

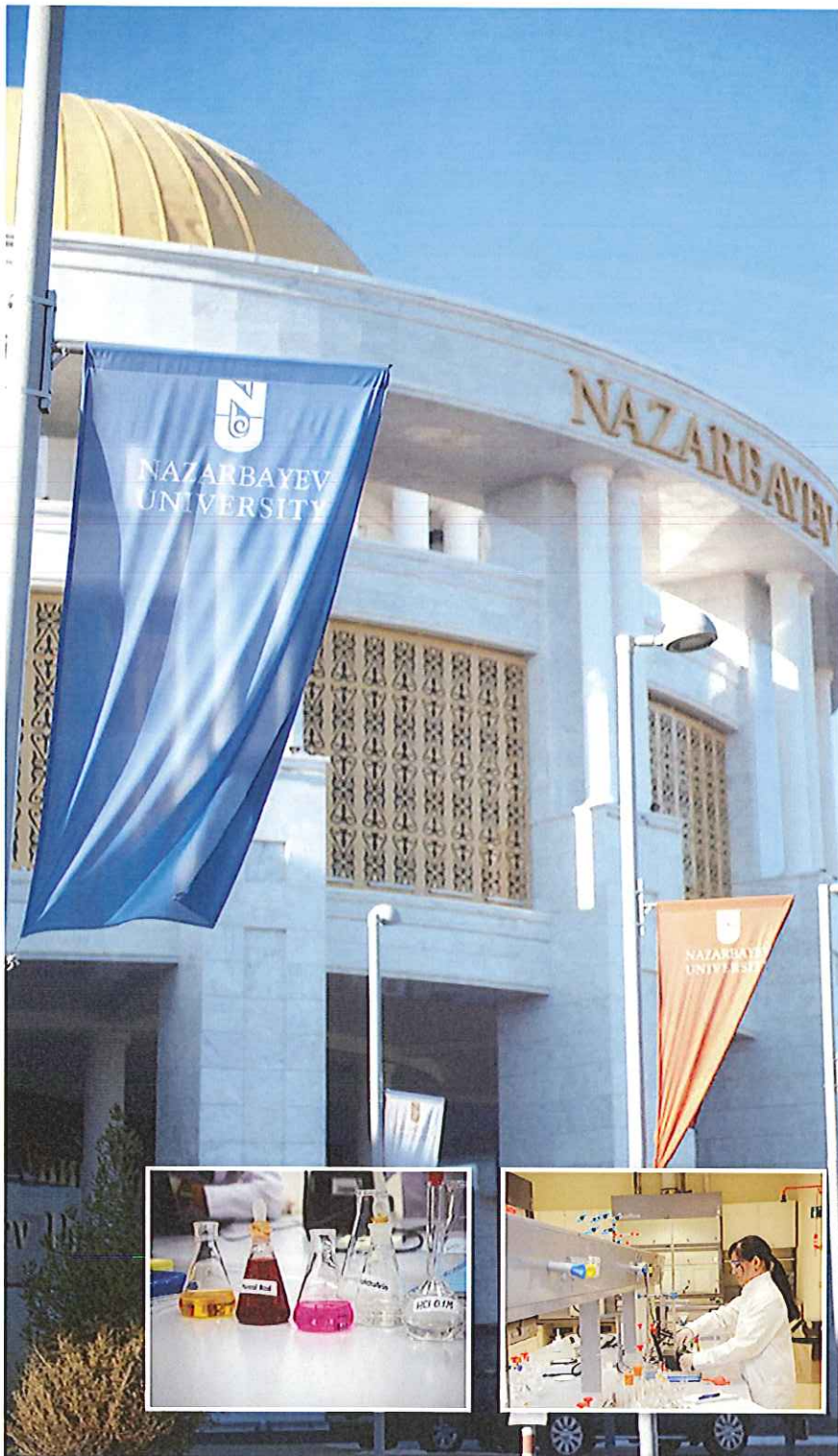


NAZARBAYEV
UNIVERSITY

- opportunity...
- support...
- community...
- location...
- flexibility...
- lifestyle...
- amenities...
- EXPO 2017...

SCIENCE PARK





a golden opportunity

Welcome to Nazarbayev University Science Park

Nazarbayev University is a modern and rapidly developing international university located in the heart of Eurasia – Astana, the capital of the Republic of Kazakhstan. This is the first university in Kazakhstan that is committed to working according to international academic standards. Academic and research programs are designed in partnership with leading universities ranked among the top higher education institutions in the world.

In accordance with the Order of the President of Kazakhstan on the creation of the intellectual and innovative cluster, the implementation of Nazarbayev University Science park project as one of the important elements of the cluster has been started.

The objective of Science Park is to attract and place established high technology businesses, R&D divisions, service providers and investors from elsewhere in the immediate vicinity of the university. The main idea is to create synergy and close links with university's research centers and academic schools providing best opportunities for your business success.

future starts today



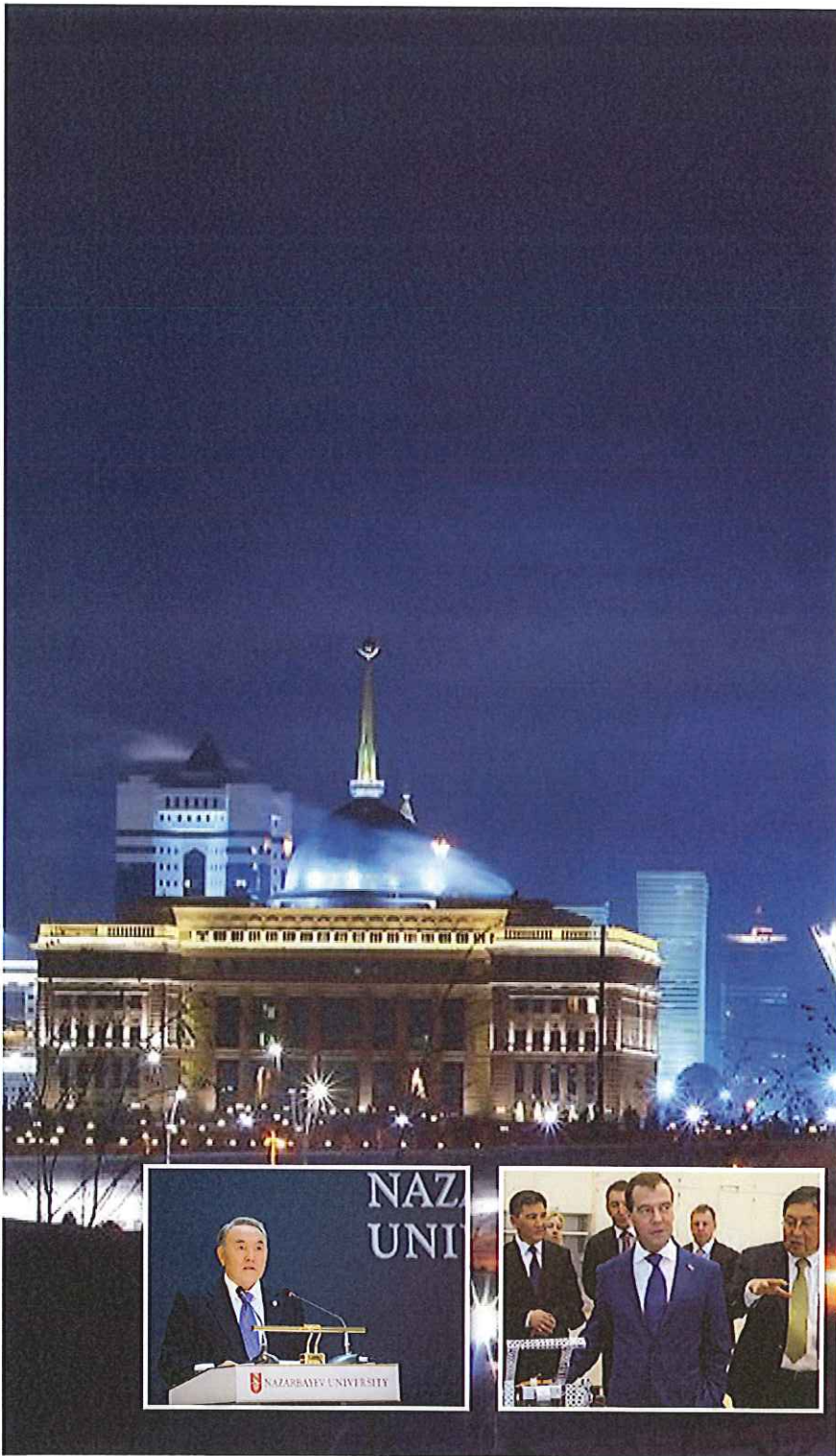
high political support...

Nazarbayev University is the President's project

The President and government actively support the university and the idea of Science Park creation and development. The President and government officials annually visit and supervise development of the university. Nazarbayev University has become the place where high rank political events take place. Leaders of the states and international organizations often visit university to face students and professors.



future starts today





theparkcommunity...

Nazarbayev University Science Park will be a great location for companies, networks and business opportunities. The innovative people and ideas make this an exciting place to be

NU Science Park will be evolved into a dynamic and vibrant community in which companies of all sizes enjoy a high quality and attractive working environment.

Over hundred thousand square meter of business and laboratory accommodation will be built on the Park territory.

The place where you can find

- bright people
- outstanding foreign professors
- talented researchers
- gifted students
- research excellence

future starts today



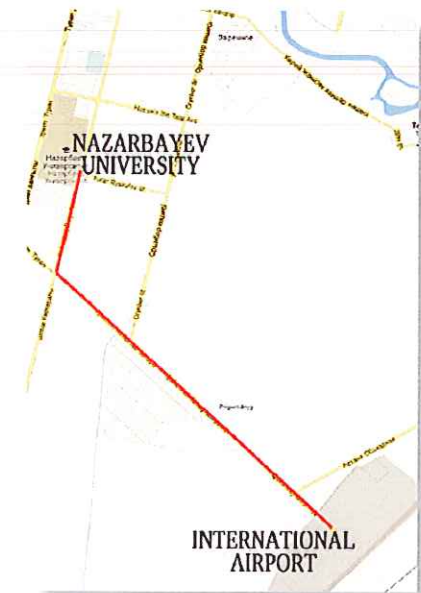


therightlocation...

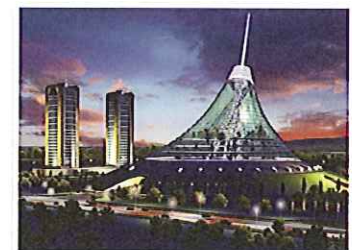
Nazarbayev University Science Park to be a unique and exciting location, designed for science, technology and business occupiers

Astana is the heart of Eurasia, crossroad of Europe and Asia, cultures and civilizations. NU Science Park is located in the newly built part of Astana – political and business center of Kazakhstan.

NU Science Park is thriving as a distinctive contemporary location for companies of all sizes. Located just 8 km from Astana international airport, the Park has excellent access road, offering easy link to Astana city, its leisure-entertainment and other services.



future starts today

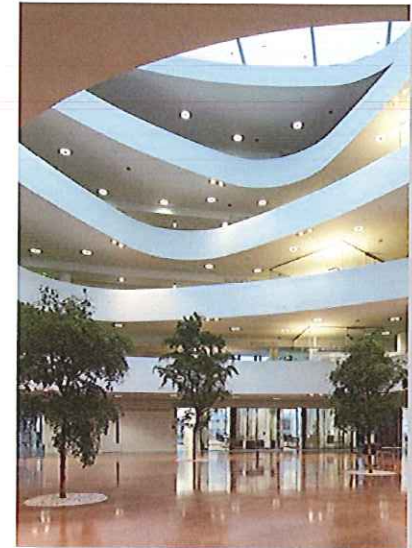




theparkflexibility...

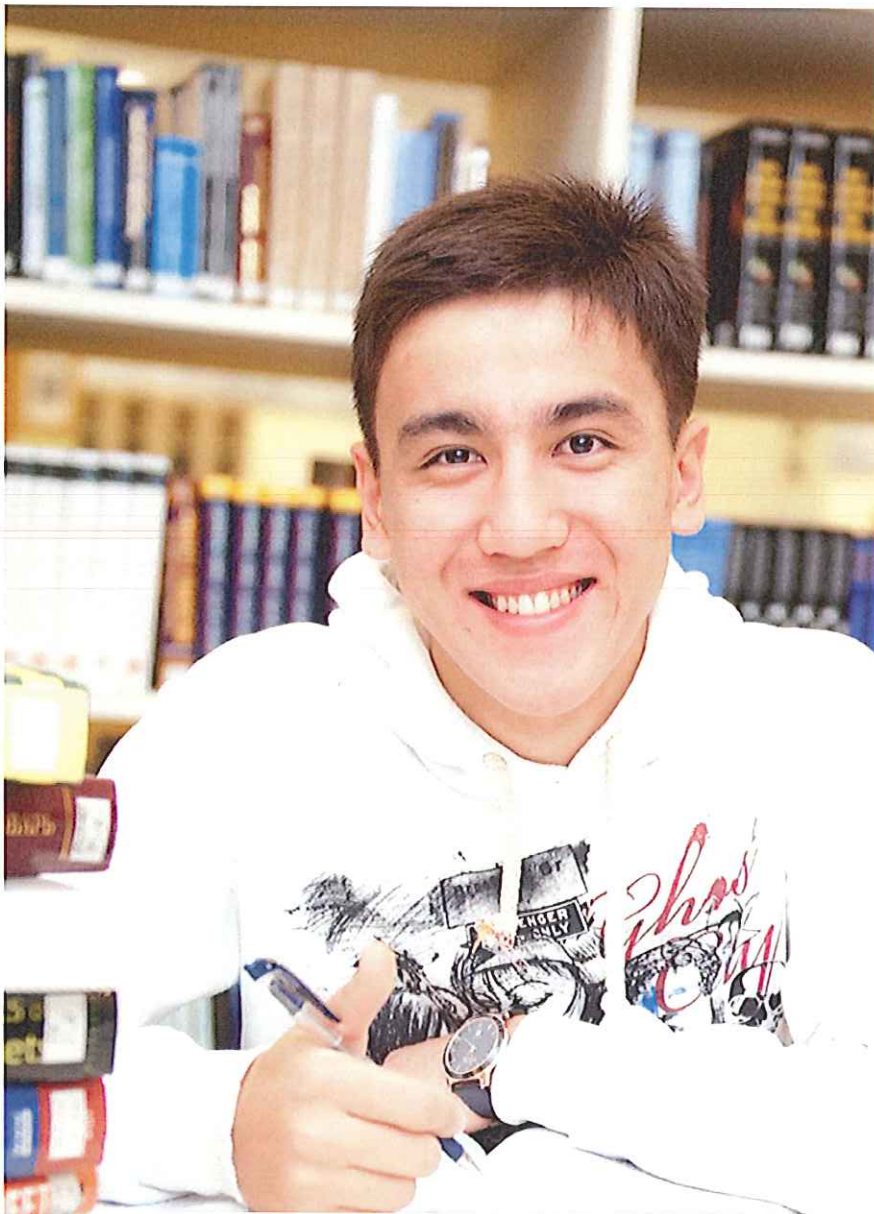
Whether you are a new company or established multinational, this is the place for you

Our flexible approach to building and leasing means we are developing and adapting to meet our tenants' ever changing needs. Through innovative and challenging design, our buildings will offer affordable flexibility without compromising on quality, style or performance. The carefully planned environment and long term development opportunities will ensure there is space to grow and room to breathe.



future starts today





an enviable lifestyle...

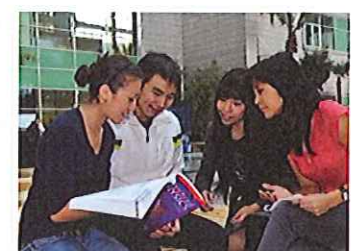
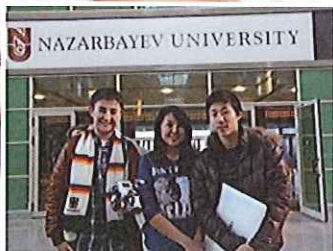
A perfect fusion of city and suburban lifestyles attracting the best staff for your business

The NU Science Park will have a vibrant, people centered environment, creating an attractive location for companies and their staff. Located in the heart of Kazakhstan, the capital city Astana and its surroundings offer an extremely high quality of life. Astana offers something for everyone, whether its sports, the arts and culture scene, or its retail and leisure facilities.

Nazarbayev University is a unique English speaking place, where a variety of cultures, people from all over the world come together to create a bright future.



future starts today





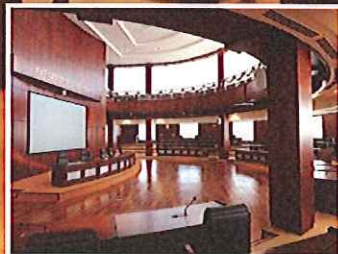
alltheamenities...

Everything you need to make working on
Nazarbayev University Science Park a pleasure

The buildings to be set within a park-land environment. A good level of car parking is provided as well as cycle ways and walkways that weave across the site to link the Park with the local road and public transport network. A wide range of meeting rooms and conference facilities will be available, together with hospitality catering and a choice of places to eat and drink. For staff, high quality facilities will be on site, together with social activities and neighboring leisure services that make working at NU Science Park a rewarding experience.



future starts today





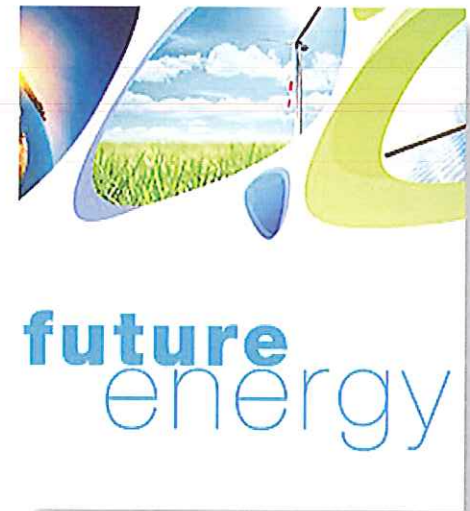
EXPO2017
ASTANA
KAZAKHSTAN

part of EXPO2017...

Nazarbayev University Science Park
as a part of EXPO2017

With the special importance of energy and environmental problems in mind, Kazakhstan proposed EXPO2017 theme: "Energy of the Future". It will highlight the wide problems related to energy conservation and promote alternative energy sources such as solar, wind, energy, marine resources, ocean and geothermal waters. Since Nazarbayev University is one of the key elements of EXPO, NU Science Park residents will benefit:

- new business opportunities
- promotion on international level
- networking and sharing ideas



future starts today





thecurrentstatus...

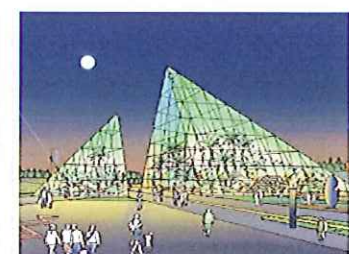
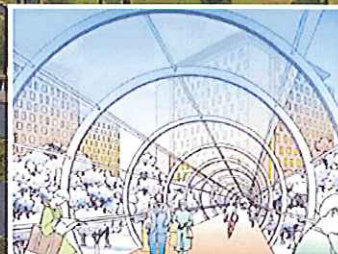
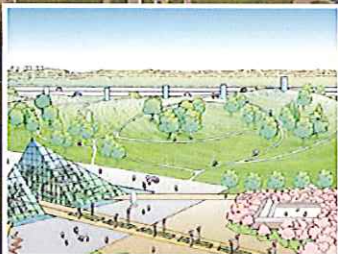
Make sure you reserved best place
for your business success

Nazarbayev University has received a site
of 50 hectares, located in a Turan Avenue,
beside the university campus, for design-
ing and construction of Science Park.
Currently master plan of Science Park is
under development.

You are welcome to NU Science Park,
where you will be at the cutting edge of
new technologies and innovation, con-
tributing to development of your busi-
ness and society.



future starts today





NAZARBAYEV UNIVERSITY

010000, Republic of Kazakhstan,
Astana, Kabanbay batyr avenue, 53
Nazarbayev University

Nazarbayev University Research and Innovation System

sciencepark@nu.edu.kz

+7 (7172) 70-92-71, 70-58-24

Explanatory note for Nazarbayev University Science Park

Basis for design

The basis for the creation of Nazarbayev University Science Park (hereinafter - the Park) is a commission of the president of the Republic of Kazakhstan Nursultan Nazarbayev, in a lecture given at Nazarbayev University on September 5th, 2012. The President has previously voiced the idea of creating intelligent and innovative clusters in his address to the nation on January 27, 2012. The cluster includes following elements: science parks, commercialization centers, industrial parks, venture capital funds and etc.

Introduction. Review of Science Parks in the world

Scientific or research parks have been widely developed in the world since the 50-ies of the last century. In general terms a science park is a territory under the control of the University and is designed to accommodate the R & D departments of large companies and high-tech small and medium firms.

Objectives of the establishment of science parks is to create a favorable environment for the placement of R & D departments of companies have already taken place, as well as to support the development of new companies by identifying entrepreneurial talent, market opportunities, and technological breakthroughs.

The main role of a science park in the innovation chain is to provide the missing links of opportunities for promotion of research results to the market. Thus, by providing such services, Science Park aims to increase the momentum of the innovation chain for the benefit of not only companies but also researchers.

Science parks exist in the many of the leading universities in the world (Stanford, Cambridge, Sophia Antipolis, Research Triangle Park, etc.).

Conclusions. A comparative table of the main parameters of science parks

	Area (ha)	Number of companies	building area (m ²)	Number of employees	m ² /ha	persons / ha	persons / m ²	m ² / persons
Stanford Research Park	284	150	929030	23000	3271.23	80.99	0.02	40.39
Research Triangle Park	2833	170	2090318	52000	737.85	18.36	0.02	40.20
Cambridge Science Park (UK)	62	100	153290	5000	2472.42	80.65	0.03	30.66
Limerick National Park (UK)	263	95	130000	5400	494.30	20.53	0.04	24.07
Cambridge Research Park	10.5		23226		2212			
Exeter Science Park	26		76000		2923			
Oxford Science Park		60	49238					
Skolkovo (Russia)	389	1000	1316000	21000	3383.03	53.98	0.02	62.67

Based on the data of science parks in the world, leads to the following average specific indicators:

- *relationship to the area of floor space in the park - 3000 m²/ha*
- *ratio of the number of employees of the park to the park area (persons/ha) - 80 persons/ha*
- *floor space ratio to the number of employees - 40 m²/persons*

Key indicators and the concept of Nazarbayev University Science Park

The location and area of the site

City of Astana has provided for the design and construction of the Science Park a land plot of 50 hectares, located within the square of streets E-49, E-79 prospect Turan.

The concept of the Science Park

The prerequisites for the establishment of Science Park Nazarbayev University are:

- needs of the country's companies in scientific and engineering expertise in many sectors of the economy of Republic of Kazakhstan;
- there is a transfer of the vast number of technologies introduced from abroad;
- availability of Nazarbayev University as a place of concentration of competent personnel in various fields, graduates, as well as strong research and development centers;
- availability of the territory under the Science Park development in the immediate vicinity of Nazarbayev University;
- proximity to the administrative center of the country, as well as to international air and rail interchanges.

Currently, in the Republic of Kazakhstan there is absolutely no research and engineering competence in most areas of the national economy. National companies in the course of their work in the majority of cases are turning to purchase and implementation of foreign technologies. Their application helps to solve the problem only in particular cases, without solving the problem of development of scientific and technological potential of the country as a whole. Thus, the attraction of research, development units of the national companies and the private sector, as well as high-tech productions to accommodate in the Park will solve not only the problem of research capacity development of the country but the specific problems of companies and obtain the following products:

- Development, testing and implementation of new technologies and devices;
- Production of new patents;
- Transfer of technology and its successful translation.

In turn, the beneficial effect of the establishment and development of the Science Park for the Nazarbayev University will be as follows:

- creation of jobs for their graduates;
- use resources of the private sector for generation of scientific knowledge;
- implementation of joint projects between industry and University researchers;
- adoption of University scientists' developments by the industry;
- development of a competitive environment in general.

Factors contributing to the creation of the Park:

- The presence of a leading university with all its scientific and technical potential and relationships with global centers of science. To date, Nazarbayev University collaborates with a number of foreign universities and research centers in the education and research sector. The use of this potential of the university will be very useful and beneficial for the residents of the Park;
- A prestigious and convenient location of the Nazarbayev University and the Park in the administrative center of Astana, has many advantages for the development of high-tech businesses;
- Increased government attention to the development of Nazarbayev University, which gives good prospects for development of the park as well.
- Hosting EXPO-2017 in Astana will give a significant boost to the development of science and technology.

The purpose of the project - to form around the Nazarbayev University a belt of branch institutes, R & D centers and high-tech companies involved into the scientific centers and schools of the University

Task of the park:

- attracting and placing R & D divisions of large companies, industry institutes, high-tech small and medium-sized businesses, venture capital funds;
- promoting cooperation between Nazarbayev university and businesses / industry;
- creating jobs for graduates of Nazarbayev University;
- creation and development environment, that fosters the generation of innovation.

Activities at the park

The main activity of Science Park will be cooperation with companies to lease laboratory and production, office and social area residents of the park. Provide support to the newly established and emerging companies.

Park is responsible for the development of the whole infrastructure, construction of new facilities, including a partnership with the private sector, to best meet the needs of the company and attract new residents.

Great importance in the Science Park will be on the development of social infrastructure.

The park will be in the shops, cafes, recreational facilities, conference rooms, hotels, sports facilities, etc. Thus the park will have a full feature residential and industrial area.

Thus, all the types of activities in the Park can be divided into the following directions

- 1) Coordinate / Services / Stimulation
 - Administration of the park
 - Maintenance (post office, restaurants, banks, etc.)
 - Conference rooms and meeting rooms
 - Offices of NGOs that support innovation and business
- 2) The interaction with the companies-residents of the Park
 - Construction and Landscaping
 - Building and Construction
 - Letting of laboratory and office space
- 3) Research (R & D) activities and trainings
 - R&D centers and laboratories
 - Technical Centers
 - Training centers

Potential residents Science Park

Residents of the park can be divided into several groups called by business:

- R&D companies;
- service companies that provide services for the first.

The former includes the R & D centers of large companies, public and quasi-public sector research centers, small and medium-sized high-tech companies, training centers. It is assumed that this group of Park residents will have the following areas of activity:

- information and communication technology,
- oil and gas,
- biotechnology and agro-industry,
- mechanical engineering industry,
- electricity,
- mining and metallurgy,
- chemical industry,
- pilot production and testing infrastructure.

Utility companies, residents of the park, will include:

- Banks
 - Hospitality
 - Restaurants, cafes, bars, clubs
 - Sports center (fitness)
 - Shopping
 - Conference rooms and meeting rooms
 - Transport companies, logistics and storage
 - Suppliers of equipment and supplies
 - Cleaning services and etc.
- Future residents of the park can be divided into the following groups:
- Large companies willing to participate in the joint construction of buildings and laboratories;
 - Representatives of small and medium businesses, mostly rented part of the building constructed by the park administration office and its needs;
 - Companies that provide services (technical services, banks, restaurants, etc.), or renting the premises, offices, and space.
 - Administration of the park.

The basic approaches to the planning of the Science Park

In accordance with the profile of residents it is necessary to make zoning of the Park and to ensure the development of social infrastructure and engineering.

There are three key profiles of the building Science Park:

- laboratory and manufacturing functional groups including scientific, laboratory and production space provided in the Science Park;
- administrative functional group in which includes all office space and space for exhibitions and educational activities and conference services;
- auxiliary function group, which includes all facilities to ensure the functioning of the object science park.

When the functional zoning, the following principles:

- the allocation of functional blocks;
- to achieve synergy of the Science Park;
- ensuring the implementation of all the functions of Science Park;
- flexibility of use of the premises;
- associativity;
- effectiveness.