

COURSE SYLLABUS

Course code	1080-BU400-ISA-0701
Course name	Technology of Building Works I
Course version	2027L
Level of education	first cycle programme
Form and mode of study	full-time study
Study profile	general academic profile
Field of study	Civil Engineering
Specialisation	-
Organizational unit	The Faculty of Civil Engineering
Implementing unit	The Faculty of Civil Engineering
Course unit	n/a
Course groups	-
Course status	Obligatory
Language of the course	English
Study stage code	BU000-S4-ISA-1080
Number of ECTS credits	3

Part I**01. Learning outcomes and the method of conducting classes**

Apprenticeships	nie dotyczy
Learning outcomes	see table "Learning outcomes"
Forms of classes and the number of hours in the semester	
lectures	45,00 h

02. ECTS balance

Number of ECTS credits	3	
Course workload	Hours	ECTS
Total number of hours and ECTS credits for the course:		
Hours and ECTS credits for courses involving direct participation of academic teachers	45	1,80
Hours and ECTS credits involving student's independent work	30	1,20
Total	75	3,00
Number of hours involving direct participation of academic teachers:		
Hours connected with class participation	45	
Other synchronous hours	0	
Total	45	
Number of hours involving student's independent work:		
Hours for student's independent work	30	

03. Course content

Part I

Course content	The course "Technology of Building Works I" within the Civil Engineering program covers issues related to the technology and organization of basic construction processes. Lectures address earthworks, including classification and soil mass balance, methods of transport, and selection of appropriate machinery such as excavators and scrapers. In the area of reinforced concrete works, students are introduced to the technology of production, transport, and placement of concrete mixes, as well as reinforcement and prefabrication of structural elements. The section on assembly works includes principles of designing assembly sequences, selection of equipment, and organization of work with precast reinforced concrete elements. Masonry works cover bonding techniques, a variety of construction materials, and principles of work organization in this field. Finishing works include the classification of operations, technologies used in finishing processes, and organization of these activities. The course emphasizes the application of modern technological and organizational tools in construction engineering.
----------------	---

Table: Learning outcomes

Knowledge	
Outcomes code	W1
Description	The student has knowledge of the technology and organization of earthworks, reinforced concrete, assembly, and prefabricated works.
Related field-of-study learning outcomes	K1_W21
Skills	
Outcomes code	U1
Description	The student has knowledge of the technology and organization of earthworks, reinforced concrete, assembly, and prefabricated works.
Related field-of-study learning outcomes	K1_U12, K1_U21
Social competence	
Outcomes code	K1
Description	The student is ready to assume social responsibility for managing construction works as a person representing a profession of public trust.
Related field-of-study learning outcomes	K1_K07, K1_K09

Part II

04. Year and semester of studies	
Year	2027Z
Semester	4
05. Course leader and course teachers	
Course leader	Paweł Nowak
lectures	Paweł Nowak
06. Course objective	
Course objective	The subject is a presentation of the theoretical foundations of selected technologies in construction: earthworks, formwork, reinforcement, concreting, assembly, introduction to finishing works, assessment in accordance with the Subject Regulations.
07. Teaching methods and techniques	
lectures	The subject is a presentation of the theoretical foundations of selected technologies in construction: earthworks, formwork, reinforcement, concreting, assembly, introduction to finishing works, assessment in accordance with the Subject Regulations.

Part II**08. Methods of verifying learning outcomes**

Knowledge	
Outcomes code	W1
Description	The student has knowledge of the technology and organization of earthworks, reinforced concrete, assembly, and prefabricated works.
Verification methods	lectures: written examination
Skills	
Outcomes code	U1
Description	The student has knowledge of the technology and organization of earthworks, reinforced concrete, assembly, and prefabricated works.
Verification methods	lectures: written examination
Social competence	
Outcomes code	K1
Description	The student is ready to assume social responsibility for managing construction works as a person representing a profession of public trust.
Verification methods	lectures: written examination

09. Required and recommended reading list

Required reading	R. Chudley, Building Construction Handbook, Wydawca: Butterworth Heinemann , 2006, Liczba stron: 736, Nr katalogowy: 0-7506-6822-9 H. Johnston, Bidding & Estimating Procedures Construction, Wydawca: Prentice Hall , 2001, Liczba stron: 262, Nr katalogowy: 0-13-082197-7 R. Chudley, Advanced Construction Technology, Wydawca: Prentice Hall , 2006, Liczba stron: 632, Nr katalogowy: 978-0-13-201985-9 D. Gransberg, Construction Equipment Management for Engineers Estimators, Wydawca: CRC Press Inc. , 2006, Liczba stron: 568, Nr katalogowy: 0-8493-4037-3
Recommended reading	R. Barry, Construction of Buildings v 1, Wydawca: Blackwell Science , 1999, Nr katalogowy: 0-632-05261-9 R. Barry, Construction of Buildings v2, Wydawca: Blackwell Science , 1999, Nr katalogowy: 0-632-05092-6 Allen, Fundamentals of Building Construction Materials & Methods 4e, Wydawca: John Wiley & Sons , 2004, Liczba stron: 912, Nr katalogowy: 0-471-21903-7 S. Nunnally, Managing Construction Equipment, Wydawca: Prentice Hall , 2000, Oprawa: oprawa twarda, Liczba stron: 399, Nr katalogowy: 0-13-901216-8

10. Other information

Other information	In accordance with the Course Regulations.
-------------------	--