Course name:

PLANING AND AUDITING PRODUCTION PROCESSES

| ECTS | 2 | |
|--|--|--|
| Course status | complementary | |
| Course final assessement/evaluation of | credit | |
| outcomes | | |
| Prerequisites | passing the subject production management (or similar) | |

Main field of study: PRODUCTION ENGINEERING

| PRODUCTION ENGINEERING | |
|---------------------------------------|------------------|
| Profile of study | General-academic |
| The code of studies (education level) | SI (bachelor) |
| Semester of studies | winter / summer |
| Language of instruction | English |

Course offered by:

| Name of faculty offering the course | Faculty of Production Engineering and Energetics |
|--|---|
| Name of department offering the course | Department of Production Engineering, Logistics and Applied Informatics |
| Course coordinator | Aleksandra Lis |

Learning outcomes of the course:

| Symbol of outcome | | Reference to | |
|---|---|------------------------------------|-------------|
| | Description of learning outcome | main field of study outcomes | discipline# |
| | KNOWLEDGE – student knows and/or understands: | | , |
| YAT_W1 | principles of planning and organizing production processes and principles of conducting technological audits | ZIP1_W12 | TZ, SZ |
| | SKILLS – student is able to: | | |
| YAT_U1 | plan a process audit and develop checklists | ZIP1_U07 | TZ |
| YAT_U2 | estimate and assess the use of production capacity, analyze production costs and estimate economic indicators characterizing production processes | ZIP1_U13 | TZ, SZ |
| SOCIAL COMPETENCE- student is ready to: | | | |
| YAT_K1 | responsible role of an engineer in solving problems related to the company's capabilities and production capabilities | ZIP1_K04 | TZ |

Teaching contents:

| Lectures 15 | hours |
|---|-------|
| Topics of the lectures Production planning methods. Types and features of audit and audit planning. Technology audit methodology - selection of methodology for the purpose and scope of the a Comparative and causal analysis. | udit. |

The role and functions of processes and process reengineering.

Process audit, process measures, checklists, reports.

The impact of processes on the company's operating results.

| Accomplished learning outcomes | YAT_W1; YAT_K1 |
|--|--|
| Verification methods, rules and criteria of outcome assessment | Written assignement Final grade share - 40% |

15

•••

hours

hours

Classes

| | Audit planning and design. | | |
|--|--|--|--|
| | Selection of the audit methodology to the purpose and scope of the audit. | | |
| Topics of the classes | Comparative analysis using selected methods for a selected production processes. | | |
| 0103303 | Causal analysis using selected methods for a selected production process. | | |
| | Assessment of the efficiency of production processes; preparation of recommendations and final report. | | |
| Accomplished learning outcomes | | YAT_U1, YAT_U2 | |
| Verification methods, rules and criteria of outcome assessment | | together with participation in the final asessement (in %) | |

Seminars

| Topics of the seminars | |
|--|--|
| Accomplished learning outcomes | symbol of learning outcomesof the seminars |
| Verification methods, rules and criteria | of Written assignement (group project) |
| outcome assessment | Final grade share - 60% |

References:

| Basic Welch, K. (2004). The process approach audit checklist for manufacturing. Quality Press. (2006). The fundamentals of production planning and control. Upper Saddle River, NJ, U Pearson/Prentice Hall. | |
|--|---|
| Supplementary | Russell, J. P. (2006). Process auditing and techniques. Quality Progress, 39(6), 71-74. |

Structure of learning outcomes:

| Discipline: # | t (provide appripriate symbol) | | | | ECTS ^{**} |
|--|---------------------------------|----|-------|--------------------|--------------------|
| Discipline: # (provide appripriate symbol - if the course relates to more than one academic disc | | | | ECTS ^{**} | |
| Structure o | f student activities: | | | | |
| Contact hou | irs | 32 | hours | 1,3 | ECTS ^{**} |
| including: | lectures | 15 | hours | | |
| | classes and seminars | 15 | hours | | |
| | consultations | 1 | hours | | |
| | participation in research | 0 | hours | | |
| | mandatory trainerships | 0 | hours | | |
| | participation in examinations | 1 | hours | | |
| e-learning | | 0 | hours | 0 | ECTS** |
| student own | work | 18 | hours | 0,7 | ECTS ^{**} |

* where 10 hours of classes = 1 ECTC (in case of 15 h \rightarrow 2 ECTS) ** stated with an accuracy to 0.1 ECTS, where 1 ECTS = 25 - 30 hours of classes # academic discipline code: RZ - animal science and fishery, PB - biological sciences, etc.