

SYLLABUS

Name: Implementation of innovations in technical systems (ZIPOZ>NI6INiTS19O)

Name in Polish:

Name in English: Implementation of innovations in technical systems

Information on course:

Course offered by department: Faculty of Organization and Management

Course for department: Silesian University of Technology

Term: Summer semester 2021/2022

Cordinator of course edition: Dr inż. Andrzej Wiczorek

Default type of course examination report:

ZAL

Language:

English

Course homepage:

<https://platforma.polsl.pl/roz/course/view.php?id=382>

Short description:

The main aim of the training is to transfer of orderly knowledge and acquisition of social skills and competences related to the theoretical and practical aspects of implementing innovations in technical systems.

Description:

Teaching modes and teaching hours:

-lectures 30 godzin

Number of ECTS credits: 2

Number of hours allocated for the student's own work:

preparation for the exam: 30 hours

preparation reports: 30 hours

Detailed description of teaching modes:

lectures:

1. Innovations – basic definition.
2. Creativity as an innovativeness consideration.
3. Methods and techniques of creativity.
4. Creation of innovations in accordance with Technology Assessment philosophy.
5. Innovations currently and in the pass.
6. Means and methods of innovation implementation.
7. Eco – innovations.
8. Innovations in the life cycle of technical means.
9. Processes and systems of innovation development.
10. Entrepreneurship and innovations.

Bibliography:

1. Meyer Arnou de: Inspire to innovate : management and innovation in Asia. Palgrave Macmillan, Basingstoke– New York 2005.
2. Carayannis E. G., Assimakopoulos D., Kondo M.: Innovation networks and knowledge clusters : findings and insights from the US, EU and Japan. Palgrave Macmillan, New York 2008.
3. Levitt J.: The handbook of maintenance management. Industrial Press, New York 1997.
4. Niebel B. W.: Engineering maintenance management. Marcel Dekker, New York 1994.
5. Verganti R.: Design-driven innovation : changing the rules of competition by radically innovating what things mean. Harvard Business Press, Boston MA 2009.

Learning outcomes:

Knowledge: a student knows and understands:

K1A_W20: fundamental dilemmas focused on innovations

Skills: a student can:

K1A_U08: make a critical analysis of how existing technical solutions function and evaluate these solutions

K1A_U15: use a foreign language at the B2 level of the European System for the Description of Languages

Social competences: a student is prepared to:

K1A_K05: responsible performance of professional

roles, including compliance with the rules of professional ethics and requiring it from others, as well as care for the achievements and traditions of the profession

Assessment methods and assessment criteria:

Lecture

Oral transmission in the form of a lecture, assisted by audiovisual aids.

The basis for passing the lecture is a positive result of the exam.

Information on course edition:

Default type of course examination report:

ZAL

Bibliography:

missing bibliography in English

Details of classes and study groups

lecture (15 hours)

Study groups details

Group number 1

Class instructors:

Dr inż. Tomasz Walek

Element of course groups in various terms:

Course group description	First term	Last term
<i>missing group description in English</i> (ZIPOZ>NI-6-19-O)	2021/2022-L	

Course credits in various terms:

<without a specific program>			
Type of credits	Number	First term	Last term
European Credit Transfer System (ECTS)	2	2021/2022-L	