<table>
<thead>
<tr>
<th>Program name</th>
<th>Master's program &quot;Hydraulic engineering construction&quot;</th>
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<tbody>
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<td>Key facts</td>
<td>The program is intended for students who have experience in the field of design, construction and operation of hydraulic structures (hereinafter referred to as HS), and want to master the modern methodology of scientific research, modern methods for analyzing the state of the HS and technical means of monitoring the safety of the HS to continue a career in the field of hydraulic engineering. Educational activities are focused on the development of research skills of students in the framework of an individual research project in the field of hydraulic engineering. Students will follow all stages of the research process from problem setting to the achievement of experimental results and their analysis. The training program is focused on developing practical skills, so students have the opportunity to work at real HS of the Sayano-Shushensky hydropower complex, as well as in modern and well-equipped laboratories of the Sayano-Shushensky branch of the SFU.</td>
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<tr>
<td>Program length</td>
<td>2 years</td>
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<td>Starting date</td>
<td>September, 1st</td>
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<td>Language of instruction</td>
<td>Russian</td>
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| Prerequisites     | • Bachelor's degree in the direction Construction profile Hydraulic engineering construction (a copy of your diploma of previous higher education and transcripts of completed courses and grades)  
• Skype interview  
*a motivation letter and letters of recommendation may also be required* |
| Tuition fee per year | Paid places – 155 600 roubles (~ 2,079 USD) |
| Program leader/team | Zateev Vadim Borisovich  
Candidate of Technical Sciences, Associate Professor of the Department of Hydraulic Structures and Hydraulic Machines of the Sayano-Shushensky branch of Siberian Federal University |
| Qualification     | Bachelor of Hydroelectric Power Plants |
| Skills/ objectives | Master's Degree in Hydraulic Engineering Construction  
- HS research activities;  
- HS design;  
- development of new methods of HS condition monitoring;  
- analysis of HS operation under different operating conditions;  
- HS construction using modern methods and materials;  
- modernization and reconstruction of HS |
| Curriculum        | Philosophy of technical sciences;  
Computer, networking and information technology;  
Professional foreign language (technical);  
Additional chapters of mathematics; |
| Optimal usage of water resources;  
| Operation of HS;  
| Current HS problems and solutions;  
| Economics in construction  
| Forecasting hydrological risks;  
| Unconventional methods of power generation;  
| Monitoring of HS condition;  
| HS instrumentation;  
| Field and model tests of HS;  
| Seismic monitoring of hydropower facilities;  
| Repair and restoration works at HS;  
| Hydromechanical equipment of HS;  
| Automation of field observations at HS;  
| Investment activity of the enterprise;  
| Management in the electric power industry |

**Contacts**

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