

Methods of Organizaing Production Processes - opis przedmiotu

Informacje ogólne	
Nazwa przedmiotu	Methods of Organizaing Production Processes
Kod przedmiotu	06.1-WM-ER-MiBM-03_18
Wydział	Wydział Mechaniczny
Kierunek	WM - oferta ERASMUS
Profil	-
Rodzaj studiów	Program Erasmus
Semestr rozpoczęcia	semestr zimowy 2021/2022

Informacje o przedmiocie	
Semestr	1
Liczba punktów ECTS do zdobycia	2
Typ przedmiotu	obowiązkowy
Język nauczania	angielski
Sylabus opracował	dr inż. Joanna Cyganiuk

Formy zajęć					
Forma zajęć	Liczba godzin w semestrze (stacjonarne)	Liczba godzin w tygodniu (stacjonarne)	Liczba godzin w semestrze (niestacjonarne)	Liczba godzin w tygodniu (niestacjonarne)	Forma zaliczenia
Wykład	15	1	-	-	Egzamin
Laboratorium	15	1	-	-	Zaliczenie na ocenę

Cel przedmiotu

The aim of the course is to familiarize students with production systems, parameters and indicators of production processes, with their control, management and productivity.

Wymagania wstępne

Manufacturing Processes

Zakres tematyczny

The content of the lecture:

Basic notions, manufacturing systems and processes, Parameters of production processes. Types, forms and variants of the organization of production. Duty of production, possibilities and production reserves. Production control and planning. Rules of the control of production flow. Methods of intercellular and intracellular production flow control. Modern methods of production control. Production management. Methods and techniques of organization and management. Styles of management. Information in management. Rating of productivity - notions and indicators. Factors improving productivity.

The content of the laboratory:

Ordering vertexes in operation networks. Calculations in the network activities. PERT networks - calculations. Production costs. Determining the size of the production batch. The parameters of work and work means: machine and worker. Parameters of workstation: output parameters– simple and complex. Output parameters: production cycle: serial, serial-parallel and parallel run of details creating. Production stock in progress – determination. Determining types of production. Calculations of parameters of details and details in operation. Scheduling work in a company. Preparation of parameters for production scheduling - calculations. Develop work schedules for machines and workers. Linear programming.

Metody kształcenia

Lecturers are given with the use of multimedia technics. Work with specialist literature – textbooks, professional journals.

Laboratory are given with the use of computer software and in the written way. Individual and group job during the realization of classes exercises.

Efekty uczenia się i metody weryfikacji osiągnięcia efektów uczenia się

Opis efektu	Symbole efektów	Metody weryfikacji	Forma zajęć
The student can use analytical and computer methods to formulate and solve problems of organization of production processes.		wykonanie sprawozdań laboratoryjnych	Laboratorium
The student has a basic knowledge of the methods of organizing production processes, determining production and economic indicators related to running a production.		egzamin - ustny, opisowy, testowy i inne	Wykład

Opis efektu	Symbole efektów	Metody weryfikacji	Forma zajęć
The student has knowledge necessary to understand determinants of organizational and non-technical engineering activities related to the production processes and the knowledge of how to consider determinants in engineering practice.		egzamin - ustny, opisowy, testowy i inne	Wykład
The student can properly determine priorities for implementation of tasks specified by themselves or others.		wykonanie sprawozdań laboratoryjnych	Laboratorium
The student can identify and choose appropriate indicators describe the production process in the range of production organization, he can interpret the results and draw conclusions. He can also suggest improvements and enhancements to existing organizational solutions in the manufacturing plant.		- test - wykonanie sprawozdań laboratoryjnych	Laboratorium
The student can integrate knowledge of the field of science relevant to Mechanical Engineering, and taking into account non-technical aspects.		- test - wykonanie sprawozdań laboratoryjnych	Laboratorium
The student can identify factors affecting the economic aspect of making decision- in a manufacturing company.		- test - wykonanie sprawozdań laboratoryjnych	Laboratorium
The student can interact and work in a group as well as independently, he can work as a leader or as a member of a larger group.		wykonanie sprawozdań laboratoryjnych	Laboratorium

Warunki zaliczenia

To get a credit the student has to pass all course forms.

Literatura podstawowa

1. Kiran D.R., Work Organization and Methods Engineering for Productivity, Butterworth-Heinemann, USA 2020,
2. Creese R., Introduction to Manufacturing processes and materials, Taylor and Francis, USA 1999,
3. 2. Gerwin D, Kolodny H., Management of Advanced Manufacturing Technology: Strategy, Organization, and Innovation, New York 1992,

Literatura uzupełniająca

Uwagi

Zmodyfikowane przez dr Katarzyna Skrzypek (ostatnia modyfikacja: 29-04-2021 11:00)

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