POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name Controlling [S2ZiIP2>Con] Course Field of study Year/Semester Management and Production Engineering 1/2Area of study (specialization) Profile of study **Quality Engineering and Management** general academic Course offered in Level of study second-cycle Polish Form of study Requirements full-time compulsory Number of hours Lecture Laboratory classes Other 15 n 0 Tutorials Projects/seminars 15 0 Number of credit points 2,00 Coordinators Lecturers dr inż. Marta Grabowska marta.grabowska@put.poznan.pl

Prerequisites

The student should have knowledge of the operation of a production company and basic concepts of financial management, micro and macroeconomics

Course objective

Acquaintance with the basic principles, procedures and tools used in the management of an organization in order to plan, monitor and control its activities. Presenting controlling as part of the management process that aims to ensure that the organization's goals are achieved effectively and efficiently.

Course-related learning outcomes

Knowledge:

Has structured, theoretically based, detailed knowledge related to the organization of production processes

Has structured, theoretically based knowledge of trends in improving the organization of control and supervision of production processes

Has theoretically based, detailed knowledge of assessing the efficiency of production processes and the effectiveness of an enterprise's operation

Has basic knowledge of the economic aspects of the functioning of a production company Has knowledge of the general principles of creating and developing forms of individual entrepreneurship

Skills:

Is able to use experimental, data analysis and simulation methods to support decisions in various areas of enterprise operation

Is able to develop forecasts regarding the effectiveness and efficiency of production processes

Social competences:

Is aware of the effects of engineering activities in both technical and non-technical areas. Is aware of the consequences of decisions made and responsibility for decisions made

Able to think and act in a creative and entrepreneurial way

Has the knowledge necessary to understand the social, economic, legal and other non-technical conditions of engineering activities

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Knowledge and skills acquired during lectures will be verified on the basis of a colloquium including definitional and problem questions. Passing the lecture if obtaining at least 50.1% correct answers. Assignment of grades to percentage ranges of results: <90–100> very good; <80–90) good plus; <70–80) good; <60–70) satisfactory plus; <50–60) satisfactory; <0–50) unsatisfactory. Exercises: assessment based on independently solved tasks in the form of case studies.

Programme content

Management of production processes based on planning and monitoring costs at the strategic, tactical and operational levels.

Course topics

Lecture:

Defining clear organizational goals and appropriate financial and non-financial indicators (KPIs) to be monitored to assess the achievement of these goals. Planning and budgeting. Comparing actual results with expected results and identifying differences. Taking corrective actions to achieve organizational goals. Risk management.

Exercises:

Defining indicators appropriate to the situations described in the case studies. Defining budgets, schedules and action plans. Application of methods and tools to analyze deviations from plans and determination of appropriate corrective actions using organizational methods and tools.

Teaching methods

Lecture: multimedia presentation illustrated with examples, solving tasks, discussion. Lecture conducted remotely using the synchronous access method.

Exercises: solving practical problems, teamwork, simulation, discussion.

Bibliography

Basic: Nowak E., Controlling in enterprise operations, PWE, 2010

Additional:

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Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	32	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	18	0,50