



MODULE DESCRIPTION

Module code	full-time studies:	Z-ZIP1-E-312b
	part-time studies:	Z-ZIPN1-E-312b
Module name	History of Technology	
Module name in Polish	Historia techniki	
Valid from academic year	2019/2020	

MODULE PLACEMENT IN THE SYLLABUS

Field of study	MANAGEMENT AND PRODUCTION ENGINEERING
Level of education	1st degree
Studies profile	General
Form and method of conducting classes	Full-time and Part-time
Specialisation	All
Unit conducting the module	Department of Mathematics and Physics
Module co-ordinator	Medard Makrenek, PhD, DSc
Approved by:	Dariusz Bojczuk, PhD, DSc

MODULE OVERVIEW

Type of subject / group of subjects	Basic
Module status	Non-compulsory
Language of conducting classes	English
Module placement in the syllabus - semester	Semester III
Initial requirements	No requirements
Examination (YES/NO)	NO
Number of ECTS credit points	1

Method of conducting classes		Lecture	Classes	Laboratory	Project	Other
Per semester	full-time studies:	15				
	part-time studies:	9				

TEACHING RESULTS AND THE METHODS OF ASSESSING TEACHING RESULTS

Category	Symbol	Learning outcomes	Assignations to the directional learning outcomes
Knowledge	W01	A student has knowledge as regards the history of technology as well as technological thought.	ZIP1_W17
	W02	A student has comprehensive knowledge as regards the beginnings of mining and metallurgy in Poland as well as the development of manufacturing and production techniques.	ZIP1_W09
	W03	A student has knowledge as regards the development of economy and technological thought as well as improving construction technologies.	ZIP1_W17
Social competences	K01	A student understands the necessity of continuous improvement of his/her knowledge as regards the history of technology.	ZIP1_K01
	K02	A student is ready to act and think in a resourceful manner understanding the needs of the society and the laws of the natural environment.	ZIP1_K05
	K03	A student is aware of the social role of a technical university graduate and understands the necessity of passing information concerning the achievements connected with the subject 'Management and production engineering' to the society in an understandable manner.	ZIP1_K06

TEACHING CONTENTS

Method of conducting classes	Teaching contents
Lecture	The beginnings of mining and metallurgy on the Polish land. The development of manufacturing technologies in craft and manufactories The conditions for the development of economy and technological thought in Poland. Improving construction technology. From Roman buildings to modern times Industrial Revolution in Poland and its influence on the development of technology in the Kingdom of Poland. Key representatives of the Polish technological thought.

METHODS OF ASSESSING TEACHING RESULTS

Symbol	Methods of checking the learning outcomes (select X)					
	Oral exam	Written exam	Test	Project	Statement	Other
W01			X			
W02			X			
W03			X			
K01						X
K02						X
K03						X

FORM AND CONDITIONS OF PASSING

Form of classes	Form of credit	Passing conditions
Lecture	Credit with grade	Obtaining at least 50% of the points of the final test

STUDENT WORKLOAD

Balance of ECTS points												
No.	Type of student's activity	Student's workload										Unit
		full-time					part-time					
1.	Participation in the activities	Lc	C	Lb	P	O	Lc	C	Lb	P	O	h
		15					9					
2.	Other (consultation, exam)	2					2					h
3.	Number of hours of a student's as- sisted work	17					11					h
4.	Number of ECTS credit points which are allocated for assisted work	0,7					0,4					ECTS
5.	Number of hours of a student's un- assisted work	8					14					h
6.	Number of ECTS credit points which a student receives for unassisted work	0,3					0,6					ECTS
7.	Work input connected with practical classes	0					0					h
8.	Number of ECTS credit points which a student receives for practical classes	0,0					0,0					ECTS
9.	Total number of hours of a stu- dent's work	25					25					h
10.	Punkty ECTS za moduł <i>1 ECTS=25 hours</i>	1										ECTS

LITERATURE

- McDaniel L. (2022), *History of technology*, Bibliotex, Canada, <http://rguir.inflibnet.ac.in/bitstream/123456789/16968/1/9781984668707.pdf>
- Headrick D.R. (2009), *Technology a Word History*, Oxford, <https://cryptome.org/2013/01/aaron-swartz/019515648X.pdf>