

Education institution stamp



APPROVED

«05» 01 2016 г.

Chairman
of the Admissions Committee,
Rector of Yanka Kupala State
University of Grodno


(signature) I. Kiturka

THE LIST OF TOPICS OF EDUCATIONAL DISCIPLINES
for an additional interview with applicants
from among foreign citizens and stateless persons,
temporarily staying or temporarily residing in the Republic of Belarus,
for obtaining advanced higher education in the specialty
7-06-0732-01 "Construction Engineering"
(English language of tuition)

Name of the educational discipline	The list of topics of the educational discipline
Architecture	1. Basic concepts of load-bearing frames of buildings. Concepts of the bearing frame of the building. 2. The main parts and structural elements of buildings, their purpose. 3. Foundations. Appointment of foundations. 4. The depth of the foundations. Walls of foundations, constructing principles. 5. Waterproofing of basement. 6. Overlaps and floors. Classification of overlaps. 7. Prefabricated concrete slabs. 8. Monolithic and prefabricated-monolithic reinforced concrete slabs. 9. Trimmer joists on wooden, reinforced concrete and metal beams. 10. Roofs. Loft and the combined coverage. 11. Construction of wooden pitched roofs. 12. Construction of precast concrete roofs and their classification. 13. Reinforced concrete frame of buildings. 14. Elements of reinforced concrete frame building.
Construction mechanics	1. Calculation of beams. 2. Calculation of three-hinged arches. 3. Calculation of three-hinged frames. 4. Calculation of trusses. 5. Calculation of continuous beams.
Construction material science	1. The main properties of building materials. 2. Organic building materials (timber, bitumen, etc.). 3. Inorganic building materials (stone, ceramics, metals, etc.). 4. Mineral astringent. 5. Fillers and chemical additives. 6. Types and properties of concrete. 7. Finishing materials. 8. Thermal insulation materials.