



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Human Capital Management in Industry 4.0

### Course

Field of study

Engineering Management

Area of study (specialization)

Managing Enterprise of the Future

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

15

Tutorials

Laboratory classes

Projects/seminars

15

Other (e.g. online)

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

Ph.D., D.Sc., Hanna Włodarkiewicz-Klimek,  
University Professor

Responsible for the course/lecturer:

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## Prerequisites

Knowledge: Can explain the basic issues of organizational science and management theory.

Skills: Is able to identify and associate the basic problems of organization science and management theory.

Competences: Demonstrates readiness to develop their knowledge and skills. Is open to team work.

## Course objective

The aim of the course is to acquire knowledge, skills and competences in the field of: understanding the essence, principles and correctness of human capital management in industry 4.0.

## Course-related learning outcomes

### Knowledge

Has in-depth knowledge of legal norms, their sources, changes and ways of influencing organizations, with particular emphasis on commercial law [P7S\_WG\_01]

Has extended knowledge of the role of man in shaping organizational culture and ethics in management, with particular emphasis on the needs of industry 4.0 [P7S\_WG\_09]

Has in-depth knowledge of ethical standards, their sources, nature, changes and ways of influencing organizations, taking into account the specifics of industry 4.0 [P7S\_WK\_01]

### Skills

Is able to use theoretical knowledge to describe and analyze the causes and course of social processes and phenomena (cultural, political, legal, economic) in the context of KL in industry 4.0 and is able to form their own opinions and select critical data and methods of analysis [P7S\_UW\_01]

Is able to forecast and model complex social processes including phenomena from various areas of social life (cultural, political, legal, economic) using advanced management methods and tools [P7S\_UW\_02]

Has the ability to use the acquired knowledge in various areas and forms, extended by a critical analysis of the effectiveness and usefulness of applied knowledge in relation to the role of human capital in industry 4.0 [P7S\_UW\_03]

Has the ability to understand and analyze social phenomena, extended by the ability to deepen theoretical assessment of these phenomena in selected areas, using the research method [P7S\_UW\_05]

Is able to correctly interpret and explain social, cultural, political, legal, economic phenomena) and mutual relations between social phenomena in creating the reality of industry 4.0 [P7S\_UW\_06]

### Social competences

Is aware of the interdisciplinary knowledge and skills needed to solve complex organization problems and the need to create interdisciplinary teams [P7S\_KK\_01]



Can see the cause-and-effect relationships in achieving the goals and rank the importance of alternative or competitive tasks [P7S\_KK\_02]

Is able to make substantive contribution to the preparation of social projects and manage projects resulting from these projects [P7S\_KO\_01]

Is able to initiate activities for social projects [P7S\_KO\_01]

Is aware of the importance of professional behavior, compliance with the principles of professional ethics and respect for the diversity of views and cultures [P7S\_KR\_01]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

a) within the scope of the project: based on the assessment of the current progress of task implementation in the audit process of the state of the organization in the knowledge economy.

b) in the scope of lectures: based on answers to questions about the material discussed in previous lectures,

Summative assessment:

a) in the scope of the project based on: (1) public presentation of the audit results and assessment of the organization's level of adaptation to the conditions of the knowledge-based economy; (2) discussion after the presentation; (3) the form and quality of prepared materials,

b) in the scope of lectures: exam in the form of a choice test, with answers among which at least one is correct; each question is scored on a scale of 0 to 1; the exam is passed after obtaining at least 55% of points. You can take the exam after passing the project.

### Programme content

Industry challenges 4.0 towards the shaping of human capital in enterprises.

The concept and meaning of human capital in the context of shaping industry 4.0.

Processes of human capital management in industrial enterprises 4.0 (acquisition, motivation, development and evaluation of employees).

Competences and skills of industry employees 4.0.

Opportunities and barriers in adapting employees to the reality of industry 4.0.

### Teaching methods

Lectures - monographic and conversational.

Project - observation, demonstration and project method.



## Bibliography

### Basic

Włodarkiewicz-Klimek H., Kapitał ludzki w kształtowaniu zwinności organizacji opartych na wiedzy, Wydawnictwo Politechnik Poznańskiej, Poznań 2018.

Atiku S.O., Human Capital Formation for the Fourth Industrial Revolution, Namibia University of Science and Technology, IGI Global 2020.

Olejniczak T., Japońskie fabryki Hybrydowe w Polsce i Europie środkowo-Wschodniej, Wydawnictwo POLTEXT 2019.

### Additional

Schwab K., Czwarta Rewolucja Przemysłowa, Studio Emka 2018.

Sobieraj J. Rewolucja przemysłowa 4,0, Wydawnictwo Naukowe Instytutu Technologii i Eksploatacji - PIB w Radomiu 2019.

## Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests, project preparation) <sup>1</sup>	45	2,0

<sup>1</sup> delete or add other activities as appropriate