COURSE DESCRIPTION CARD - SYLLABUS

Course name
Organization of technical preparation of production [N1Log2>OTPP]

Course

Field of study
Logistics

Year/Semester
2/4

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
part-time

Requirements
elective

Number of hours

Lecture
8

Laboratory classes
0

Other
0

Tutorials
10

Projects/seminars
0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

Student has knowledge of business processes, design, organization and implementation of the production processes, as well as in the area of design, evaluation, verification and implementation of production. Student is responsible and can interact with others and work in a team. Student understands the need for lifelong learning and acting in accordance with the rules.

Course objective

Presenting knowledge of theoretical and practical problems connected with organization of production preparation and selected methods applied in this scope.

Course-related learning outcomes

Knowledge:
1. Student knows the basic concepts in the field of technical preparation of production [P6S_WG_05]
2. Student knows basic issues in the life cycle of socio-technical systems and the life cycle of industrial products [P6S_WG_06]
3. Student knows the basic issues in the field of construction, technological and organizational preparation of production [P6S_WG_08]

4. Student knows the basic relationships applicable in the area of technical preparation of production [P6S_WK_04]
5. Student knows the basic phenomena and contemporary trends characteristic of technical preparation of production [P6S_WK_05]
6. Student knows best practices within the product life cycle and production preparation [P6S_WK_06]

Skills:
1. Student is able to search based on the subject literature and other sources and present in an orderly manner information regarding a problem falling within the scope of technical preparation of production [P6S_UW_01]
2.Student is able to use appropriate experimental and measurement techniques, including computer simulation, to solve a problem included in the preparation of production and product [P6S_UW_03]
3. Student is able to prepare the means of work necessary to work in an industrial environment and knows the safety rules related to this work [P6S_UW_05]
4. Student is able to assess and critically analyze in economic terms a selected problem that falls within the framework of construction, technological and organizational preparation of production [P6S_UW_06]
5. Student is able to design an object, system or production process using appropriate methods and techniques [P6S_UW_07]
6. Student is able to present, using appropriately selected means, a problem within the scope of issues related to technical preparation of production [P6S_UK_01]
7. Student is able to identify changes in requirements, standards, regulations, technical progress and labor market reality in the field of production preparation [P6S_UU_01]

Social competences:
1. Student is aware of the importance of knowledge in the area of production preparation (processes and products) in solving cognitive and practical problems [P6S_KK_02]
2. Student is aware of initiating activities related to the formulation and transfer of information and cooperation in society [P6S_KO_02]
3. Student is aware of responsible fulfillment, correct identification and resolution of dilemmas related to the profession of logistics [P6S_KR_01]
4. Student is aware of cooperation and team work to solve problems within the scope of technical preparation of production [P6S_KR_02]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture:
Rating forming: in the range of lectures based on oral answers to questions about the material covered in the current and previous lectures. Rating summary: exam, open and closed questions, passing threshold: 50% of the points.
Exercises:
Rating forming: on the basis of an assessment of the current progress of tasks.
Rating summary: grade point average, passing threshold: 50% of the points.

Programme content

Lecture:
Characteristics of the product and production process. Objectives, tasks and functions of product production preparation in industrial company. Organization structure of product preparation units. Systems supporting the design and production of products.

Exercises:
Tasks related to the organization and improvement of production.

Course topics

Lecture:
Production process components, range of tasks. Objectives, tasks and functions of product production preparation in industrial company. Constructive, technological and organizational preparation of the

production - planning and designing, far-reaching and current activity.
Systems supporting the design and production of products. Curve of product life cycle. Costs of the production preparation. Documentation of production preparation and flow. Organization structure of product preparation units. Innovative processes in activity of industrial company.

Exercises:
Tasks related to the organization and improvement of production - multi-criteria assessment, consisting in the presentation of production flow norms, preparation of the production process structure and company structure in terms of process organization and the scope of technical, construction, technological and organizational preparation, mapping the production process.

Teaching methods

Lecture: multimedia lecture, case study analysis.
Projects: multimedia lecture, work in teams, problem-solving tasks set by the teacher, presentation of solutions and forum discussion group.

Bibliography

Basic:
1. Kawecka-Endler A., Organizacja technicznego przygotowania produkcji - prac rozwojowych, Wydawnictwo Politechniki Poznańskiej, Poznań 2004.
2. Karpiński T., Inżynieria produkcji, WNT, Warszawa 2004.
3. Szatkowski K., Przygotowanie produkcji, Wydawnictwo Naukowe PWN, Warszawa 2013.
4. Kawecka-Endler A., Wpływ technicznego przygotowania produkcji na kształtowanie jakości wyrobu [w:] Grudowski P., Preihs J., Waszczur P., Współczesne nurty w inżynierii jakości, Wydawnictwo Politechniki Gdańskiej, Gdańsk 2005, s. 235-242.
5. Kawecka-Endler A., Montaż wyrobów - aspekty ergonomiczne i jakościowe, Zeszyty Naukowe Organizacja i Zarządzanie, nr 43/2006, s. 33-52.

Additional:
1. Durlik I., Inżynieria zarządzania. Strategia i projektowanie systemów produkcyjnych, cz.2, Agencja Wydawnicza Placet, Warszawa 2005.
2. Marczewska-Kuźma R., Kawecka-Endler A., Analiza zmian zachodzących w relacji klient - przedsiębiorstwo, Przegląd Organizacji, nr 12/2015.
3. Reliability centered maintenance framework for manufacturing and service company: functional oriented / Ireneusz Gania (WIZ), Michał Fertsch (WIZ), K.R. Kumara Jayathilaka // W: 24th International Conference on Production Research (ICPR 2017) / red. Marek Fertsch (WIZ), Agnieszka Stachowiak (WIZ), Beata Mrugalska (WIZ), Joanna Oleśków-Szłapka (WIZ), Łukasz Hadaś (WIZ), Piotr Cyplik (WIZ), Paulina Golińska-Dawson (WIZ): DEStech Publications, Inc., 2017 - s. 721-725

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	18	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	32	1,00