MATRIX of existing Master course (Donbas National Academy of Civil Engineering and Architecture)

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| Name of compulsory chair | Year | Semester | Number of ECTS | Number of elective chairs | List of available elective chairs | short description | relation between the contents and RETHINK’s theme |
| Master in Architecture of Buildings and Structures | | | | | | | |
| Architecture and regional planning | 1st year | 1 semester | 3 | 3 |  | Course aims:  To open functional, typological peculiarities of regions architectural objects, to discover monuments of architecture. Acquaintance students with theory and practice of modern city planning, study of conformity to natural laws of process of origin and development cities and also acquaintance of students with influence of natural conditions on planning of cities and basses of landscape projecting. The course has reflection specific, experience of planning and building cities in Donbas. | - influence of natural conditions on planning of cities and basses of landscape projecting;  - reflection specific, experience of planning and building cities in Donbas |
| Designing in an urban setting | 1st year | 1 semester | 3 |  |  | Course aims:  to open historical aspects of the design appearance as a specialty, to acquaint with the main trends and aspects of the design, to open correlation of the design and the architecture, to explain the method of forming of the architecture and the environmental design, to acquaint with the main principles of the construction of environmental design objects. | - the method of forming of the architecture and the environmental design;  - the main principles of the construction of environmental design objects |
| Scientific foreign language (English or German) | 1st year | 1 semester | 3 |  |  | Course aims:  To develop the abilities and skills of professional and scientific communication in a foreign language, of getting the information from foreign sources, to improve communicative competence in English scientific professional area. | - improvement of communicative competence in English scientific professional area |
| Scientific research methodologies | 1st year | 1 semester | 4 |  |  | Course aims:  To give the knowledge about the methodology of scientific research, to form the ability to use these skills in practice; to study to organize research. | - method of displaying the results of scientific research: reports, theses, articles, dissertations, scientific guidance, manuals, monographs |
| Management and marketing | 1st year | 1 semester | 3 |  |  | Course aims:  To give to the students of concept about business, bases of business, to finish up to the students foreign and domestic experience of business, it a history, normative and acts |  |
| Safety legislation in architecture | 1st year | 1 semester | 3 |  |  | Course aims:  To provide the student with an understanding of defence methods and modes of people and national economy objects in emergency of natural, technogenic and military character. To consider civil defence objectives under modern conditions; emergency situations and modes of protection; civil defence protective facilities; evacuation measures rescue and urgent operations; construction of civil defence protective facilities. | - methods of protecting people and national economy objects in case of emergency;  - factors affecting building conditions |
| Architectural designing with research elements | 1st year | 1 semester | 4 |  |  | Course aims:  To develop an ability to prove in illustrative form in the logical sequence the preliminary and main tangible results of the research by the student. | - the connection between modern design and research;  - the main stages of research in architectural design |
|  | 1st year | 1 semester |  |  | Ecology in architecture – 2 ECTS | Course aims:  Formation of the theoretical and practical foundations of general training for the architectural students which is based on the knowledge about the impact of architectural and construction industry on the environment, the main environmental problems of architectural environment and different tools for their solution and methods of ecological reconstruction of buildings and territories. | knowledge about the impact of architectural and construction industry on the environment:  - legislation and national programs of environmental balance between natural and anthropogenic components of the urban environment;  - world and national practice of solutions of global environmental problems in architecture and urban planning;  - ecological foundations of architectural and urban design;  - designing technologies of architectural and urban objects based on ecological principles |
|  | 1st year | 1 semester |  |  | Practical course of specialization – 3 ECTS | Course aims:  To introduce and to give the knowledge about using the research methods in architectural design; to acquaint with the method of profound criteria analysis on the object at different levels of its architectural and planning organization; to teach the students the methods of variant design. | - practice different techniques and tools of profound criteria analysis on the architectural object |
|  | 1st year | 1 semester |  |  | Regional architecture – 2 ECTS | Course aims:  To learn general peculiarities of Donetsk region: mining-geological, city-planning, ecological, climatological, architectural-artistic, economical etc., that are necessary during projection buildings and structures. | general building with architectural regional demands:  - slope and slump grounds;  - specific conditions of Industrial mines region;  - local building materials and its rational using in architecture |
| Total |  |  | 30 |  |  |  |  |
| Scientific foreign language (English or German) – | 1st year | 2 semester | 3 | 2 |  |  |  |
| Scientific research methodologies II | 1st year | 2 semester | 3 |  |  |  |  |
| Information technologies in scientific research | 1st year | 2 semester | 3 |  |  | Course aims:  To introduce the modern computer methods with a goal to solve engineering problems, to get the basic skills of mathematical modelling of physical processes of gaining skills of algorithmic a computational process established mathematical model. | - |
| Ergonomics in architecture | 1st year | 2 semester | 8 |  |  | Course aims:  To learn general notions of the discipline; to make connection with other sciences; to study ergonomic directions. | - the anthropometric demands of the system “human-environment” |
| Research seminar | 1st year | 2 semester | 5 |  |  | Course aims:  To form the knowledge and skills for organizing the scientific experiment and having classes. | Preparing of Master's thesis and its defence |
|  | 1st year | 2 semester |  |  | Philosophic aspects of science and technique – 4 ECTS | Course aims:  To give the knowledge about modern philosophic concepts of science and technology, to conduct own philosophical investigation, to preparation for writing an essay and exam in Philosophy for receiving the degree level. |  |
|  | 1st year | 2 semester |  |  | Critical analysis and theories on modern architecture – 4 ECTS | Course aims:  To introduce students with contemporary architectural theory in Western countries, with leading architectural schools, to reflect on their experience critically, to find the connection with architectural theories of the twentieth century, to give the knowledge of methodological and philosophical foundations of the main trends. |  |
| Total |  |  | 30 |  |  |  |  |
| FINAL PROJECT/MASTER DISSERTATION | 2nd year | 1 semester |  |  |  |  |  |
| 2nd year | 2 semester |  |  |  |  |  |
| Total |  |  | 30 |  |  |  |  |
| Total for Master course: | 1,5 years | 3 semesters | 90 |  |  |  |  |

MATRIX of existing PhD (Doctorate) course (name of the partner university)

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| Name of compulsory chairs | Year | Semester | Number of ECTS | Number of elective chairs | List of available elective chairs | short description | relation between the contents and RETHINK’s theme |
| Name of the PhD course | | | | | | | |
| -  - | 1st year | 1 semester |  |  |  |  |  |
| Total |  |  | 30 |  |  |  |  |
| -  - | 1st year | 2 semester |  |  |  |  |  |
| Total |  |  | 30 |  |  |  |  |
| -  - | 2nd year | 1 semester |  |  |  |  |  |
| Total |  |  | 30 |  |  |  |  |
| -  - | 2nd year | 2 semester |  |  |  |  |  |
| Total |  |  | 30 |  |  |  |  |
|  | 3rd year |  | 60 |  |  |  |  |
| Total: | 3 years |  | 180 |  |  |  |  |