#### INSTITUTE OF ENGINEERING AND DIGITAL TECHNOLOGY

# NANOMATERIALS

The program provides knowledge of modern nanomaterials, methods of their production and research, as well as the development of technological processes for the production of nanomaterials with given properties, based on the application of modern methods and tools. The learner is given the opportunity to master modern and high-tech equipment. Lectures by leading Russian specialists in the field of nanomaterials are available.



LEVEL Bachelor

DEPARTMENT

Institute of Engineering and Digital Technology

DURATION 4 years

START DATE 1st September

LOCATION 308015, building 15, st. Pobedy, 85, Belgorod

LANGUAGE Russian

PROGRAM COORDINATOR
Olejnik Ivan Ivanovich

TUITION FEES

3950 USD

• currency of payment is ruble

WEB

bsuedu.ru/bsu/

ACADEMIC-RELATED ENQUIRIES oleinik\_i@bsu.edu.ru 8(4722)30-13-92

### ENTRY REQUIREMENTS

Admission of foreign citizens to study under contracts for the provision of educational services is carried out on a competitive basis (based on the results of entrance tests conducted by the university).

#### APPLICATION

Application for acceptance of documents for enrolment (by mail).

Consent to the processing of personal data of the applicant. Letter of consent

Identity document, citizenship.

Academic degree

Documents confirming the individual achievements of the applicant.

An agreement on the provision of paid educational services (for admission on a contractual basis).

#### PROGRAM STRUCTURE

General subjects: Foreign Language, Mathematics, Physics, Chemistry, Economics, History, Philosophy and Sociology. There are no core courses in the first year.

Year 2: Theoretical Mechanics, Fundamentals of Materials Science, Technology of Structural Materials.

Year 3: Nanomaterials Technology, Heat Treatment Theory, Fundamentals of Engineering, Machine Parts, Material Resistance, Crystallography and Lattice Defects, Mechanical Properties of Materials, Electrical Engineering and Electronics, Modern Methods of X-Ray Analysis.

Year 4: Solid State Physics Fisical Properties, Structural Steels and Alloys, Functional Materials, Physics of Strength and Plasticity, Nanocoatings and Nanomodification of Surface.

Bachelors are offered 6 general subjects and 12 specialist subjects. The main types of learning activities are lectures, practical and laboratory classes. Practical trainings are provided for the 1st and 2nd year, 4th year - pre-graduation internship.

## CAREER OPPORTUNITIES

Bachelors are prepared to work in research and production laboratories, institutions of higher and secondary vocational education and have the opportunity to enter a Master's programme.