Cracow University of Technology

Course syllabus

binding for the doctoral students of the CUT Doctoral School commencing their studies in the academic year 2022/2023

Information on the course

Name of the course in Polish	Zarządzanie projektem
Name of the course in English	Project management
Number of the ECTS points	1
Language of instruction	Polish
Category of the course	Choosable
Field of education	Engineering and technology
Discipline of education	Mechanical engineering
Person responsible for the course Contact	Prof. Józef Gawlik, *doctor habilitatus* jozef.gawlik@pk.edu.pl

Type of course, number of hours in the study programme curriculum

Semester	Credit type (G / NG)*	Lecture	Practical classes	Laboratory	Computer Lab	Project Class	Seminar
2, 3, 4, 5	G	15	0	0	0	0	0

*G – graded credit, NG – non-graded credit

Course objectives

Code	Objective description
Objective 1	Expanding knowledge of the organization and management of structural and technological projects in the field of mechanical engineering.
Objective 2	Expanding knowledge in the field of modelling and analysis of the results of experimental research on processes appropriate for mechanical engineering.

Learning outcomes

Code	Description of the learning outcome adjusted to the specific characteristics of the discipline	Learning outcome symbol in the CUD DS	Methods of verification
OUTCOMES RELATED TO KNOWLEDGE			
EUW1	The doctoral student knows and understands the principles of formulating and implementing projects in the field of mechanical engineering.	E_W01, E_W02	Involvement in class activities, grade for the presentation.
EUW2	The doctoral student knows and understands the principles of design / technology assessment in mechanical engineering.	E_W01, E_W02	Involvement in class activities, grade for the presentation.
OUTCOMES RELATED TO SKILLS			

EUU1	The doctoral student is able to define the construction structure taking into account the assumptions and limitations specific to the implemented project.	E_U01	Involvement in class activities, grade for the presentation.
EUU2	The doctoral student is able to assess the proposed technology in relation to the quality requirements.	E_U02	Involvement in class activities, grade for the presentation.
EUU3	The doctoral student is able to propose other variants of design / technological solutions.	E_U01 E_U02	Involvement in class activities, grade for the presentation.
OUTCOMES RELATED TO SOCIAL COMPETENCES			
EUK1	The doctoral student is ready to engage in a constructive, critical discussion and evaluation of the proposed design / technological solutions.	E_K01 E_K02	Involvement in class activities, grade for the presentation.
EUK2	The doctoral student is ready to expand their knowledge and introduce innovative design / technological solutions.	E_K01 E_K02	Involvement in class activities, grade for the presentation.

Course outline

No.	Contents	Learning outcomes for the course	No. of hours
LECTURE			
W1	Project organization and schedule.	EUW1, EUW2, EUU1	2
W2	Construction project management.	EUW1, EUW2	4
W3	Technological project management	EUW1, EUW2	4
W4	Modelling and analysis of research results.	EUW2, EUU3, EUK1	5

The ECTS points statement

WORKING HOURS SETTLEMENT	
Type of activity	Average number of hours (45 min.) dedicated to the completion of an activity type
SCHEDULED CONTACT HOURS WITH AN ACADEMIC TEACHER	
Hours allotted in the syllabus	15
Consultations	1
Examination / course credit assignment	2
HOURS WITHOUT THE PARTICIPATION OF AN ACADEMIC TEACHER	
Independent study of the course contents	8
Preparation of a paper, a report, a project, a presentation, a discussion	4
ECTS POINTS STATEMENT	
Total number of hours	30
The ECTS points number	1

Preliminary requirements

No.	Requirements
1	The participant knows the basics of construction.
2	The participant knows the basics of designing technological processes.

Course credit assignment conditions / method of the final grade calculation

No.	Description
COURSE CREDIT ASSIGNMENT CONDITIONS	
1	Active participation in class.
2	Presentation of a paper.
METHOD OF THE FINAL GRADE CALCULATION	
Course credit and grade assigned on the grounds of involvement in class activities and presentation of the student's own paper.	

Additional information

None specified

The course reading list

1	Wirkus M., Lis A, *Zarządzanie projektami badawczo-rozwojowymi,* Warszawa, 2012, Difin.
2	Wirkus M., Roszkowski H., Dostatni E., Gierulski W., *Zarządzanie projektem*, Warszawa, 2014, PWE.
3	Project Management Institut, *A guide to the Project Management Body of Knowledge (PMBOK guide),* sixth edition, 2017, Project Management Institut.
4	Ahern T., Leavy B., Byrne P.J., *Knowledge formation and learning in the management of projects: A problem solving perspective*, International Journal of Project Management, Vol. 8, 2014.
5	Kiełbus A., Gawłowski G., *Quality Tools of The Innovative Project in the Planning Phase Analysed on a Chosen Example*, Czasopismo Techniczne. Mechanika, Wydawnictwo PK, Kraków, 2016.
6	Europe Aid Cooperation Office: *Project Cycle Management Guidelines*, Aid Delivery Methods, Brussels, 2004.