### BELARUSIAN STATE TECHNOLOGICAL UNIVERSITY



### SUMMER SCHOOL

# THE WORLD OF 3D TECHNOLOGY



#### **Programme Description**

The Summer School is intended for students and young researchers who would like to delve into the matters of chemical engineering and production of polymer composite materials, 3D modeling, 3D scanning and printing.

During their stay in Belarusian State Technological University (Minsk, Belarus), participants will get familiar with innovative developments of Belarusian scientists in the field of production of polymer composite materials of different applications, and get hands-on experience of making polymer materials for 3D printing. Through various lively activities of the summer school programme they will get insight into the Belarusian history, nature, culture, customs and traditions.

#### **Place**

Belarusian State Technological University (Minsk, Belarus)

#### Who can enroll

University students, young researchers in Chemical Engineering, Materials Science and related fields

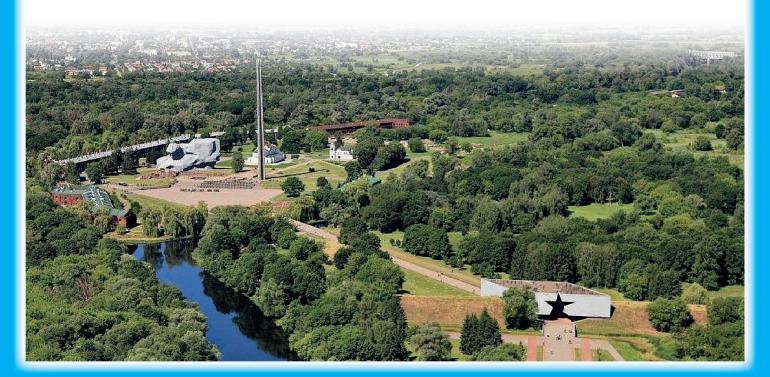
#### **Application documents**

Curriculum Vitae, Motivation Letter Passport copy

Please **send your applications** to BSTU International Office inter@belstu.by

#### **Fees**

The summer school fee is **390 USD**. The fee includes accommodation in the student dormitory, meals and activities listed in the school programme, transport to the visited sites. The participants must cover the cost of the round trip between Belarus and their home country themselves.



## Summer School "The World of 3D Technology" Programme

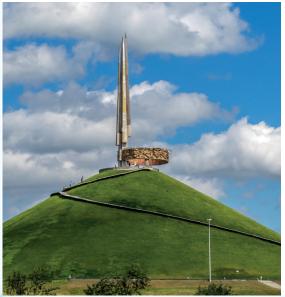
Date, time			Content
1	Sunday	All day	Arrival of participants.
			Accommodation (BSTU dormitory)
2	Monday	9.00-10.00	Breakfast (BSTU café)
		10.00-13.00	Welcome meeting. Presentation of BSTU.
		13.00-14.00	Lunch (BSTU café)
		14.00-17.00	Minsk City tour. National Library of the Republic of Belarus
3	Tuesday	9.00-10.00	Breakfast (BSTU café)
		10.00-13.00	Presentation of Department of Polymer Composite Materials
		13.00-14.00	Lunch (BSTU café)
		14.00-17.00	Engineering of polymers and composite materials (lecture)
	Wednesday	9.00-10.00	Breakfast (BSTU café)
4		10.00-13.00	Production of polymer composite materials for 3D printing ( <i>laboratory work</i> )
		13.00-14.00	Lunch (BSTU café)
		14.00-17.00	Production of polymer composite materials for 3D printing ( <i>laboratory work</i> )
5	Thursday	9.00-10.00	Breakfast (BSTU café)
		All day	Visit to BELAZ
	Friday	9.00-10.00	Breakfast (BSTU café)
6		10.00-13.00	Physical and chemical methods of investigating polymer composite materials
		12.00 14.00	for 3D printing ( <i>laboratory work</i> )  Lunch (BSTU café)
		13.00-14.00	
		14.00-17.00	Creating a 3D model ( <i>laboratory work</i> )
7		9.00-10.00	Breakfast (BSTU café)
	Saturday	All day	Nesvizh Castle
/		All day	INESVIZII Castie

Date, time			Content
8	Sunday	All day	Free time
9	Monday	9.00-10.00	Breakfast (BSTU café)
		10.00-13.00	3D printing of models made from polymer composite materials ( <i>laboratory work</i> )
		13.00-14.00	Lunch (BSTU café)
		14.00-17.00	3D printing of models made from polymer composite materials ( <i>laboratory work</i> )
10	Tuesday	9.00-10.00	Breakfast (BSTU café)
		10.00-13.00	3D printing of models made from polymer composite materials ( <i>laboratory work</i> )
		13.00-14.00	Lunch (BSTU café)
		14.00-17.00	Wrapping up round table and discussion
11	Wednesday	9.00-10.00	Breakfast (BSTU café)
		All day	Departure of participants









#### **BSTU**

Belarusian State Technological University is recognized in the Republic of Belarus and the CIS member countries as a leading higher educational institution in the fields of forestry, forest engineering, chemical technology of organic substances, chemical technology of inorganic substances, economics, management, biotechnology and bioecology, printing and publishing, information systems and technology, tourism and nature management, standardization and certification, power engineering.

Today the University trains more than 10,000 students in 34 graduate programs and employs over 650 researchers and lecturers, 75% of who have academic degrees and titles. Belarusian State Technological University houses 8 faculties, 48 departments, 5 affiliated colleges, two affiliated forestry experimental stations, Botanical Garden, Centre for Chemical and Physical Investigation Methods, etc.

The University holds over 200 bilateral cooperation agreements with educational and research institutions from 35 counties worldwide. The University researchers contribute to over 230 projects within 35 national and international scientific and technical programs. The University collaborates with more than 400 national enterprises and business within commercial contracts of applied character.

#### **REPUBLIC OF BELARUS**

The Republic of Belarus is a country located in Central Europe with the territory of 207.6 thousand square km. It borders with Poland, Lithuania, Latvia, Russia and Ukraine.

Population: 9.5 million. Capital: Minsk Belarusian climate is moderate continental. The hottest month is July, the coldest one is January.

Local time: + 2 hours from Greenwich Time (GMT + 02:00). Currency – Belarusian ruble.

Official languages – Belarusian and Russian.

With a complex history and rich architecture Belarus is a wonderful place to explore no matter what time of year. With a diverse geography and a passion for natural history and wildlife Belarus would be an outdoor enthusiasts' dream.







#### **MINSK**

Minsk, the capital of Belarus, is located in the centre of the country.

Minsk today is a modern international city. The first recorded mention of the city goes back to 1067.

Over the course of its chequered history, Minsk has been destroyed and rebuilt numerous times, most recently after World War 2, when it was almost completely destroyed.

More than 1.9 million people live in Minsk today. It has excellent transport links including Minsk airport, several major train stations, the Minsk metro underground network, and a well-developed road system.





#### **NESVIZH CASTLE**

Nesvizh Castle is on the Nesvizh Estate, one of the oldest settlements and most famous places in Belarus. Nesvizh is in the Minsk region of Belarus, approximately 120km south-west of Minsk.

Nesvizh Castle is considered the most beautiful castle in Belarus and attracts thousands of visitors every year. The gardens are a particular attraction, with ornamental lakes, and beautifully landscaped gardens. You can stroll through its gardens in winter, or sit on the bench in warm summer evenings, admire the picturesque views of the river and pond with swans, swim on a real boat.

The castle is a UNESCO World Heritage Site.





#### **BELAZ**

BELAZ is a major world manufacturer of mining dump trucks of heavy-duty and super-size load capacity, as well as the other heavy vehicles, being used in mining and construction branches of industry.

You will have a unique opportunity to visit manufacturing workshops as well as learn about the history of the enterprise. During the excursion you will be offered to visit the museum and learn about the history of the enterprise – from the moment of the plant foundation up to the present time. Apart from that you will visit the exposition of heavy and super-heavy dump trucks and special purpose equipment and will see how dump trucks are being assembled.

BeLAZ-75710 possesses capacity of 4,600 horsepower and load capacity of 450 tons. By results of testing it set a record of lifting 503 tons, which was listed in the Guinness book of records.

