MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATION OF THE REPUBLIC OF UZBEKISTAN

TASHKENT STATE UNIVERSITY OF ECONOMICS

"APPROVED"

Dean of the Faculty of Management

D.ISMAILOV

June 30, 2026

PRODUCTION MANAGEMENT

CURRICULUM SYLLABUS OF THE DISCIPLINE

Bachelor's degree (full-time mode of study)

Field of knowledge:	400,000	Business, Management and Law
Field of education:	410000	Business and Management
Direction of education:	60410800	Management

Tashkent – 2026

Dean (Approved)
D.ISMAILOV

This syllabus was approved by the decision of the Council of the Faculty of Management (Minutes No. T-10 dated “30” June 2026).

This syllabus is presented by the Department of "Innovation Management" of Tashkent State University of Economics (Minutes of the Department Meeting No. 44 dated “26” June 2026).

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1. Subject Information

Subject/Module Code PROMAN515	**Academic Year** 2026-2027	**Semester** 5	**ECTS – Credits** 5.00
Subject/Module Type Compulsory	**Language of Instruction** English	**Curriculum Sequence Number**	**Weekly Lesson Hours** 1

Subject Name	Total Workload (hours)	Total Classroom Activities – 60 hours, of which:			Independent Study (hours)	Course Paper
		Lecture	Practical	Lab		
Production Management	150	30	30	0	90	-

2. Subject Content

Subject Goal – "Production Management" Effective management of enterprises, industries, and firms remains one of the important tasks in the subject , and this subject is planned to be taught in the fifth semester of the third year. Increasing production efficiency requires modern managers to have high skills and modern knowledge in management science. This requires managers to improve their knowledge in their specialty and to have practical skills in the field of production management. The main focus of the discipline is on developing operational strategies for enterprises, implementing JIT and Kaizen systems in enterprises, effective management of business processes , personnel development , and solutions to problems that arise during the implementation of operational strategies .

Subject Tasks – The purpose of teaching the subject is to develop the necessary skills for independent application of the theoretical and practical foundations of production management, the laws and principles of the market economy. In order to better control the application of the necessary methods and results, students are required to complete practical and situational tasks that can be discussed in subsequent lessons. They are also required to independently read the textbook or other sources, conduct research based on the theoretical knowledge gained, and make presentations based on the scientific results obtained.

3. Prerequisites for the subject

1.	Management
2.	Operations Management
3.	Quality Management

4. Learning Outcomes (LO)

Professional Competencies:	
TN1	Deeply understands the essence of modern production systems and can explain their importance in today's competitive economic environment. The student will have a complete understanding of the basic concepts, principles and processes of production management.
TN2	Develops the skills necessary to effectively analyze and synthesize the many interdependencies inherent in complex socio-economic production systems.
TN3	. To have the ability to identify situations in the production system environment that suggest the use of certain quantitative methods to help manage production processes and make decisions on strategy.
TN4	. Understand management responsibility for operations, even when production is outsourced or occurs in areas far from corporate headquarters
TN5	Master the methods of determining, controlling and accounting for raw materials and material reserves, as well as gain practical knowledge in warehouse management, determining inventory levels and effectively organizing material flow.
Skills:	
TN6	. Describes the possibilities of integrating scientific and technological advances into production processes, analyzes the impact of innovative technologies and digital transformation on production efficiency.
TN7	Can apply basic methods for determining production costs and assessing economic efficiency, including differentiating between basic, additional and general plant costs and calculating profitability
TN8	Master strategic decision-making processes through practical training and games (simulations) related to production, through which they interactively assess variability, risks, and efficiency factors in production

5. Subject Content and Forms of Study:		**Hours**
Lecture (L)		**30**
M1	**Content, goals and objectives of the "Production Management" course.** 1. The concept of production management. 2. History of the development of production management. 3. Efficient management from "input" to "output" in the production system. 5. Key areas for achieving cost minimization and profit maximization	2
M2	**Structure and content of the organization's management system.** 1. Structure of the organization's management system. 2. The external and internal environment of the organization's management system. 3. Scientific justification of the organization's management system. 4. Targeted subsystems of the organization's management system. 5. Managed and controlled subsystems of the organization's management system.	2
M3	**Production planning and forecasting.** 1. The essence and principles of planning processes. 2. Requirements for the quality of plans. Organization of planning work. 3. The content and procedure for developing strategic plans of the organization. 4. SWOT	2

5. Subject Content and Forms of Study:		Hours
	analysis in strategic planning. 5. Features of quick calendar scheduling. 6. Forecasting production	
M4	**Project management in manufacturing.** 1. Project concept and feasibility study 2. Strategic planning of production projects and resource optimization 3. Project quality control and standardization systems in production 4. Digital technologies and automated systems in project management 5. Risk management and cost-effectiveness assessment in production projects	2
M5	**Managing resources, materials, and inventory in manufacturing plants.** 1. Fundamentals of resource supply strategy. 2. Material flow in manufacturing plants 3. Types of reserves in production 4. Inventory management in production 5. Resource efficiency analysis 6. Logistics functions in resource management.	2
M6	**Design and organization of production processes.** 1. Types of production. 2. Stages of organizing production. 3. Tasks and methods of organizing basic production. 4. Streamline and its elements. 5. Organizational and technological preparation of production.	2
M7	**Fundamentals of innovation activity of a manufacturing enterprise.** 1. The essence, classification and coding of news and innovations. 2. Main areas of innovative activity 3. Stages of the innovation process 4. The innovative potential of the enterprise. 5. Key indicators of innovation activity and efficiency.	2
M8	**Product quality management in manufacturing plants.** 1. The essence and system of product quality indicators. 2. Basic steps of quality management 3. International Quality Systems (ISO) 4. Modern methods of quality management 5. The economic effectiveness of quality management. 6. Product and quality system certification.	2
M9	**Product and service design in manufacturing enterprises.** 1. Selection of goods and services 2.New product creation or product development 3. Service design 4.Product documentation 5. Creating products based on consumer requirements.	2
M10	**Production costs, cost and value management.** 1. Types of production costs. 2. Classification of expenses. 3. Grouping the costs that make up the cost of producing a product. 4. Profit and its maximization. 5. Profitability and ways to increase it. 6. Sources and factors of product cost reduction.	4
M11	**Maintenance, reliability and production continuity in manufacturing plants.** 1. The strategic importance of technical service equipment reliability 2. Preventive service 3.Repair ability 4.Reduce production interruptions.	2
M12	**Location and production capacity of manufacturing plants.** 1. The strategic importance of the location of the enterprise 2. Proximity of the company's location to the market, suppliers, and labor resources 3. Location assessment methods 4.Production area layout 5.Production capacity.	2
M13	**Organization of wages and labor payment system in manufacturing enterprises.** 1. Economic description of the salary. 2. Socio-economic functions of wages. 3. Tariff	2

5. Subject Content and Forms of Study:		Hours
	system and its main elements. 4. Normative documents regulating the labor remuneration system . 5. Control the use of labor resources and the labor fund.	
M14	**Advanced manufacturing systems and digital technologies.** 1. Conceptual foundations of Industry 4.0 and advanced manufacturing systems. 2. Integration of cyber-physical systems (CPS) and Internet of Things (IoT) technologies. 3. The importance of "Digital Twins" and modeling in manufacturing. 4. Optimization of additive technologies (3D printing) and robotics complexes. 5. Prospects for industrial safety and artificial intelligence (AI) in the digital economy .	2
Practical Session (P)		**30**
A1	**Content, goals and objectives of the "Production Management" course.** 1. The concept of production management. 2. History of the development of production management. 3. Efficient management from "input" to "output" in the production system. 5. Key areas for achieving cost minimization and profit maximization	2
A2	**Structure and content of the organization's management system.** 1. Structure of the organization's management system. 2. The external and internal environment of the organization's management system. 3. Scientific justification of the organization's management system. 4. Targeted subsystems of the organization's management system. 5. Managed and controlled subsystems of the organization's management system.	2
A3	**Production planning and forecasting.** 1. The essence and principles of planning processes. 2. Requirements for the quality of plans. Organization of planning work. 3. The content and procedure for developing strategic plans of the organization. 4. SWOT analysis in strategic planning. 5. Features of quick calendar scheduling. 6. Forecasting production	2
A4	**Project management in manufacturing.** 1. Project concept and feasibility study 2. Strategic planning of production projects and resource optimization 3. Project quality control and standardization systems in production 4. Digital technologies and automated systems in project management 5. Risk management and cost-effectiveness assessment in production projects	2
A5	**Managing resources, materials, and inventory in manufacturing plants.** 1. Fundamentals of resource supply strategy. 2. Material flow in manufacturing plants 3. Types of reserves in production 4. Inventory management in production 5. Resource efficiency analysis 6. Logistics functions in resource management.	2
A6	**Design and organization of production processes.** 1. Types of production. 2. Stages of organizing production. 3. Tasks and methods of organizing basic production. 4. Streamline and its elements. 5. Organizational and technological preparation of production.	2

5. Subject Content and Forms of Study:		Hours
A7	**Fundamentals of innovation activity of a manufacturing enterprise.** 1. The essence, classification and coding of news and innovations. 2. Main areas of innovative activity 3. Stages of the innovation process 4. The innovative potential of the enterprise. 5. Key indicators of innovation activity and efficiency.	2
A8	**Product quality management in manufacturing plants.** 1. The essence and system of product quality indicators. 2. Basic steps of quality management 3. International Quality Systems (ISO) 4. Modern methods of quality management 5. The economic effectiveness of quality management. 6. Product and quality system certification.	2
A9	**Product and service design in manufacturing enterprises.** 1. Selection of goods and services 2.New product creation or product development 3. Service design 4.Product documentation 5. Creating products based on consumer requirements.	2
A10	**Production costs, cost and value management.** 1. Types of production costs. 2. Classification of expenses. 3. Grouping the costs that make up the cost of producing a product. 4. Profit and its maximization. 5. Profitability and ways to increase it. 6. Sources and factors of product cost reduction.	4
A11	**Maintenance, reliability and production continuity in manufacturing plants.** 1. The strategic importance of technical service equipment reliability 2. Preventive service 3.Repair ability 4.Reduce production interruptions.	2
A12	**Location and production capacity of manufacturing plants.** 1. The strategic importance of the location of the enterprise 2. Proximity of the company's location to the market, suppliers, and labor resources 3. Location assessment methods 4.Production area layout 5.Production capacity.	2
A13	**Organization of wages and labor payment system in manufacturing enterprises.** 1. Economic description of the salary. 2. Socio-economic functions of wages. 3. Tariff system and its main elements. 4. Normative documents regulating the labor remuneration system . 5. Control the use of labor resources and the labor fund.	2
A14	**Advanced manufacturing systems and digital technologies.** 1. Conceptual foundations of Industry 4.0 and advanced manufacturing systems. 2. Integration of cyber-physical systems (CPS) and Internet of Things (IoT) technologies. 3. The importance of "Digital Twins" and modeling in manufacturing. 4. Optimization of additive technologies (3D printing) and robotics complexes. 5. Prospects for industrial safety and artificial intelligence (AI) in the digital economy .	2

6. Independent Study Assignments

№	Topic / Assignment Name	Hours
1	**Content, goals and objectives of the "Production Management" course.** 1. The concept of production management. 2. History of the development of production management. 3. Efficient	6

№	Topic / Assignment Name	Hours
	management from "input" to "output" in the production system. 5. Key areas for achieving cost minimization and profit maximization	
2	**Structure and content of the organization's management system.** 1. Structure of the organization's management system. 2. The external and internal environment of the organization's management system. 3. Scientific justification of the organization's management system. 4. Targeted subsystems of the organization's management system. 5. Managed and controlled subsystems of the organization's management system.	6
3	**Production planning and forecasting.** 1. The essence and principles of planning processes. 2. Requirements for the quality of plans. Organization of planning work. 3. The content and procedure for developing strategic plans of the organization. 4. SWOT analysis in strategic planning. 5. Features of quick calendar scheduling. 6. Forecasting production	6
4	**Project management in manufacturing.** 1. Project concept and feasibility study 2. Strategic planning of production projects and resource optimization 3. Project quality control and standardization systems in production 4. Digital technologies and automated systems in project management 5. Risk management and cost-effectiveness assessment in production projects	6
5	**Managing resources, materials, and inventory in manufacturing plants.** 1. Fundamentals of resource supply strategy. 2. Material flow in manufacturing plants 3. Types of reserves in production 4. Inventory management in production 5. Resource efficiency analysis 6. Logistics functions in resource management.	8
6	**Design and organization of production processes.** 1. Types of production. 2. Stages of organizing production. 3. Tasks and methods of organizing basic production. 4. Streamline and its elements. 5. Organizational and technological preparation of production.	8
7	**Fundamentals of innovation activity of a manufacturing enterprise.** 1. The essence, classification and coding of news and innovations. 2. Main areas of innovative activity 3. Stages of the innovation process 4. The innovative potential of the enterprise. 5. Key indicators of innovation activity and efficiency.	8
8	**Product quality management in manufacturing plants.** 1. The essence and system of product quality indicators. 2. Basic steps of quality management 3. International Quality Systems (ISO) 4. Modern methods of quality management 5. The economic effectiveness of quality management. 6. Product and quality system certification.	8
9	**Product and service design in manufacturing enterprises.** 1. Selection of goods and services 2.New product creation or product development 3. Service design 4.Product documentation 5. Creating products based on consumer requirements.	6
10	**Production costs, cost and value management.** 1. Types of production costs. 2. Classification of expenses. 3. Grouping the costs that make up the cost of producing a product. 4. Profit and its maximization. 5. Profitability and ways to increase it. 6. Sources and factors of product cost reduction.	8

№	Topic / Assignment Name	Hours
11	**Maintenance, reliability and production continuity in manufacturing plants.** 1. The strategic importance of technical service equipment reliability 2. Preventive service 3.Repair ability 4.Reduce production interruptions.	6
12	**Location and production capacity of manufacturing plants.** 1. The strategic importance of the location of the enterprise 2. Proximity of the company's location to the market, suppliers, and labor resources 3. Location assessment methods 4.Production area layout 5.Production capacity.	6
13	**Organization of wages and labor payment system in manufacturing enterprises.** 1. Economic description of the salary. 2. Socio-economic functions of wages. 3. Tariff system and its main elements. 4. Normative documents regulating the labor remuneration system . 5. Control the use of labor resources and the labor fund.	4
14	**Advanced manufacturing systems and digital technologies.** 1. Conceptual foundations of Industry 4.0 and advanced manufacturing systems. 2. Integration of cyber-physical systems (CPS) and Internet of Things (IoT) technologies. 3. The importance of "Digital Twins" and modeling in manufacturing. 4. Optimization of additive technologies (3D printing) and robotics complexes. 5. Prospects for industrial safety and artificial intelligence (AI) in the digital economy .	4
	Total:	**90**

Note:

7. Educational Technologies and Methods

• performing practical work based on real situations;
• writing essays, theses, and articles;
• solving situational tasks (case studies);
• process-oriented education;
• participate in discussions ;
• work in small groups;
• project work execution;
• perform independent work;
• preparing a presentation;
• solving tests of different levels;
• conducting a survey;
• problem solving.
• developing decision-making skills through simulation and interactive methods;
• Study real management processes by participating as an observer in enterprises and organizations

8. Requirements for acquiring credits by students

Assessment of students' knowledge in this subject (module) is based on the completion of educational materials (independent work, tests and written assignments) during the semester. During the lesson, students are assessed on a 100-point system. Of these, 20 points are given for the student's activity in practical classes, independent work and current results, 30 points for intermediate control, and 50 points for final control. The form of final control is determined in agreement with the department for the organization of academic activities. Current, intermediate and control tasks are distributed as follows:

PROCEDURE OF ASSESSMENT OF STUDENTS' KNOWLEDGE

Types of Rating Assessment	Max. score	Assignments to be completed	Deadline for completing tasks
Current control, of which	**20**	**According to the schedule of the educational process**	
Participation in class sessions	10	Depending on the nature of the subject, oral questions, tests, interviews, control work, colloquiums, case studies, case studies or fables, situational assignments, projects, term papers, and homework in seminars, laboratories, and practical classes.	According to the lecture time in the subject's class schedule
Independent study, of which	10	Students' independent work is organized in two directions - in the classroom and outside the classroom.	
1-independent study	5	1000–1200 word essay or analytical article on one of the independent study topics	Until the last week of classes according to the academic schedule
2-independent study	5	preparation of project work (in the form of infographics, slides or video presentation) and defense	Until the last week of classes according to the academic schedule
Midterm control	**30**	**In the form of a presentation (work in small groups)**	**In accordance with the schedule of the educational process, midterm control is organized during the week through the HEMIS information system or directly in the educational auditorium.**
Final control	**50**	**Test**	**In accordance with the schedule of the educational process, midterm control is**

Types of Rating Assessment	Max. score	Assignments to be completed	Deadline for completing tasks
			organized during the week through the HEMIS information system or directly in the educational auditorium.
Total	**100**		

The student's total score in a subject during the semester is calculated using the following formula in accordance with the rules established for each type of control:

YaB =JN+ON+YaN

where: JN – current control; ON – intermediate control; ЯN – final control.

In this case, (JN+ON)≥ 30 points; YaN≥30 points are required.

Note: A student who fails to score at least 60 percent (30 points) of the total points (50 points) allocated for the current control and intermediate control

will not be allowed to enter the final control. In addition, a student who participates in the final control and fails to score at least 60 percent (30 points) of the total points (50 points) allocated for the final control (i.e., receives an unsatisfactory grade) is considered to have not mastered the relevant credits in this subject and is considered an academic debtor.

9. Criteria for assessment of students' knowledge

a) For a grade of 5 (excellent), the student's level of knowledge must meet the following:

– can fully explain the essence and content of the subject;

– adheres to scientificity and logic in presenting systematic management topics, avoiding errors and confusion;

– can apply theoretical knowledge in various management situations;

– can answer the questions posed clearly and concisely;

– has fully mastered independent tasks and practical skills;

– adheres to a systematic approach and coherence;

b) For a grade of 4 (good), the student's level of knowledge must meet the following:

– understands the essence and content of the subject, does not allow serious confusion in explaining the topics;

– understands the practical significance of the subject;

– completes the assigned tasks and assignments within the framework of the curriculum;

– can answer questions correctly and complete independent assignments in full;

– tries to master practical skills and qualifications;

c) For a grade of 3 (satisfactory), the student's level of knowledge must meet the following:

– has a general understanding of science;

– covers topics in a narrow range, allowing for some confusion;

– completes independent assignments, but the presentation is not fluent;

– answers questions vaguely;

d) Under the following cases, the student's level of knowledge may be graded with an unsatisfactory grade of 2:

– has no idea about the subject;

– has not completed independent assignments;

– has clearly copied texts from others;

– cannot answer questions about the subject;

Note: Student knowledge is assessed on a 100-point scale: current control – 20 points, intermediate control – 30 points, final control – 50 points. The student's overall score is calculated using the following formula: YaB = JN + ON + YaN (JN – current control, ON – intermediate control, YaN – final control). A student who has not scored at least 60 percent of the points allocated for current and intermediate controls and the final control score is considered an academic defaulter.

10. References

Basic References:

1.	I.K Yakhyayeva Operations Management. [Textbook] – Innovative Development Publishing House, 2023. – 316 p.
2.	G. Sh. Djuraeva . Proizvodsvennyy menedzment: uchebnoe posobie. [Study guide] – Innovative Development Publishing House, 2023. – 320 p.
3.	3. Uzair Khaleeq uz Zaman, Ali Siadat Aamer Handbook of Manufacturing Systems and Design. [Textbook] – Innovative Development Publishing House, 2024. – 323 p.

Additional References:

1.	NQYuldoshev, IKYakhyayeva "Operations Management". Textbook. T.: "Innovative Development Publishing House" 2022. - 244 p. (This textbook is available in PDF format in the university's ARM).

2.	I.K. Yakhyayeva “ Improving resource efficiency and innovative development mechanisms based on cost-effective strategies in industry ” . Monograph. / “JAHONA NASHR” publishing house, 2026. – 124 p. (This monograph is available in PDF format in the university ARM).
3.	Kadirkhodjaeva NR Innovative strategic management in industrial enterprises. Monograph./"JAHONA NASHR" publishing house, 2026 -y. - 128 p. (This monograph is available in PDF version in the university ARM).
Internet resources:	
1.	www.gov.uz - State portal of the Republic of Uzbekistan.
2.	www.lex.uz - National database of legislative documents of the Republic of Uzbekistan.
3.	http://ima.uz - Intellectual Property Agency under the Ministry of Justice of the Republic of Uzbekistan
4.	https://mininnovation.uz - Ministry of Innovative Development of the Republic of Uzbekistan.
5.	https://stat.uz/uz/ - State Statistics Committee of the Republic of Uzbekistan.

11. Academic Requirements

The relationship between the teacher and the student should be sincere and impartial, the student sends the assignments completed independently in the prescribed manner via e-mail or learning platform and receives the answer in the same manner. Assignments not completed within the prescribed period will not be accepted again. The teacher checks the assignments completed by the student in an anti-plagiarism program, works with an originality level of less than 70 percent will not be accepted for assessment. The student's completed assignment is allowed to be checked in an anti-plagiarism program up to 2 times, if the result is not up to the required level, the work will not be accepted.

12. Application of the program to other study modes

This curriculum is designed for full-time education, and based on it, working curricula will be developed for part-time, evening, and distance education.