



MODULE SPECIFICATION

Module code	
Module title in Polish	Praktyki zawodowe
Module title in English	Internship
Module running from the academic year	2016/2017

A. MODULE IN THE CONTEXT OF THE PROGRAMME OF STUDY

Field of study	Environmental Engineering
Level of qualification	first cycle (first cycle, second cycle)
Programme type	academic (academic/practical)
Mode of study	full-time (full-time/part-time)
Specialism	Water Supply, Treatment of Wastewater and Solid Waste, Sanitary Pipelines and Systems
Organisational unit responsible for module delivery	Department of Water and Wastewater Engineering
Module co-ordinator	Lidia Bartkiewicz, PhD, Eng.
Approved by:	Lidia Dąbek, PhD hab., Professor of the Kielce University of Technology

B. MODULE OVERVIEW

Module type	core module (core/programme-specific/elective HES*)
Module status	compulsory module (compulsory/optional)
Language of module delivery	Polish/ English
Semester in the programme of study in which the module is taught	semester 7
Semester in the academic year in which the module is taught	winter semester (winter semester/summer semester)
Pre-requisites	None (module code/module title, where appropriate)
Examination required	No (Yes/No)
ECTS credits	4

* elective HES – elective modules in the Humanities and Economic and Social Sciences

Mode of instruction	lectures	classes	laboratories	project	others
Total hours per					4 weeks



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semester					
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C. LEARNING OUTCOMES AND ASSESSMENT METHODS

Module aims	The aim of the internship is to enable students to acquire practical experience connected with the studied field. Other objectives include: familiarising students with the characteristics of work concerning the plants and municipal services as well as local authorities and design offices.
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Module outcome code	Module learning outcomes	Mode of instruction (l/c/lab/p/ others)	Corresponding programme outcome code	Corresponding discipline-specific outcome code
W_01	A student knows the conditions regarding the activity of municipal enterprises, design offices and local authorities related to environmental engineering; a student has practical knowledge of the conditions and the functioning of management systems as well as the organisation of the unit in which the internship is performed.	other	IS_W18 IS_W19 IS_W20 IS_W21	T1A_W02 T1A_W07 T1A_W08 T1A_W09 T1A_W10 T1A_W11
W_02	A student knows the design process and the specificity of object and device development as regards environmental engineering (water and sewage treatment, waste management, water supply and sewage, piped utility, HVAC as well as RES systems)	other	IS_W02 IS_W03 IS_W05 IS_W07 IS_W09 IS_W10	T1A_W03 T1A_W04 T1A_W05 T1A_W06 T1A_W07
W_03	A student knows the fundamentals of technological and operational processes related to environmental engineering in practice (water and sewage treatment, waste management, water supply and sewage, piped utility, HVAC as well as RES systems) as well as the principles of settling up the works.	other	IS_W07 IS_W08 IS_W09 IS_W10 IS_W11 IS_W15 IS_W19	T1A_W01 T1A_W03 T1A_W04 T1A_W05 T1A_W06 T1A_W07 T1A_W08 T1A_W09 T1A_W11
U_01	A student can design, perform, and supervise assembly, construction, technological and installation works in accordance with the documentation; a student can assess a technical condition of devices and objects in environmental engineering.	other	IS_U01 IS_U04 IS_U16	T1A_U03 T1A_U05 T1A_U07 T1A_U08, T1A_U09 T1A_U10 T1A_U11, T1A_U13 T1A_U14 T1A_U15 T1A_U16
U_02	A student can assess the usefulness of methods and tools used for solving engineering tasks typical of environmental engineering.	other	IS_U03 IS_U27	T1A_U02 T1A_U08 T1A_U15
U_03	While solving engineering tasks, a student can notice their non-technical aspects, including the environmental ones.	other	IS_U07 IS_U25	T1A_U05 T1A_U09 T1A_U10
K_01	A student understands the significance of his/her responsibility for the performed engineering tasks.	other	IS_K02 IS_K05 IS_K06	T1A_K02 T1A_K03 T1A_K04 T1A_K05 T1A_K06 T1A_K07



K_02	A student is aware of the necessity to raise his/her professional qualifications independently.	other	IŚ_K03	T1A_K01 T1A_K02 T1A_K04
K_03	A student can work on the assigned task both individually and in a team works in accordance with the principles of professional ethics.	other	IŚ_K01 IŚ_K08	T1A_K03 T1A_K05

Module content:

1. Topics to be covered in the lectures
2. Topics to be covered in the classes
3. Topics to be covered in the laboratories

No.	Topics	Module outcome code
1	OHS training.	W_01 K_01
2	Familiarising students with the scope of operation of the plant (i.e. a unit in which the internship takes place).	W_01 K_01
3	Acquainting students with the procedures of functioning, managing, and organising a unit in which the internship takes place.	W_01 K_01
4	Participating in the design process.	W_02 U_01 U_02 K_01 K_03
5	Participating in the implementation of the investment.	W_01 W_02 K_01
6	Familiarising students with the technology and operation of municipal objects and devices.	W_02 W_03 U_02 K_01 K_03
7	Participating in the current activity of the plant (participating in technical processes).	W_02 W_03 K_01 K_03
8	Participating in the investment supervision process.	W_01 W_02 U_01 K_01 K_02

Assessment methods

Module outcome code	Assessment methods <i>(Method of assessment; for module skills – reference to specific project, laboratory and similar tasks)</i>
W_01	Submitting a report on the internship which is confirmed by the employer.
W_02	Submitting a report on the internship which is confirmed by the employer.
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U_01	Submitting a report on the internship which is confirmed by the employer.
U_02	Submitting a report on the internship which is confirmed by the employer.



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U_03	Submitting a report on the internship which is confirmed by the employer.
K_01	Submitting a report on the internship which is confirmed by the employer.
K_02	Submitting a report on the internship which is confirmed by the employer.
K_03	Submitting a report on the internship which is confirmed by the employer.



D. STUDENT LEARNING ACTIVITIES

ECTS summary		
	Type of learning activity	Study time/ credits
1	Contact hours: participation in lectures	0
2	Contact hours: participation in classes	0
3	Contact hours: participation in laboratories	0
4	Contact hours: attendance at office hours (2-3 appointments per semester)	0
5	Contact hours: participation in project-based classes	0
6	Contact hours: meetings with a project module leader	0
7	Contact hours: attendance at an examination	0
8		
9	Number of contact hours	0
10	Number of ECTS credits for contact hours <i>(1 ECTS credit = 25-30 hours of study time)</i>	0
11	Private study hours: background reading for lectures	0
12	Private study hours: preparation for classes	0
13	Private study hours: preparation for tests	0
14	Private study hours: preparation for laboratories	0
15	Private study hours: writing reports	0
16	Private study hours: preparation for a final test in laboratories	0
17	Private study hours: preparation of a project/a design specification	0
18	Private study hours: preparation for an examination	0
19	Preparing questionnaires	4 weeks
20	Number of private study hours	4 weeks <i>(sum)</i>
21	Number of ECTS credits for private study hours <i>(1 ECTS credit = 25-30 hours of study time)</i>	
22	Total study time	0
23	Total ECTS credits for the module <i>(1 ECTS credit = 25-30 hours of study time)</i>	4
24	Number of practice-based hours <i>Total practice-based hours</i>	4 weeks
25	Number of ECTS credits for practice-based hours <i>(1 ECTS credit = 25-30 hours of study time)</i>	4

E. READING LIST

References	
Module website	