

Bioluminescent technology

Siberian Federal University

Degree or qualification is awarded: **Certificate (30 ECTS)**

Language of study: **English**

Mode of study: **full-time**

Duration: **1 semester**

Availability of free education: **no**

Price: **125 000 RUB**

Programme webpage at the university website: <http://www.sfu-kras.ru/en/masters/bio-engineering#tab1>

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The international program Bioluminescent Technologies, lasting one semester, proposed by Siberian Federal University, is part of the Biological Engineering English-language master's program. The program is for students with experience in the study of natural sciences and wishing to master the modern methodology of scientific research for their further improvement in the field of biological engineering.

Features of the program:

Teaching methods: lectures, laboratory experiments, analysis of certain situations, seminars.

Teaching staff: professors of Siberian Federal University and visiting professors from universities in Russia, the USA, Italy, China, the United Kingdom and other countries.

Most of the classes are held in one of the most modern laboratories of SibFU - the Laboratory of Bioluminescent Biotechnologies.

Scientific work: within the framework of this program, students study the phenomenon of bioluminescence from all positions - genetic, molecular, evolutionary and environmental. Master's research work will be related to the study of the chemical nature of light emission in both recently discovered and well-studied species (fungi, earthworms, coelenterates, bacteria, etc.) Students will have the opportunity to simulate the functioning of enzymes in the cellular hyaloplasm, study the possibilities of obtaining new recombinant bioluminescent organisms and create biosensors of new generation based on bioluminescent, which find their application in environmental monitoring and medicine. The program also addresses the fundamental and applied aspects of the use of bioluminescence.

Specializations within this programme