EUROPEAN UNIVERSITY
POLYTECHNICAL PARTNER OF MULTIVERSITY GROUP

Approved: ……
EPU Rector, Prof. Marin Marinov, PhD

Educational Degree

«MASTER»

Form of Training: ***Full-time***
Term of Training: ***1.5 Academic Years (3 Semesters)***

Professional Field

5.7. Architecture, Civil Engineering and Surveying

A C A D E M I C C U R R I C U L U M

SPECIALITY:
RENOVATION OF BUILDINGS, FACILITIES AND CULTURAL MONUMENTS

2020

I. TIME SCHEDULE

Year	Auditoria Workload	Exams	Practical Training	Industrial/Field Placement	Practice	Work on Diploma Thesis	Vacations	Total (Number of Weeks)
I	30	4	-	-	-	-	18	52
II	0	0	-	-	-	15	9	24

II. CURRICULUM

ECTS code**: (CE/GC)TNo**
- **CE** – „Civil Engineering“;
- **GC -** General University discipline
- **T** – type of degree: **B** - “Bachelor”, **M** - “Master”;
- **No** – serial number of discipline;

Lectures (L), Seminar Exercises (SE), Laboratory Exercise (LE), Practical Training/Fieldwork (PT), Auditoria Workload (total) (AT), Self-Study (SS) per week ;
Exam (EX), Continuous Assessment (CA); Project Work (PW), Courseworks (Cw)

I SEMESTER

№	Discipline	Weekly Workload							Assessment				Code	ECTS
		L	SE	LE	PT	AT	SS	Total	E	CA	PW	Cw		
1	Longevity and sustainability of building materials and constructions	2	0	2	0	4	5	9	1	0	0	1	**CEMR101**	5
2	Diagnostics of constructions and isolation systems of buildings(including cultural monuments) and facilities	2	1	1	0	4	5	9	0	1	0	1	**CEMR102**	5
3	Management of renovation, reconstruction and modernization of buildings (including K.M.) and facilities	2	1	1	0	4	5	9	0	1	0	1	**CEMR103**	5
4	Fire resistance of building constructions – problems and design	3	0	2	0	5	5	10	1	0	1	0	**CEMR104**	6
5	Anti-seismic design of reconstructed buildings and facilities	2	0	2	0	4	5	9	1	0	1	0	**CEMR105**	5
6	Legal problems in renovation of buildings (including K.M.) and facilities	2	0	0	0	2	2	4	0	1	0	0	**CEMR106**	2
7	Elective Course I	2	0	0	0	2	2	4	0	1	0	0		2
	Total	**15**	**2**	**8**	**0**	**25**	**29**	**54**	**3**	**3**	**2**	**3**		**30**

II SEMESTER

№	Discipline	Weekly Workload							Assessment				Code	ECTS
		L	SE	LE	PT	AT	SS	Total	E	CA	PW	Cw		
8	Construction and construction problems in renovation of buildings (including K.M.) and facilities	3	0	3	0	6	6	12	1	0	1	0	**CEMR207**	7
9	Technological problems in renovation of buildings and facilities	2	0	2	1	5	5	10	1	0	0	1	**CEMR208**	5
10	Performance of installation systems in renovation of buildings and facilities	2	0	2	0	4	5	9	0	1	1	0	**CEMR209**	5
11	Contemporary exterior and interior solutions	2	0	2	0	4	5	9	0	1	0	1	**CEMR210**	5
12	Building products and systems for retrofitting and renovation of buildings (including K.M.) and facilities	3	0	2	0	5	5	10	1	0	0	1	**CEMR211**	6
13	Elective CourseII	2	0	0	0	2	2	4	0	1	0	0		2
	Total	**14**	**0**	**11**	**1**	**26**	**28**	**54**	**3**	**3**	**2**	**3**		**30**

III SEMESTER

№	Discipline	Weekly Workload							Assessment				Code	ECTS
		L	SE	LE	PT	AT	SS	Total	E	CA	PW	Cw		
14	Elective Course I	2	0	0	0	2	2	4	0	1	0	0		2
15	Elective Course II	2	0	0	0	2	2	4	0	1	0	0		2
16	Diploma thesis*	0	5	0	0	5	40	45	дипломна защита				**CEMR312**	26
	Total	**4**	**5**	**0**	**0**	**9**	**44**	**53**	**0**	**2**	**0**	**0**		**30**

Note: * The diploma thesis needs to contain chapters with elements of scientific research.

COMPULSORY ELECTIVE MODULES

An elective discipline is one of the following in the corresponding modules:

Elective module 1:

Discipline	Code
Theory and methodology of reconstruction of buildings	**CEMR107**
Finite elements method	**CEMR108**
Sustainability and dynamics of building constructions	**CEMR109**
Modern computational methods in construction design	**CEMR110**

Elective module 2:

Discipline	Code
Economic efficiency in renovation of buildings and facilities	**CEMR212**
Geotechnical problems in renovation of buildings and facilities	**CEMR213**
Reconstruction, restoration and conservation of cultural heritage buildings	**CEMR214**
Safe and healthy working conditions in renovation of buildings and facilities	**CEMR215**
Facultative : Modern technical/ scientific English	**CEMR 216**

Notes:
1. The curriculum of specialty “Renovation of buildings and facilities” for educational degree ”Master” offers knowledge, which will improve the qualification of civil engineers with bachelor or master degree in the area of renovation, reconstruction and modernization of buildings and facilities. Buildings and facilities are renovated so as to increase their exploitation robustness and longevity, as well as to improve the microclimate parameters of living spaces in order to save energy. Students have the possibility to extend their knowledge of new and effective building materials and technologies.

2. The number of credits per semester is 30. They correspond to the weekly workload, the accomplishment of course projects and courseworks, and method of assessment.

3. Elective disciplines aim at improving the general training of students, depending on their individual needs and wishes. The workload of these disciplines is 30 hours of lectures and 15 hours of self-study per semester. The control of these subjects is realized through continuous assessment.

4. . Student knowledge and skills are evaluated in accordance to a six-grade rating system: 6 – excellent; 5 – very good; 4 – good; 3 – satisfactory; 2 – fail. An exam or continuous assessment is considered successfully passed if the student has achieved a minimum result of 3 (satisfactory). The correlation between the Bulgarian evaluation system and ECTS grades is as following: A (5.50-6.00), B (4.50-5.50), C (3.50 -4.50), D (3.00-3.50), E (2.50-3.00), FX (2.25-2.50), and F (2.25- 2.00).

III. BASIC PARAMETERS OF THE CURRICULUM

Semester	Weekly Workload							Semester Workload				Assessment			
	L	SE	EL	PT	AT	Ss	Total	L	SE	EL	PT	E	CA	PW	Cw
I	15	2	8	0	25	29	54	225	30	120	0	3	3	2	3
II	14	0	11	1	6	28	54	210	0	165	15	3	3	2	3
III	4	5	0	0	9	44	53	60	75	0	0	0	2	0	0
Total	**33**	**7**	**19**	**0**	**59**	**101**	**160**	**495**	**105**	**285**	**15**	**6**	**8**	**4**	**6**

1. Term of study	1,5 years, 3 semesters	
2. Auditoria Workload		
2.1. Total	900	hours
2.2. Lectures	495	hours
2.3. Seminar Exercises	105	hours
2.4. Laboratory Exercises	285	hours
3. Total number of disciplines	15	
3.1. Compulsory	11	
3.2. Elective	4	
4. Control		
4.1. Exams	6	
4.2. Continuous Assessment	8	
4.3. Project Work	4	
4.4. Courseworks	6	

Head of the Program:

Assoc. Prof. Eng. AnaYanakieva, PhD