Ministry of Agriculture and Food of the Republic of Belarus

Educational Institution «Belarusian State Agrarian Technical University»

APPROVED
Rector of BSATU
_____ M. Ramaniuk
«___» _____2023
Registration No _____

PROGRAM ON TECHNOLOGICAL PRACTICAL TRAINING

for specialty
7-06-0812-01 "Technical support of agricultural production"

2023

The educational program is based on the sample curriculum of specialty 7-06-0812-01"Technical support of agricultural production," approved on 18.04.2023.

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EXPLANATORY NOTE

The technological practice program was developed in accordance with the approximate curriculum of the specialty 7-06-0812-01 “Technical support of agricultural production”.

The internship of master's students is a mandatory component of the educational process of advanced higher education; it is organized and conducted in close cooperation with government agencies and other organizations for which specialists are trained and awarded a Master's degree.

Practice in mastering is based on the knowledge and skills acquired in the study of the following disciplines included in the curriculum of the specialty 7-06-0812-01 “Technical support of agricultural production”: Design of promising mechanized processes in crop production, Design of promising mechanized processes in animal husbandry, Methods for assessing the technical level of machinery and equipment, Fundamentals of information technology, Innovative directions for the development of agricultural machinery.

The goal of technological internship is to consolidate and deepen the system of knowledge and skills acquired in the process of theoretical training at the second stage of higher education, to acquire competencies and professional experience, practical skills for independently solving innovative and relevant scientific and technical problems.

Practice makes it possible to expand and enrich scientific and practical knowledge in the field of technical support for agricultural production.

The tasks of technological practice are:

– checking the possibilities of independent work of the future master in the conditions of a specific enterprise (organization);

– development in production conditions of methods for designing mechanized processes for the production of agricultural products, machines and their working parts, technological equipment for engineering support for the production of agricultural products;

– mastering, in the conditions of a specific enterprise (organization), methods for assessing the technical level of machines and equipment;

– identification of problems and ways of their engineering and technical solutions;

– formation of management decision-making skills taking into account an understanding of the development trends of modern society and state policy.

As a result of technological internship, the Master degree student should acquire and develop the following practical skills, abilities, and universal competencies:

AC-1 Apply the scientific knowledge methods in research activities, generate and implement innovative ideas.

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

Upon completion of technological internship, the master's student should

know:

– methods of generalization and methods of systematization of documentation materials (regulatory, planned, reporting) of enterprises (organizations) and literary sources;

– methods for analyzing possible solutions to emerging issues from the point of view of their technical and economic feasibility;

– methods for assessing the technical level of machinery and equipment;

– design and forecasting of mechanized processes for the production of agricultural products;

– principles of organization and production management;

– labor protection requirements at production sites of the enterprise (organization);

– main economic indicators of the production activity of the enterprise (organization);

– ideological, moral values of the state of the Republic of Belarus and be able to follow them;

be able to:

– summarize and systematize documentation materials (normative, planning, reporting) of enterprises (organizations) and literary sources;

– assess the state of technical support for the production of agricultural products;

– work in a team and deeply understand the national goals of their professional activities;

have skills in:

– formation of initial data and independent performance of engineering calculations for specific production conditions, based on the obtained theoretical knowledge.

Places for technological practical training are usually

– enterprises (organizations) of the agro-industrial complex of the Republic of Belarus of various forms of ownership, providing pre-sale preparation, operation, and maintenance;

– enterprises engaged in the production of agricultural machinery and processing of agricultural products, and having conditions for the implementation of the practice program;

– scientific and practical centers, research institutes and design organizations that have production facilities.

Technological practical training was developed in accordance with the curriculum for specialty 7-06-0812-01 “Technical support of agricultural production”. The total labor intensity of the practice is 9 credit units (324 hours). Practice period is 6 weeks.

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

THEMATIC PLAN

Name of topic	The amount of hours
1. Preparation of documents for internship at an enterprise (organization), introductory briefing on labor protection. Familiarization with the goals, objectives, content of practice. Conducting introductory training on labor protection, instruction on the forms, volume and types of work	9
2. Familiarization with the enterprise (organization), its structure, production areas. Conducting training on labor protection at the workplace. Mastery in production conditions of the principles of organization and management of production, analysis of its technical and economic indicators	36
3. Study of the main directions of production activities of divisions of an enterprise (organization). Mastering the skills and organization of scientific and production work	36
4. Study of the structure and organization of work of engineering and technical workers, service personnel of the enterprise	36
5. Studying methods for designing mechanized processes for the production of agricultural products, assessing the technical level of machinery and equipment Изучение методов проектирования механизированных процессов производства сельскохозяйственной продукции, оценки технического уровня машин и оборудования	72
6. Formation and analysis of materials for completing an individual assignment and a master's thesis on an approved topic	45
7. Analysis, collection, systematization and processing of factual material to complete an individual task (work with chief specialists, engineering and technical workers of the enterprise, study of regulatory, technical and technological documentation, etc.)	54
8. Review and discussion of the contents of the report with the chief specialist of the enterprise	9
9. Systematization of factual and literary material, preparation of a report on technological practice	27
Total:	324

TECHNOLOGICAL INTERNSHIP CONTENT

The content of technological internship at all its stages must be consistent, interconnected and sufficiently complete to ensure the solution of problems in the preparation of master's students in accordance with the requirements of educational standards and is determined by the individual task, as well as the need to study and master methods for solving technical, scientific-pedagogical, technological, managerial and other tasks.

In agreement with the internship supervisor, during the internship, students are expected to perform the following activities:

1. Familiarization with the goals, objectives, content of practice. Conducting the following briefings: introductory training on labor protection; according to forms, volume and types of work.

2. Familiarization with the location of the enterprise (organization), the history of its origin and its subsequent development, its structure, scientific, educational, and production areas. Conducting training on labor protection in the workplace. Mastering the principles of organization and production management in a production environment. Analysis of technical and economic indicators characterizing the efficiency of the enterprise’s production activities over the past three years.

3. Analysis of the structure and organization of work of engineering and technical workers, service personnel of the enterprise (organization). Study of personnel subordination schemes and staffing levels of the enterprise (organization); studying the job responsibilities of employees of an enterprise (organization).

4. Study of methods for designing mechanized processes for the production of agricultural products, machines and their working parts, technological equipment for engineering support for the production of agricultural products, assessing the technical level of machines and equipment.

5. Analysis, collection, systematization and processing of factual material to complete an individual task (work with chief specialists, engineering and technical workers of the enterprise (organization), study of regulatory, technical and technological documentation, etc.).

6. Systematization of factual and literary material, preparation of a report on technological practice.

Technological internship organization practical training

The internship of master's students is organized on the basis of agreements concluded with enterprises (organizations) of the Republic of Belarus that correspond to the training profile of master's students, regardless of the form of ownership and subordination.

Places for internship are determined by the department in agreement with the dean of the faculty and the vice-rector for academic affairs and production. The undergraduate takes an active part in determining the place of internship.

The dean's office of the faculty, together with the department and the vice-rector for academic work and production, organize individual conclusion of contracts with enterprises (organizations) for practical training (one copy remains at the enterprise, the second is stored at the university and serves as the basis for preparing a draft order).

The basis for internship is the order of the university rector. The draft order is prepared by the dean of the faculty based on proposals from the departments of the faculty.

At the university, general supervision of the practice is carried out by the Vice-Rector for Academic Affairs and Production, direct supervision is by the head of practice from the department (scientific supervisor of the master's thesis).

Educational and methodological supervision of practice is carried out by teachers of the department (scientific supervisor of the master's thesis), practical, methodological and organizational and technical guidance is provided by employees of enterprises (organizations), including labor protection issues, monitoring the implementation of the internship program, analysis, together with the involved enterprises (organizations), of the results of implementation practice programs and preparation of proposals for improving its organization.

General management of practice at an enterprise (organization) (place of internship) is assigned to the head of the enterprise (organization) or another employee authorized by him, who carries out technological practice in accordance with the internship program. Direct supervision of the internship of undergraduates at the facility, in a structural unit of the enterprise (organization), is carried out by an experienced employee of the organization, who is appointed by order of the head of the organization.

The mutual responsibilities of the institution of higher education and the enterprise (organization) accepting the student for internship are determined by the relevant agreement.

During the period of internship, undergraduates are subject to labor protection legislation and internal labor regulations of the organization, and students hired for vacant positions are also subject to labor legislation.

The enterprise (organization) carries out the internship, documents it and ensures the issuance of an order on the enrollment of master's students for technological practice, creation of the necessary conditions for them to undergo the internship and the implementation of its program, instructing students on labor protection, and attracting master's students to the work provided for by the internship program.

At the workplace, undergraduates must undergo introductory briefing and instruction on labor protection with a signature in the log.

During the internship, undergraduates perform individual work stipulated by the job responsibilities of the qualification characteristics of the Unified Qualification Directory of Employee Positions for the corresponding position. During the period of technological practice, master's students can be hired for vacant positions in accordance with the law.

The head of practice from the enterprise (organization) systematically checks the master's student's keeping of the practice diary and assists in collecting data for preparing a report on the practice.

Responsibilities of a master's student before leaving for internship:

– receive a diary, an internship program, an individual assignment and a travel certificate (if necessary) from the department;

– get advice on all issues of organizing and conducting technological practice (about the work procedure, record keeping and the procedure for collecting materials in accordance with the practice program, the most rational methods of work in the workplace, literature that must be read before and during the practice, preparation of a practice report).

Targeted instruction is conducted by a teacher from the department (scientific supervisor of the master's thesis).

Responsibilities of the master's student upon arrival at the place of practice:

– report to the HR department and provide a referral;

– mark the date of arrival on the travel document;

– familiarize yourself with the order for acceptance into practice;

– obtain the appropriate document of the enterprise (organization) (certificate, pass, etc.);

– undergo introductory training on safe methods of working with registration and signing in the journal;

– familiarize yourself with the order on assigning the immediate supervisor of the practice from the enterprise (organization);

– go to the production practice manager, familiarize him with the practice program, individual assignment and diary, clarify the plan and assignment in accordance with the working conditions at the given enterprise (organization) and clarify the procedure, time and place for receiving consultations;

– clarify with the production supervisor the living conditions (accommodation and food), specific workplaces and the main responsibilities that the trainee must perform during the internship: the procedure for summing up the results for each workplace, the procedure for obtaining special clothing, etc.;

– undergo training at the workplace with registration and signature in the log.

Having received instructions from the head of practice from the enterprise (organization), the student begins to implement its program.

Late attendance of a master's student for internship is considered absenteeism.

A master's student who has not completed the internship period is not allowed to take the internship credit.

METHODOLOGICAL PART

The timing and content of the internship are determined by the approved curricula and training programs, educational expediency and schedules of the educational process, which establish a reasonable sequence for the formation of a system of professional skills among undergraduates in accordance with the future specialty.

Full-time master's students undergo practical training during the summer period after the 2nd semester of education, and part-time higher education students undergo practical training during the intersession period.

The departments where master's students are trained organize the provision of internship with a program, methodological instructions, a list of scientific and reference literature and other necessary materials on paper and electronic media for the practical training of a master's student.

Responsibilities of a master's student during internship:

– during the internship period, the student shouldt strictly comply with the internal regulations of the enterprise (organization);

– keep daily notes in the practice diary about the work done;

– submit a practice diary weekly for verification to the head of practice from the enterprise (organization);

– take an active part in the public life of the enterprise (organization) and provide assistance when possible;

– upon arrival of the internship supervisor from the department (representative of a higher education institution), provide materials about the work done, receive advice on internships, completing individual assignments and completing additional assignments;

– complete the internship program in full;

– during the last week of internship, the undergraduate prepares a written report on the completed internship program. The report must be signed by the student, the immediate supervisor of the practice from the enterprise (organization), approved by the head (deputy director) of the enterprise (organization) and certified by a seal;

– unauthorized leaving or redistribution of the place of practice assigned by order at the university is prohibited.

Requirements for the content and procedure for filling out the practice diary

The practice diary is filled out by the master's student daily. It records information about the types of work performed in accordance with the practice program and individual assignment.

Diary entries should

contain:

– a list of work performed by the master’s student;

– the amount of work performed by the master's student in order to provide practical assistance;

– topics of self-preparation and organization of classes in production;

reflect:

– assignment for technological internship, agreed with the internship supervisor from the enterprise (organization);

– types of work performed can be grouped by types and features of their implementation and recorded in a brief form;

– a report on the master's student's completion of the assignment (types and volumes of work performed) in accordance with the assignment for internship (filled out daily) with a summary of the work performed;

– feedback from the internship supervisor from the enterprise (organization, educational institution) about the internship and the student's social work during the internship.

All sections of the practice diary must be signed by the production supervisor and certified with a seal.

Requirements for the content and design of an individual assignment

During the period of technological practice, the student is required to complete an individual task, which is presented in the form of an independent section.

An individual assignment is issued to each master's student for an in-depth study of individual issues in the specialty by practice managers and can be specified taking into account the conditions and needs of the enterprise (organization).

The topic and scope of the individual assignment are reflected in the practice diary.

An approximate list of individual tasks is presented in Application B.

Requirements for the content and format of the practice report

At the end of the technological internship, the undergraduate is required to draw up and defend a report on the internship, which is compiled during his stay at the enterprise (organization) based on entries in the internship diary. The report is checked by practice managers from the enterprise (organization) and the university.

The source materials for drawing up a practice report are: the enterprise's business plan for the current year, annual reports of the enterprise (organization), recommended literature.

The undergraduate finds answers to all other questions in conversations with the manager and specialists of the enterprise (organization).

The report should include the following sections:

Introduction. Describe the current state of the issue under consideration, existing problems and ways to solve them, the need to collect information during practice, the purpose and objectives of technological practice.

Brief description of the enterprise (organization). Provide general information, name, location (region, district, locality), production and scientific areas.

Individual task. Reveal the topic of the individual assignment.

Conclusion. Outline the main shortcomings identified during the internship, conclusions and proposals for eliminating them.

The report is generated by the student during his stay at the enterprise (organization) based on entries in the workbook and practice diary. In this case, the report is checked by practice managers from the enterprise and the university.

It should be noted that the report does not present general considerations, but the actual participation of trainees in the work of the enterprise (organization) and personal observations.

Each section of the report should end with brief messages, which, without repeating the content of the main part, should include practical recommendations and personal suggestions formulated based on the study of this issue.

In all cases where digital material is presented, an analysis must be made.

The textual presentation of the material must be illustrated with graphs, diagrams, diagrams, drawings, photographs, accompanied by figure captions with numbering.

Throughout the entire report, uniformity in the design of terms, designations, abbreviations and symbols should be observed.

The report must be written in technically competent language, as rich as possible in diagrams, drawings, and photographs. It should contain, along with the main material and introduction, a conclusion (conclusions), a list of sources used, and appendices.

Requirements for reporting

The explanatory note of the report, the text of which is short, clear, unambiguous, must be written correctly, neatly formatted and bound. The explanatory note must be made in the *Word* text editor and printed on A4 sheets (font type – *Times New Roman* fout, size – 14 points (pt), line spacing – one and a half), alignment – width, paragraph indentation – 12.5 mm. Pages are numbered with Arabic numerals.

The first page is the title page, but there is no page number on it. The list of references that were used and applications are included in the general numbering.

All sections of the explanatory note, conclusion, list of references and appendices begin on a new page.

It is allowed to focus attention on certain terms, formulas, theorems, using methods of graphically highlighting text.

Blots and traces of not completely removed previous text (graphics) are not allowed.

The title page must be typed in a Word text editor and printed on a printer (Appendix A).

The content includes the names of all sections, subsections and paragraphs of the explanatory note, indicating the page number on which the beginning of the corresponding section, subsection and paragraph is located.

The table of contents also includes “Introduction”, “Conclusion”, “List of references” and the title of each appendix.

The word “Contents” is written as a title symmetrically to the text in capital letters without a dot at the end.

The name of each section and its number, the headings “Introduction”, “Conclusion”, “List of sources used”, “Appendix” are written on a new line in capital letters. The names of subsections and paragraphs are written in lowercase letters, except for the first capital one. Abbreviations of title names are not permitted. The names of sections and subsections given in the contents must fully correspond to the headings of these sections and subsections in the text of the explanatory note.

In the main part of the explanatory note, sections, subsections and paragraphs are provided with short headings reflecting their content.

The degree of fragmentation of section material depends on its volume and content. Sections must be numbered throughout the note in Arabic numerals, without a period.

Subsections must have serial numbers within each section. Subsection numbers consist of section and subsection numbers separated by a dot. There is no dot at the end of the subsection number. If there are points in a subsection, then the numbering of points should be within the subsection. The item number consists of the section, subsection and item numbers separated by dots. There is no dot at the end of the item number.

Clauses can be divided into subclauses, which must be numbered within each clause, for example, 1.2.1.1, 1.2.1.2, 1.2.1.3, etc.

Listings may be provided within clauses or subclauses. Each listing item is preceded by a hyphen. If necessary, references in the text to one or more listings are indicated by a lowercase letter, which is placed instead of a hyphen. The letter is followed by a closing parenthesis. To further detail the enumeration, Arabic numerals are used, each of which is followed by a closing parenthesis.

Each paragraph, subparagraph and enumeration is written with a paragraph indentation. Hyphenation of words in headings and their underlining are not allowed. There is no period at the end of headings, sections or subsections. If the title consists of two sentences, they are separated by a period. Each section of the note should begin on a new sheet.

The text of the note is performed on the forms established by the ESKD standards. Each sheet is framed with a frame having a distance of 20 mm from the left side of the sheet and 5 mm from the other three.

The distance from the frame to the borders of the text should be left at the beginning and end of the lines - at least 3 mm, from the text to the top or bottom

sides of the frame - at least 10 mm. Paragraphs in the text begin with an indent of 12.5 mm.

Presentation of the text of the note. The note should be written by the author himself. Rewriting text material from literary sources and methodological developments is not allowed. The text of the note should be short, clear and not subject to different interpretations.

The note should use scientific and technical terms and designations established by the relevant standards, and in their absence, those generally accepted in the scientific and technical literature. Throughout the entire note, it is necessary to strictly observe the uniformity of terms, designations, abbreviations of words and symbols. You should not use foreign words and terms if they can be replaced by Russian (Belarusian).

When presenting material, it is necessary to correctly divide the text into paragraphs. Points and thoughts that are closely related to each other should be highlighted in paragraphs.

All calculations contained in the text are performed using the technical regulations of the Republic of Belarus "Units of measurements approved for use on the territory of the Republic of Belarus" (TR 2007/003/BY).

When calculating empirical formulas, it is allowed to carry out calculations in the units provided for these formulas, then converting the resulting values into SI units (International System of Units).

In addition to the International System of Units, TR 2007/003/BY (Article 5) allows the use of some units that are not included in the SI: minute (min), hour (h), day (day).

Writing formulas and letter symbols. Conventional letter designations of quantities must comply with the established standard.

In formulas, symbols and designations must be clearly written so that it is clear which alphabet the letter belongs to. It is not allowed in a note to denote different concepts with the same symbols, or the same concepts with different symbols. If several quantities are denoted by the same letter, then indexing must be used to distinguish them.

Construction of tables. Digital material in the note should be presented in the form of tables. According to GOST 2.105–95 "ESKD. General requirements for text documents" tables are used for better clarity and ease of comparison of indicators. The title of the table (if any) should reflect its content, be accurate, and concise. The title should be placed above the table.

The tables of each application are designated by separate numbering in Arabic numerals with the addition of the application designation before the number. All tables in the document must be referenced in the text of the document. When referencing, you should write the word "table" indicating its number.

If the rows or columns of the table go beyond the page format, the table is divided into parts, placing one part under the other or next to it, and in each part of the table its head and side are repeated. It is allowed to replace the head or sidebar with the number of the columns or rows, respectively, while the columns and (or) rows of the first part of the table are numbered with Arabic numerals.

The word “Table” is indicated once on the left above the first part of the table, above the other parts the words “Continuation of the table” or “End of the table” are written, indicating its number.

If the table is interrupted at the end of the page and its continuation will be on the next page, in the first part of the table the lower horizontal line limiting the table is not drawn.

Tables with a small number of columns can be divided into parts and placed one part next to the other on the same page, while repeating the head of the table. It is recommended to separate parts of the table with a double line or a 2s line.

The column “Sequence number” is not allowed to be included in the table.

Design of illustrations. The number of illustrations should be sufficient to explain the text presented. Illustrations can be located both throughout the text of the document (possibly closer to the relevant parts of the text) and at the end of it. Illustrations must be made in accordance with the requirements of ESKD standards.

Illustrations of each application are designated separately by numbering in Arabic numerals with the addition of the application designation before the number, for example, “Figure A.3”.

It is allowed to number illustrations within a section. In this case, the illustration number consists of the section number and the serial number of the illustration separated by a dot, for example, “Figure 5.1”.

Compiling a list of sources used. The completion of the report is the compilation of a list of sources used in accordance with GOST 7.1–2003 “System of standards for information, library and publishing. Bibliographic record. Bibliographic description. General requirements and rules of compilation”, the basis for which is a list of all the literature that was used in the course of the work. The list of sources used is formed either in the order of appearance of links in the text of the explanatory note, or in alphabetical order of the names of the first authors and (or) titles.

Design of applications. Attachments are designed as a continuation of the note. They can be mandatory and informational. Informational applications may be of a recommended or reference nature.

Links to all attachments must be provided in the text of the note. The attachments are arranged in the order of references to them in the text of the note.

Each appendix should start on a new page with the word “Appendix” and its designation indicated at the top of the page, and below it in parentheses the word “mandatory” is written for a mandatory appendix, and “recommended” or “reference” for an informational appendix.

The application must have a title, which is written symmetrically relative to the text with a capital letter on a separate line.

Applications are designated in capital letters of the Russian alphabet, starting with A, with the exception of the letters Ё, З, Й, О, Ч, Ь, Ы, Ъ. The word “Application” is followed by a letter indicating its sequence.

If a document has one attachment, it is designated by the word “Appendix”. Attachments must have continuous page numbering in common with the rest of the document.

Conclusion is the final part of the textual material of the practice report, including the final conclusions characterizing the results of the master’s student’s work in solving the tasks assigned to him. Here it is necessary to critically characterize the decisions made and show their advantages.

Attention should be paid to recommendations for the practical use of report materials.

Responsibilities of a master's student upon completion of internship:

– provide a practice diary and a report to the practice manager from the enterprise (organization) and receive from him a review and signatures certified by a seal;

– settle accounts with the organization on material and technical issues;

– mark the date of departure, certified by signature and seal on the travel document;

– pass a differentiated test in practice within the established time frame.

Summing up the internship

In the case of a correspondence form of education, the master's student passes a differentiated test to the head of practice from the department at the session after the end of the internship.

When receiving full-time education, during the first two weeks after the end of the internship, in accordance with the schedule of the educational process, the master's student passes a differentiated test to the head of the internship from the department.

When conducting a differentiated test, the undergraduate submits an internship diary, a report on the implementation of the internship program and a written review from the immediate supervisor of the internship from the organization about the internship.

The practice mark is taken into account when summing up the results of the current certification of undergraduates.

The general results of the internship for the year are summed up at the council of the institution of higher education and the councils of faculties with the participation (if possible) of representatives of organizations.

A master's student who has not completed the internship program, who has received a negative review from the internship supervisor from the organization, or an unsatisfactory mark when passing a differentiated test to the internship supervisor from the department, is re-sent to practice during his free time from studying. At the same time, the duration of practice provided for by the curriculum is maintained.

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

LITERATURE

Basic

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Appedix A

Ministry of Agriculture and Food
of the Republic of Belarus

Educational Institution
"Belarusian State Agrarian Technical University"

Department_____

The report is protected with a graded assessment _____

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(teachers' signatures)

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(date)

REPORT
in technological practical training
for specialty
7-06-0812-01 “Technical support of agricultural production"

Master's degree student _____
(signature) (full name)

_____ _____
(date) (specialty)

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(faculty) (group)

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(course)

Company (organization) practice supervisor

_____
(full name)
University practice supervisor

_____
(full name)

Minsk
20____

Appedix B

Sample list of individual tasks

1. Study of innovative technological processes and operations for tillage and machines used.
2. Study of innovative technologies and methods of applying fertilizers using precision farming systems and used machines.
3. Study of innovative technologies and methods of sowing and planting agricultural crops using precision farming systems and used machines.
4. Study of innovative technologies and methods of controlling pests, diseases and weeds of agricultural crops using precision farming systems and used machines.
5. Study of innovative technologies for preparing feed from grasses and seeded crops and the machines used.
6. Study of innovative technologies for harvesting grain, leguminous and cereal crops, analysis of work processes, designs of combine harvesters.
7. Study of innovative technologies and methods of post-harvest grain processing, analysis of designs and operating processes of grain cleaning sorting machines.
8. Study of innovative technologies and methods of grain drying, analysis of designs, operating processes of dryers and grain cleaning drying complexes.
9. Study of innovative technologies for harvesting root tuber crops, analysis of work processes, designs of machines for harvesting and post-harvest processing of root tuber crops.
10. Study of innovative flax harvesting technologies, analysis of work processes, designs of flax harvesting machines.
11. Analysis of the interaction of the working parts of agricultural machines with the object being processed, directions and ways of their improvement.
12. Study of the technologies used for diagnosing and maintaining machines at an enterprise (organization) and developing proposals for their improvement.
13. Analysis of the existing organization of machine maintenance at the production and technical base of the enterprise (organization).
14. Study of the state of the organization of write-off and disposal of agricultural machinery at the enterprise (organization), development of measures to improve it.
15. Analysis of the mechanized process of preparing and distributing feed on a livestock farm.
16. Study of modern technological processes for organizing machine milking of animals.
17. Mastering modern technical means of primary milk processing in a livestock farm.
18. Analysis of technical means and processes for cooling milk.

AGREED BY:

Dean
of agromechanical faculty _____ V.B. Lovkis «___» _____2023