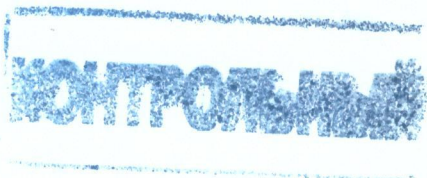


MINISTRY OF AGRICULTURE AND FOOD OF
THE REPUBLIC OF BELARUS

EDUCATIONAL INSTITUTION
"BELARUSIAN STATE AGRARIAN TECHNICAL UNIVERSITY"



APPROVED



Rector of BSATU

M. Ramaniuk M. Ramaniuk

10 2023

Registration No *1512/yt. - III*

PROGRAM ON
TECHNOLOGICAL PRACTICE
for specialty

7-06-1021-01 "Occupational Safety and Ergonomics"

The program is based on the sample curriculum for specialty 7-06-1021-01 "Occupational Safety and Ergonomics", approved on April 13, 2023

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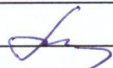
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(Minutes No 4 dated 13 11 2023)

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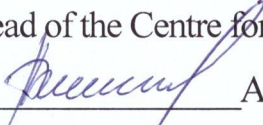
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EXPLANATORY NOTE

The technological practice program is compiled in accordance with the requirements of the higher educational standard (OSVO 7-06-1021-01-2023)

Technological practice is an integral part of the training of master degree student at the Educational Institution “Belarusian State Agrarian Technical University”. Only a combination of deeply thought-out, carefully planned and consistently executed practical training with the entire system of theoretical training will ensure the quality of training of a competent specialist.

The goal of the practice is consolidation of knowledge and skills acquired in the process of theoretical training, acquisition of competencies and professional experience, practical skills in independently solving innovative and current scientific and technical problems

The task of the practice are as follows:

- acquiring professional skills in the specialty;
- forming a modern integral vision of the world in the master degree student, based on humanistic ideals and scientific principles of activity;
- consolidation, expansion and systematization in production conditions of the knowledge and skills of master degree student acquired at the university while studying special disciplines in the specialty profile;
- checking the capabilities of independent work of the future specialist in the conditions of a specific production;
- acquiring practical skills, knowledge and abilities in professional, organizational work in a team;
- preparing materials for a master’s thesis.

Whit the practical training in the specialty 7-06-1021-01 Occupational Safety and Ergonomics, master degree student develop the following competencies:

AC-4. Develop innovative receptivity and the ability to innovate conditions.

AC-5. Be able to predict the implementation of professional activity and solve professional problems in conditions of uncertainty.

UPC-2. Develop directions for the development of the occupational safety management system in the organization based on monitoring changes in legislation, current scientific advances and best practice in the field of occupational safety.

SPC-3. Monitor and develop activities to prevent potentially dangerous man-made factors and ensure environmental, industrial, industrial safety and security in emergency situations.

SPC-4. Develop and implement measures to ensure industrial safety, taking into account the analysis of the psychological characteristics of the employee as a subject of labor and his behavior.

SPC-5. Perform out ergonomic assessment, the design solutions expertise at all stage of the human-machine systems design, predict and minimize employee errors to ensure optimal performance of human-machine systems.

PC-2. Conduct a systematic analysis of technical systems and select protective equipment to improve working conditions.

PC-3. Plan, methodically support and improve technical facilities and technology in order to increase their industrial safety.

PC-4. Improve technological processes, select equipment to ensure safe working conditions.

PC-7. Use modern science and technology, innovative production processes in the agro-industrial complex when agricultural products, production and processing.

PC-8. Organize the personnel activities taking into account the characteristics and organizational and technical conditions of production.

As a result of the internship, the master degree student should:

know:

- structure and organization of production;
- modern technologies of production and processing of agricultural products;
- labor protection requirements when organizing production processes and workplaces, rules for the safe operation of technical equipment;
- requirements of regulatory legal acts for the safe design and safe operation of production facilities, machines, equipment;
- know the ideological and moral values of Belarusian society and be able to follow them.

be able to:

- analyze the state of industrial safety when performing technological processes, certain types of work and assess the working conditions of workers;
- select equipment taking into account ensuring safe working conditions;
- work in a team and deeply understand the general civil goals of their professional activities;
- make management decisions taking into account an understanding of the development trends of modern society and state policy.

have skills in:

- risk management during production processes and operation of technological equipment to ensure safe working conditions in the workplace;
- introduction of technological processes, equipment and scientific developments on labor protection into production;
- find compromise and constructive solutions in situations of conflict of interests of different cultures, effectively interact with their carriers.

Technological practice was developed in accordance with the curriculum for the specialty 7-06-1021-01 Occupational Safety and Ergonomics in the 2nd semester. Practice period is 6 weeks (324 hours)

The organization, management and summing up of technological practice is regulated by the Regulations on the practice of students, cadets, listeners, approved by Resolution of the Council of Ministers of the Republic of Belarus dated 06/03/2010 No. 860 (as amended on 07/26/2023 No. 408)

The form of assessment of the results of technological practice is a graded credit.

Allocation of academic hours by types of work is given in the thematic plan.

Thematic plan of technological practical training

Name of topic	The amount of hours
1. Familiarization with the structure and organization of production	26
2. Methods of organizing and promoting worker safety.	thirty
3.Characteristics of technological processes	42
4. Monitoring the state of industrial safety during the operation of machinery and equipment in production	44
5. Analysis and assessment of the effectiveness of the industrial safety management system based on the current labor legislation	56
6. Development of proposals to prevent potentially dangerous man-made factors and ensure environmental, industrial, industrial safety (individual task).	100
7. Practice report preparation	26
Total	324

METHODOLOGICAL PART

The procedure for organizing and conducting technological practice in the specialty profile

Technological practice in the specialty profile is a mandatory component of the educational process, organized and conducted in close cooperation with government agencies and other organizations for which specialists are trained.

Technological practice is organized on the basis of agreements concluded with organizations of the Republic of Belarus that correspond to the profile of training specialists, regardless of their ownership and subordination.

The basis for undergoing technological practice is the order of the university rector. The draft order is prepared by the dean of the faculty based on proposals from the department.

At the university, the general management of practice is carried out directly by the head of practice from the department.

Educational and methodological management of technological practice is carried out by the Department of OHS Management.

The University organizes technological practice, its documentation and ensures: timely (no later than one month before the start of the practice) conclusion of agreements on the organization of practice in accordance with concluded agreements with organizations; approval of practice programs; Conducting, if necessary, a medical examination of master degree student aimed at technological practice, making payments to them and reimbursement of expenses in accordance with the Regulations in force at the university; educational and methodological guidance of technological practice; monitoring the implementation of the program; analysis, together with organizations, of the results of implementing the technological practice program and preparation of proposals for improving its organization.

The general management of technological practice in an organization is entrusted to the head of the organization or another employee of the organization authorized by him, who carries out the practice in accordance with the current Regulations and the program of technological practice.

Direct supervision of the technological practice of master degree students at the facility, in a structural unit of the organization, is carried out by an experienced employee of the organization, who is appointed by order of the head of the organization.

During the internship period, master degree students are subject to labor protection legislation and internal labor regulations of the organization.

The organization carries out technological practice, documents it and ensures:

– conclusion of agreements on the organization of technological practice for master degree student;

- issuance of an order for the organization on the enrollment of master degree student for practical training in accordance with agreements, on the organization of technological practice of master degree student;
- creating the necessary conditions for master degree student to undergo technological practice and complete its program;
- conducting training for master degree student on labor protection;
- involvement of master degree student in the work provided for in the technological practice program.

Requirements for the content and design of an individual assignment and report on technological practice

During the period of technological internship, the master degree student completes an individual assignment issued by the internship supervisor. The topic of the individual assignment is determined by the topic of the master's thesis.

During the technological internship, the master degree student, under the supervision of the organization's immediate supervisor, completes the technological internship program and reflects the results in the report on its completion.

The report on technological practice presents materials on the implementation of an individual task.

The report must be signed by the master degree student, the immediate supervisor of the internship from the organization and approved by the head (deputy head) of the organization. At the end of the technological internship, the immediate supervisor of the internship from the organization issues a written review of the master degree student completion of the technological internship.

The report is compiled on the basis of specific factual material and is accompanied by a critical analysis of the objects being studied. It must contain the required sections, in accordance with the report structure suggested below. In each section it is necessary to give a general conclusion; the report ends with conclusions and suggestions.

University practice supervisor:

- prepares draft orders on general issues of organizing and conducting technological practice;
- together with the department and faculty, constantly works to improve the process of conducting technological practice;
- monitors the progress of technological practice, and also analyzes and summarizes its results;
- analyzes annual reports on the results of technological practice programs and, based on these reports, draws up a certificate on the quality of practice in the past year.

Faculty:

- informs master degree student about the timing and location of technological practice, distributes them among organizations;

- organizes meetings on organizational and methodological issues with the participation of the head of practice from the university;
- organizes training for master degree student on labor protection;
- controls the timeliness of submission of reporting documentation and differentiated tests by master degree student after completion of technological practice;
- listens to reports from departments on the results of the technological practice program at the faculty council and makes proposals for improving the process of conducting technological practice for master degree student.

Department:

- develops a program of technological practice;
- introduces master degree student to the goals, objectives and program of technological practice, provides information about the organizations in which the internship will take place;
- prepares proposals for the distribution of master degree student for technological practice among organizations;
- develops, as necessary, revises, adjusts methodological instructions for master degree student and heads of technological practice from the department, forms of reporting documentation;
- identifies and promptly eliminates shortcomings during technological practice, and, if necessary, reports them to the management of the university and organization; after completing technological practice, organizes the acceptance of differentiated credits;
- analyzes the implementation of technological practice programs, discusses the results and, within a week after the department meeting, presents an extract from the minutes of the department meeting to the head of the practice from the university, and reports on the results of the technological practice to the dean of the faculty.

The responsibilities of a master degree student in preparation for technological practice and during its completion are detailed in Appendix A.

The report must be drawn up logically coherent, complete, theoretically correct, illustrated with diagrams, drawings, etc. additional materials. It should reflect the required material for all sections of technological practice in accordance with the topic of the individual assignment.

The report must be prepared by each master degree student separately.

The text of the report is typed using computer tools in the Word program in Times New Roman font size 14 pt at 1 interval with width alignment and automatic word hyphenation. Drawings, drawings, etc. can be done in pencil or, if appropriate material is available, neat photocopies are accepted.

The text of the report must be legible, literate and neat, without blots or corrections. Minor, neat corrections are allowed. It is presented in bound form. It is permissible not to frame the sheets with standard frames. It is advisable to start each section on a new sheet. If it is necessary to include applications in the report, they are given at the end. The type and nature of applications depend on the

content. The sheets of report text and appendices must be numbered consecutively. The report is compiled in a volume of 10 -15 sheets.

Structure and content of the report

The report must contain mandatory sections in accordance with the attached structure:

- cover page with the title, surname of the master degree student and signatures of leaders from the organization and department (Appendix B);
- an abstract reflecting the main content of technological practice, a brief summary of the task assigned to the master degree student, the solution method and the main results obtained, information about the scope of the report;
- introduction, which provides a general description of the organization;
- table of contents of the main material in accordance with the content of technological practice;
- results of completing an individual task;
- conclusion, which sets out the results obtained during technological practice;
- bibliographic list of literature used in the implementation of the technological practice program;
- annex to the report (if necessary).

Summing up the technological practice

After completing the technological practice, in accordance with the schedule of the educational process, the master degree student passes a differentiated test to the head of the practice from the department.

When conducting a differentiated test, the master degree student submits a report on the implementation of the technological practice program in the prescribed form.

A master degree student who has not completed the technological internship program, who has received a negative review from the practice manager from the organization, or an unsatisfactory mark when passing a differentiated test to the internship supervisor from the department, is re-sent to technological practice in his free time from studying.

The mark on technological practice is taken into account when summing up the results of the current certification of the master degree student.

The general results of technological practice for the year are summed up at the university council and faculty councils with the participation (if possible) of representatives of organizations.

Master degree student Handbook of the procedure for completing technological internship

1. Preparation for technological practice

The master degree student should:

1. Appear at the department at the appointed time to clarify the place and timing of the technological internship.

If a master degree student has independently decided on the place of technological internship, then at the department he receives a contract of the established form in two copies. After completing this document, the master degree student goes to the organization to conclude an agreement. One copy of the agreement must be provided to the department to issue an order for technological practice, the other remains with the organization.

If a master degree student has not decided on the place of technological internship on his own or is late in drawing up an agreement by the time established by the department, then the department takes over the distribution of internship places and the conclusion of agreements.

2. Find out which of the department employees will lead the practice.

3. Obtain a program and guidelines from the department (or library).

4. Complete a referral for technological practice according to the established template. Receive and issue a travel certificate of the established form.

5. At the general production meeting of a group of master degree student (which is announced in advance), undergo targeted instruction on labor protection with a signature in the appropriate journal.

6. Get advice from the manager on all issues of organizing and conducting technological practice (about the work procedure; about keeping records and the procedure for collecting materials in accordance with the technological practice program; about the most rational methods of work in the workplace; about technical literature that must be read before technological practice practice and during its passage, etc.).

7. Write down the telephone number of the department and the head of the practice, leave your contact details (mobile phone, home phone, residential address).

2. Responsibilities of master degree student upon arrival to technological practice

1. Report to the organization on time. At the HR department, submit a referral for technological practice. Make the necessary notes on the travel certificate.

2. Receive the appropriate document of the organization (certificate, pass) and undergo an introductory briefing on labor protection with a signature in the log.

3. Necessarily control the issuance of an order (management decision) in the organization on the acceptance of a master degree student for technological practice and the appointment of a practice manager from the organization.

4. Appear to the production practice manager, familiarize him with the technological practice program, clarify the plan and assignment in accordance with the working conditions in this organization. Agree with the practice manager on the procedure, time and place for obtaining the necessary consultations.

5. Check with the practice manager about the specific jobs and main responsibilities that must be performed by the intern.

6. Complete on-the-job training and sign in the log.

7. Having received instructions from the organization's internship supervisor, the master degree student begins to complete its program. A master degree student who has not completed the technological practice program is not allowed to defend the report.

8. Failure of a master degree student to show up on time for a technological internship is considered absenteeism.

3. Responsibilities of a master degree student during technological internship

1. Strictly observe, on an equal basis with permanent employees, the internal regulations established in this organization, as well as in the place of temporary residence (dormitory).

2. Follow all instructions from the internship supervisor from the organization and the internship supervisor from the university.

3. Complete the program and individual assignments issued by practice supervisors.

4. Collect the necessary material to write a report.

5. The master degree student needs to study a set of issues related directly to the technological practice program.

6. Upon arrival at the organization of the head of practice from the university (for the purpose of control), present him with materials about the work done, receive advice on all issues of practice and possible additional tasks.

7. Take an active part in the public life of the organization and provide the necessary assistance.

Appendix B. Cover page

**MINISTRY OF AGRICULTURE AND FOOD OF
THE REPUBLIC OF BELARUS**

**EDUCATIONAL INSTITUTION
"BELARUSIAN STATE AGRARIAN
TECHNICAL UNIVERSITY"**

OHS Management Department

Report

**on technological practice
specialties 7-06-1021-01 Occupational Safety and Ergonomics**

at the _____
(Company name)

Practice period is from “ ___ ” to “ ___ ” 20__

Compiled by master degree
student _____
(FULL NAME.)

Company practice
supervisor _____
(position, full name)

University practice
supervisor _____
(position, full name)

Graded assessment _____

Minsk 20__

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