distance learning;
- ensuring the adaptation of curricula to modern requirements for the preparation of graduates for admission to specialized higher educational institutions;

- Development of cooperation with educational and research institutions, government agencies and industry enterprises.

The resolution also approved:

The list of basic specialized schools to be created in 2020, as well as higher educational institutions, scientific and innovation centers, industrial enterprises assigned to them;

Phased construction schedule for 2021–2023. in the republic of specialized schools.

The document was published in the National Legislation Database and entered into force on October 7, 2020.

The relevance of the reconstruction and construction of specialized IT schools in the country determined the choice of the topic of the diploma project by M. Bositkhanova, bachelor of the Department of Interior and Landscape Design of the Tashkent Institute of Architecture and Civil Engineering, and the protection in 2021 of the project of the IT school in the city of Tashkent

The project provides for the construction of a school in the Yunusabad district of Tashkent city at 4 Moikurgon Street, where residential buildings, a preschool educational institution and a cinema are located.

The architecture of the school is designed as an abstract one with an internal developmental space that meets the national traditions of construction. Everything in this area is also adapted for extracurricular learning and for recreation.



Explication

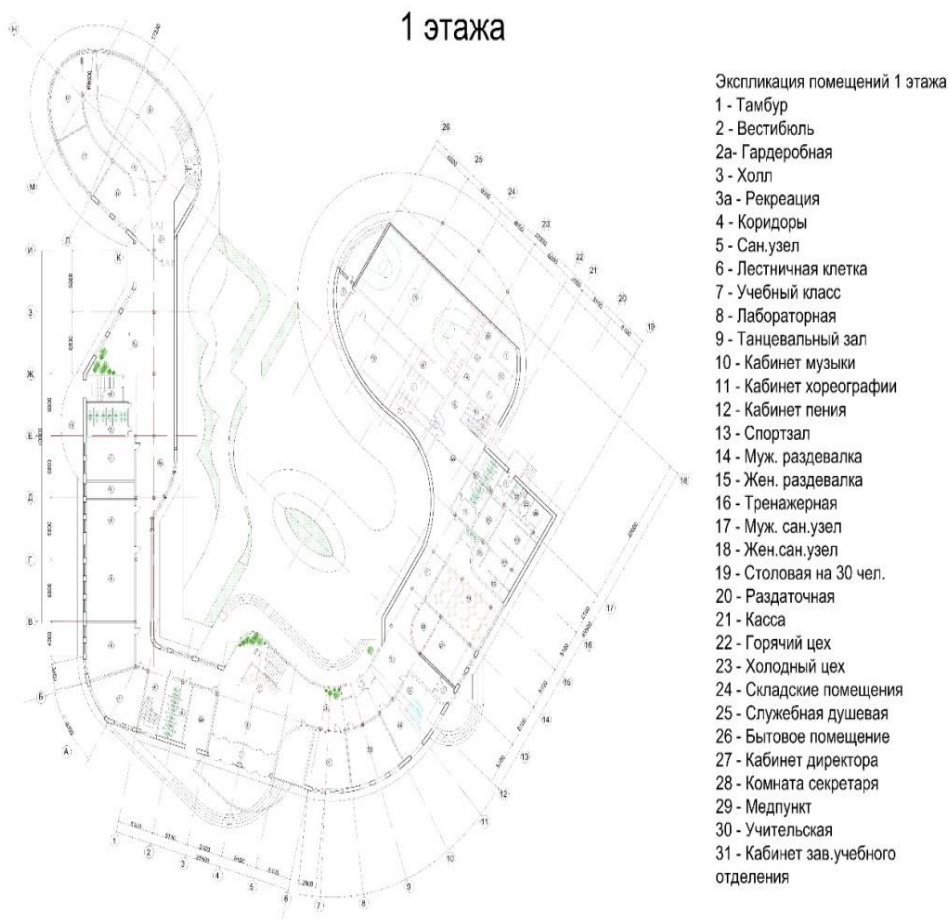
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|------------------|------------------|
| 1- School        | 6- Assembly hall |
| 2- Entrance zone | 7 - Amphitheater |

- 3- Football field      8 - Buffet
- 4 - Basketball field    9 - Library
- 5 - Tennis court      10 - Educational buildings for additional classes

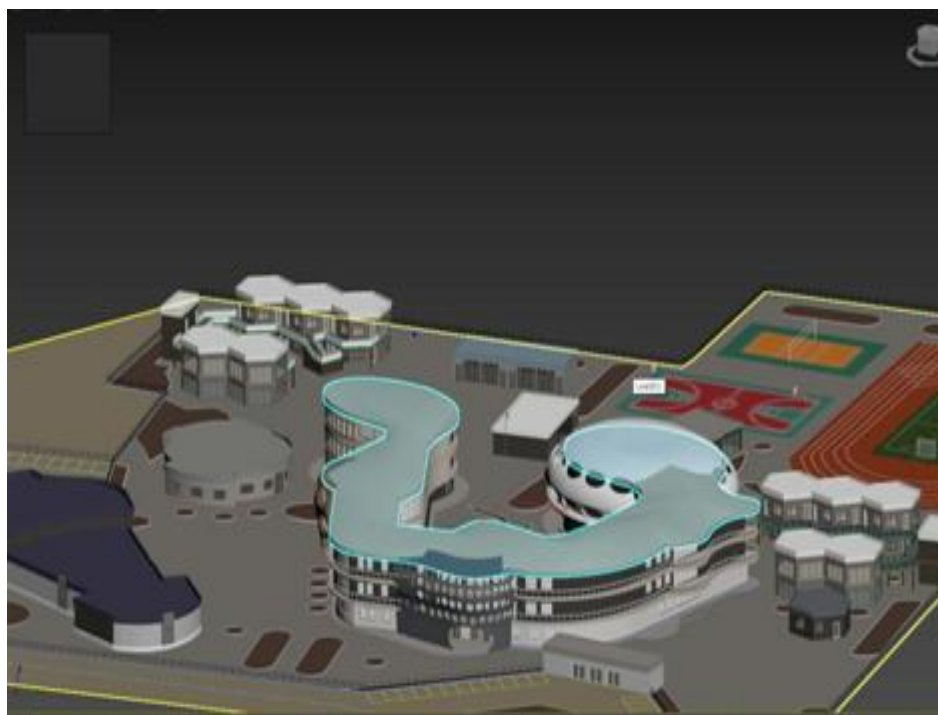
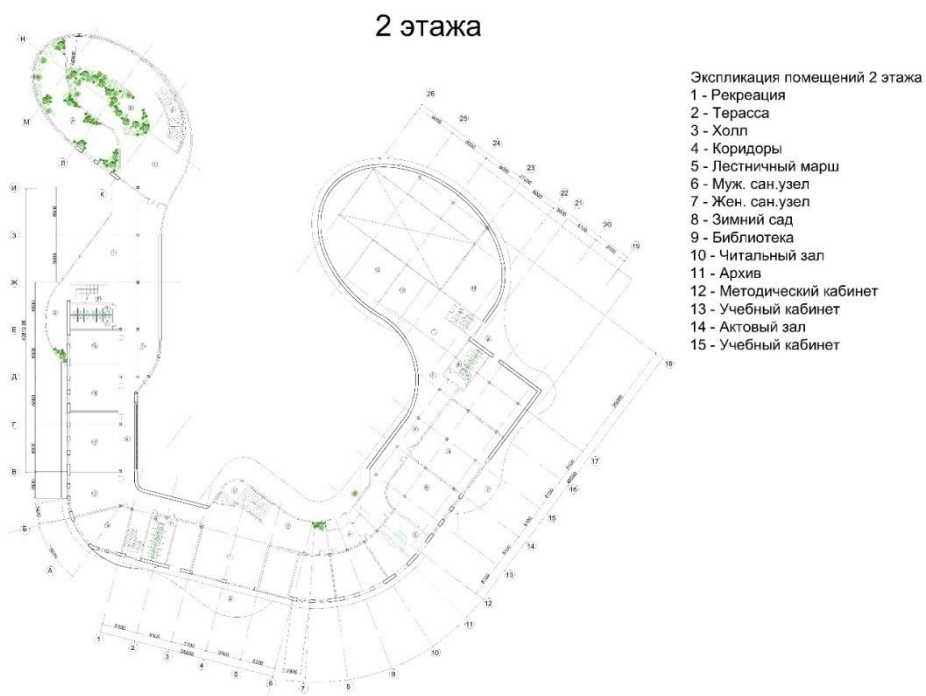
The school building is designed for 1100 students and has 4 floors. On the ground floor of the building there are administrative premises (office of the director, accountant, teacher's office), a dining room, and several classrooms. On the second floor there is a large library with a reading room, an assembly hall and a winter garden, the third and fourth floors are completely reserved for specialized training classes and computer science rooms.

The project provides for the creation on the territory of a modern specialized IT school of a sports zone with a football and basketball field, tennis court, gymnastics grounds, as well as educational buildings for additional optional classes. Comprehensive education and physical training are necessary for schoolchildren at the present time, since in the future they will, having physical activity and a broad outlook, make discoveries in various fields, create unique works of art, transforming the world, making it better and better.

Plan



Plan





The construction of a specialized IT school sets a new standard for educational institutions in the country. By implementing the national digital school project, the state will have a chance to catch up with the advanced countries in terms of the quality of education and human capital as the main engine of socio-economic development.

In the 21st century, new requirements are imposed on school graduates. So, for example, according to the forecast of analysts in Moscow by 2035, the share of highly qualified jobs will increase from 30 to 50%, the number of people working with information technology skills will be required for 45% of new professions. [2]

To ensure the re-equipment of production with new equipment and highly qualified personnel, a program has been developed in Uzbekistan to improve the quality of continuous education in the field of information technology in 2020–2023. and a plan for the phased creation in 2021–2023. in the republic of specialized schools. Starting from the 2020/2021 academic year, the compulsory inclusion of the subject "Informatics and Information Technologies" in specialized and other general education schools is envisaged. This need arose in connection with the request of a developing society, the needs of the economy. The school of the future must prepare students for life and work in the rapidly changing world of the 21st century.

## **LITERATURE:**

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