SYLLABUS

Name: ***Economics of sustainable development (InfAAu>SI1EoSD19)***
Name in Polish:
Name in English: ***Economics of sustainable development***

Information on course:

Course offered by department: Faculty of Automatic Control, Electronics and Computer Science
Course for department: Silesian University of Technology

Default type of course examination report:

ZAL

Language:

English

Short description:

The aim of the course is to familiarize with the concept of economics of sustainable development as the basis of socio-economic processes of the contemporary world. The acquired knowledge and skills will enable a systemic view on the economic activity of organizations, thanks to which the Student will understand the basic economic and environmental problems constituting the non-technical conditions of engineering activities.

Description:

ECTS: 2
Total workload: 50 hours (30 contact hours, 20 students' own work hours)
Forms of contact hours:
Lecture 30h
Students' own work: preparation for test

Lectures:
1. Preliminary issues: subject, goals and principles of economics of sustainable development. Traditional and sustainable economics. Main theses of the economics of sustainable development. The goals of the 2030 Agenda.
2. Selected basic issues and tools of economics. Market economy. Market mechanism. Contemporary economic systems as conditioning of production activity. Market sharing categories. Types of market structures. The essence of demand and supply. Market equilibrium.
3. Ecological and social problems in economic theory. Limited resources and environmental pollution. Place of social economy in the socio-economic system. Problem areas and criteria of sustainable development economics. The internalisation of external effects.
4. Household as an economic entity. The personal dimension of the economy of sustainable development. Correlation between consumption and the state of the natural environment. Consumption models.
5. Economic instruments for environmental protection - modelling the behaviour of business entities and consumers.
6. Sustainable development management. Environmental management tools in a product and organization life cycle perspective. Corporate social responsibility.
7. Issues of economic growth. Economic growth in the economy of sustainable development. Sustainable production, agriculture and consumption. Sustainable agriculture and its strategies. Labour market. The problem of poverty. Sustainable Development Strategy.

Bibliography:

1. Bruckmeier K., Economics and Sustainability:Social-ecological perspectives, Springer 2020.
2. The Economics of Sustainable Development, Cambridge university Press 1998, edited by Goldin I., Winters L.A.,
3. Economy, finance and sustainable development, Monografie Prawnicze 2023, red.: Jaś-Nowopolska M., Wolska H.,
4. Nulkar G., The Economics of Sustainable Development. A Machine-genereted Literature Overvew, Spinger 2024.

Learning outcomes:

The student knows and understand fundamental dilemmas of modern civilization (final test): K1A_W18
The student knows and understand the basic economic concepts of sustainability (final test): K1A_W18, K1A_W19, K1A_K05
The student is able to analyze and evaluate social, economic and environmental aspects of engineering activities (final test): K1A_W18, K1A_W19, K1A_K03, K1A_K05, K1A_K06
The student is prepared to fulfill social obligations in organizing engineering activities (final test): K1A_K03, K1A_K04, K1A_K06

Assessment methods and assessment criteria:

The final grade is based on final test. Students need to obtain at least 6 points of 10.

The syllabus is valid from academic year 2024/25 and its content cannot be changed during the semester.

Element of course groups in various terms:

Course group description	First term	Last term
Informatics S1 semester 1 common subjects (InfAAu>SI1-19-WSP)	2020/2021-Z	

Course credits in various terms:

<without a specific program>

Type of credits	Number	First term	Last term
European Credit Transfer System (ECTS)	2	2020/2021-Z	