



## SHORT DESCRIPTION OF PROGRAM

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| Institution's name | <b>1.1. St. Petersburg State University.</b>  |
| Faculty            | 2.1. Mathematical Faculty and Faculty of biology and soil science.  |
| Course title       | 2.1. Mathematical models in soil science and agrochemistry (for masters).   |
|                    | 2.2. Faculty of biology and soil science.   |
| Course title       | 2. The introduction to plants science with the base of genetics for agrochemists and soilspecialists.                     |
| Institution's name | <b>1.2. St. Petersburg Electrotechnical University named after Lenin.</b>   |
| Faculty            | 2.3. Faculty of construction of devices, biomedical and ecological engineering  |
| Course title       | 2.3. Express methodic of estimation of integral ecological character of environment with using of biological test method. |

### COURSE PROFILE

2.1. Agroecology, methods of mathematical models creation, computer system, application for analysis of pesticides fate in soil, possibility of use for ecological expertise.

2.2. The genetic in plants science, genebanks, collection of Vavilov Institute, diversity of agricultural crops of Russia, crops and agro ecology, ecological problems of conservation and using of plant agro-biodiversity.

2.3. Ecological character, environment, biological test express method, certification, economic estimation of expertise.

### INTEGRATED PRACTICAL TRAINING

**will be in every course also**

2.1. The estimating of ecological soil dangers of pesticides in different soil types and meteorological conditions by means of computer programs. It is realized in a form of practical training for students. A friendly interface of programs is useful for pedagogical practice.

2.2. The teaching on the experimental field stations of Vavilov Institute of Plant Industry of Russian Academia of Agriculture Science (RAAS). The students look through with diversity of agricultural crops of Russia, they are teaching for identification these crops in practice, they are acquainting also with Russian names of crops. The economic estimating of some crops will be discussed.

2.3. Practical study of biological test of nature water system quality, soil on the base of devices of department of environment protection. Some devices were constructed during this department was taking part in investigation. 8 hours.

## YOUR TEACHERS

The State University, The faculty of biology and soil science

2.1. The associated professor, doctor of biological science **Semenova Natalia Nikolaevna**. At the same time the head of department of plants modelling of All Russian Institute of plants protection of Russian Academia of Agriculture Science (RAAS).

2.2. The professor, doctor of biological science **Loskutov Igor Gradislavovich**. At the same time the head of department of genetic resources of oat, barley and rye of Vavilov Institute of Plant Industry of RAAS.

The State Electrotechnical Institute named after Lenin, The Faculty of construction of devices, biomedical and ecological engineering

2.3. The head of department of environmental protection, professor, doctor of technical science **Sidorenko Vladimir Michailovch**.

**Russian language for beginners**. The Faculty of Russian language. The main teacher **Smirnova Ludmila Alekseevna**.

**Courses duration - 60 hours of special courses and 24 hours of Russian courses for beginners.**