# POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

#### Course name Philosophy [S1AiR1>PO2-Filozofia]

Course			
Field of study Automatic Control and Robotics		Year/Semester 1/2	
Area of study (specialization)		Profile of study general academic	
Level of study first-cycle		Course offered in polish	
Form of study full-time		Requirements elective	
Number of hours			
Lecture 30	Laboratory classe 0		Other (e.g. online) 0
Tutorials 0	Projects/seminars 0	6	
Number of credit points 2,00			
Coordinators dr Radosław Kot radoslaw.kot@put.poznan.pl		Lecturers	

#### **Prerequisites**

The student has basic knowledge of history and culture; can choose the appropriate sources of knowledge and obtain the necessary information from them and provide a critical analysis and evaluation of solutions for complex and unusual engineering problems; is aware of the need of deepening and expanding knowledge to solve newly born technical problems.

## **Course objective**

Obtaining knowledge on the history of philosophy, the role of philosophy in science and its impact on modern technology.

#### Course-related learning outcomes

Knowledge

Has basic knowledge necessary to understand social and ethical, economic, legal and other non-technical conditions of engineering activity; understands the impact of social and civilizational changes on the lifestyle of society.

Skills

Is able to perceive the non-technical aspects in formulating and solving engineering problems, including

environmental, economic and legal ones.

Social competences

Is aware of the level of his knowledge in relation to the conducted research in science and technolog; is able to think and act in a creative and entrepreneurial way, taking into account the safety and ergonomics of work and its economic aspects, is aware of the need to initiate action for the public interest and of responsibility for the effects of the team and its participants work; understands and appreciates the importance of intellectual honesty in the actions of its own and other people; is ready to demonstrate reliability, impartiality, professionalism and ethical attitude; is aware of its social role as a graduate of a technical university, is ready to popularize scientific content to the society and to identify, when met, and resolve basic problems related to the field of study.

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Forming grade:

By discussions and questions checking the degree of mastery of previously presented issues. Final grade:

Final essay on an accepted prreviously topic.

# Programme content

 The essence, genesis, object and functions of philosophy: man as a philosophizing entity in search of the meaning of its existence and goals of its action. Knowledge and motivation to act. Philosophy and worldview and ideology. The role of philosophy in the development of science and practical skills.
Stages of philosophy development: The main stages of the development of philosophical reflection. Structure of philosophical problems. Individual criticism and mental formations. The basic branches of philosophy: materialism and idealism. Criteria for the division of philosophy into materialism and idealism.
Theory of cognition: Place and role of knowledge in human action. The structure of the cognitive process: subject, object, perception, thinking, concept. Knowledge and its role in the operation of individuals and communities. Individual and collective knowledge - collectivization of knowledge.

4. Theory of truth and cognitive discourse: The Learning Theory. Experiment and theory. The truth: the truth of knowledge, the criteria of truth. Scientific method and falsification of theory.

5. Science. The genesis of modern science and its role in contemporary culture.

6. The theory of being (ontology): Analysis of the object being studied. Nature of reality. Matter and form; material unity and formal diversity. Individual beings and general entities, classes of beings.

7. Dialectics; processes and relationships: Processes; time and space; causal relationship. Determinism, indeterminism. Necessity, chance, freedom. Matter and consciousness. Pyramid of beings and development.

8. Axiology: ethics and aesthetics: Individual and society: morality, ethics, professional ethics. Good and evil; the issue of responsibility. Beauty and art

9. Elements of philosophical anthropology: Theories of social life. Basics and forms of collective life. The concept of social formation. Production method, way of thinking, culture. Mechanism of changes in social formation: social conflict, revolution, regularity of social processes.

10. Analysis of social institutions: the state and the nation. Power, politics and forms of governance.

Authoritarianism, totalitarianism, democracy, anarchism. Pathologies of power and social life.

11. Currents of contemporary philosophy.

## **Teaching methods**

Lecture, discussion with students and providing materials of educational importance available on the Web.

## Bibliography

Basic

Zagadnienia i kierunki filozofii, K. Ajdukiewicz, Warszawa, 1983
R. H. Popkin, A. Stroll, Filozofia, Poznań, 1995
Additional
W. Dilthey, O istocie filozofii, Warszawa 1987
T. Kuhn, Struktura rewolucji naukowych, Warszawa 2001

## Breakdown of average student's workload

	Hours	ECTS
Total workload	55	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	25	1,00