MODULE DESCRIPTION

Module code	**Z-0471**
Module name	**Historia techniki**
Module name in English	**History of Technology**
Valid from academic year	**2016/2017**

A. MODULE PLACEMENT IN THE SYLLABUS

Field of study	**Management and Production Engineering**
Level of education	**1st degree** *(1st degree / 2nd degree)*
Studies profile	**General** *(general / practical)*
Form and method of conducting classes	**Full-time** *(full-time / part-time)*
Specialisation	**All**
Unit conducting the module	**The Department of Economics and Finances**
Module co-ordinator	**Stanisław Meducki, PhD hab., Professor of the University**
Approved by:	

B. MODULE OVERVIEW

Type of subject/group of subjects	**Other HES** *(basic / major / specialist subject / conjoint / other HES)*
Module status	**Non-compulsory** *(compulsory / non-compulsory)*
Language of conducting classes	**English**
Module placement in the syllabus - semester	**3rd semester**
Subject realisation in the academic year	**Winter semester** *(winter / summer)*
Initial requirements	**No requirements** *(module codes / module names)*
Examination	**No** *(yes / no)*
Number of ECTS credit points	**1**

Method of conducting classes	Lecture	Classes	Laboratory	Project	Other
Per semester	**15**				

C. TEACHING RESULTS AND THE METHODS OF ASSESSING TEACHING RESULTS

Module target	The aim of the module is to familiarise students with the traditions of global technological thought and to present the achievements of Poland's engineering personnel. The solutions of Polish engineers as well as their contribution to the national economy (and also foreign economies) will be presented.

Effect symbol	Teaching results	Teaching methods *(l/c/lab/p/other)*	Reference to subject effects	Reference to effects of a field of study
W_01	A student has knowledge as regards the history of technology as well as technological thought.	l	K_W17	T1A_W08
W_02	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.	l	K_W09	T1A_W04
W_03	A student has knowledge as regards the development of economy and technological thought as well as improving construction technologies.	l	K_W17	T1A_W08
U_01	A student is able to obtain information from the literature on the subject; a student can also associate the obtained information, make analyses and interpretations, draw conclusions, formulate and justify his/her opinions on the history of technology.	l	K_U01	T1A_U01
U_02	A student can work individually and in a team; a student can also estimate the required time to realise an assigned task; a student can set a schedule of work which guarantees meeting deadlines.	l	K_U02	T1A_U02
U_03	A student is capable of self-betterment in order to solve and realise new tasks and raise his/her professional competences.	l	K_U06	T1A_U05
K_01	A student understands the necessity of continuous improvement of his/her knowledge as regards the history of technology.	l	K_K01	T1A_K01
K_02	A student can act and think in a resourceful manner understanding the needs of the society and the laws of the natural environment.	l	K_K05	T1A_K06
K_03	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.	l	K_K06	T1A_K07

Teaching contents:

1. Teaching contents as regards lectures

Lecture number	Teaching contents	Reference to teaching results for a module
1	The beginnings of mining and metallurgy on the Polish land.	W_02 U_01 U_02 K_01
2	The development of manufacturing technologies in craft and manufactories.	W_02 U_01

		K_01
3	The conditions for the development of economy and technological thought in Poland.	W_03 U_01 K_02
4	Improving construction technology. From Roman buildings to modern times.	W_03 U_01
5	Industrial Revolution in Poland and its influence on the development of technology in the Kingdom of Poland.	W_01 U_01 K_03
6	Key representatives of the Polish technological thought.	W_01 W_03 U_01 U_03

2. Teaching contents as regards classes

Class number	Teaching contents	Reference to teaching results for a module

3. Teaching contents as regards laboratory classes

Laboratory class number	Teaching contents	Reference to teaching results for a module

4. The characteristics of project assignments

The methods of assessing teaching results

Effect symbol	**Methods of assessing teaching results** *(assessment method, including skills – reference to a particular project, laboratory assignments, etc.)*
W_01	A discussion and individual work assessment.
W_02	A discussion and individual work assessment.
W_03	A discussion and individual work assessment.
U_01	A discussion and individual work assessment.
U_02	A discussion and individual work assessment.
U_03	A discussion and individual work assessment.
K_01	Observing a student's involvement during the lectures.
K_02	Observing a student's involvement during the lectures.
K_03	Observing a student's involvement during the lectures.

D. STUDENT'S INPUT

ECTS credit points		
	Type of student's activity	**Student's workload**
1	Participation in lectures	**15**
2	Participation in classes	
3	Participation in laboratories	
4	Participation in tutorials (2-3 times per semester)	**5**
5	Participation in project classes	
6	Project tutorials	
7	Participation in an examination	
8		
9	**Number of hours requiring a lecturer's assistance**	**20** *(sum)*
10	**Number of ECTS credit points which are allocated for assisted work** *(1 ECTS point=25-30 hours)*	**0.68**
11	Unassisted study of lecture subjects	**3**
12	Unassisted preparation for classes	
13	Unassisted preparation for tests	
14	Unassisted preparation for laboratories	
15	Preparing reports	
15	Preparing for a final laboratory test	
17	Preparing a project or documentation	**5**
18	Preparing for an examination	
19		
20	**Number of hours of a student's unassisted work**	**8** *(sum)*
21	**Number of ECTS credit points which a student receives for unassisted work** *(1 ECTS point=25-30 hours)*	**0.32**
22	**Total number of hours of a student's work**	**28**
23	**ECTS points per module** *1 ECTS point=25-30 hours*	**1**
24	**Work input connected with practical classes** *Total number of hours connected with practical classes*	**7**
25	**Number of ECTS credit points which a student receives for practical classes** (1 ECTS point=25-30 hours)	**0.28**

E. LITERATURE

Literature list	1. Orłowski B., *Historia techniki polskiej*, Radom 2006. 2. Bocheński A., *Przemysł polski w dawnych wiekach*, Warszawa 1984 r. 3. Kołodziejczyk R., *Bohaterowie nieromantyczni. O pionierach kapitalizmu w Królestwie Polskim*, Warszawa 1961r.
Module website	