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#### 618883-EPP-1-2020-1-IT-EPPKA2-CBHE-JP Transforming Architectural and Civil Engineering Education towards a Sustainable Model (TACEESM )

«Հարտարապետության և քաղաքացիական Հարտարագիտության կրթության վերափոխումը կայուն մոդելի» (TACEESM )

LOCAL WORKSHOP 3 AND 4

Irina Vanyan, Associate Professor, PhD in Economics 2021 គ្.



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**NEW DEVELOPED COURSE** 

# **"PROJECT MANAGEMENT FOR ARCHITECTS"**



**Teaching on Bachelor level** 

2 Credits

62 academic hours

Irina Vanyan, PhD in Economics, Associate Professor Varazdat Hovhannisyan, PhD in Engineering, Associate Professor WP2 - Development of new courses in the field of architecture and civil engineering

#### **DESIGNED COURSES**

#### ARCHITECTURAL

- 1. Professional Practice
- 2. Studies in light and materials
- 3. Ornament Theory and Design
- 4. Contemporary Architectural Discourse
- 6. Techno-Sensation Architecture
- 7 Green Design and Interior
- 8. BIM Technology
- 9. Architectural projection of contemporary construction systems 10. Territory Improvement and engineering development of area
- 11. Sustainable architecture
- 12. Project management for architects
- 13. Contemporary methods of preservation of historical environment

#### **CIVIL ENGINEERING**

- 1. Structural Stability
- 2. Advanced Structural Analysis
- 3. Construction Machinery and Equipment's
- 4. Road maintenance and repair
- 5. Construction plant and equipment
- 6. Waste management
- 7. Operations Research and Linear Programming
- 8 Computer-Aided Design for Construction
- 9. Applied Hydraulics
- 10. Actions on Structures

1. BIM (Building Information Model) տեխնոլոգիաներ (բակալավրիատ, 4 կրեդիտ)

2. Ժամանակակից շինարարական համակարգերի ձարտարապետական նախագծում (բակալավրիատ, 3 կրեդիտ)

3. Տարածքների բարեկարգում և ինժեներական զարգացում (բակալավրիատ, 2 կրեդիտ)

4. Կայուն ձարտարապետություն (մագիստրատուրա, 2 կրեդիտ)

5. Նախագծի կառավարում ձարտարապետների համար (մագիստրատուրա, 2 կրեդիտ)

6. Պատմական միջավայրի պահպանման ժամանակակից մեթոդները (մագիստրատուրա, 4 կրեդիտ)

## **"PROJECT MANAGEMENT FOR ARCHITECTS"**

The goal of the discipline is to form the students` knowledge and skills in the field of project-oriented management in the process of developing and implementing design solutions, as well as investment and construction activity based on applying modern techniques and methods of project management that will meet the requirements of consumers and society as well as requirements for students earning a *Bachelor degree* within the framework of the RA National Qualifications Framework (NQF ), which will ensure their effective professional activity in the future or at the next stage of study.







# Learning Outcomes

As a result of discipline study, the master must:

#### Know:

a/ the theoretical fundamentals of project management,
b/ basic concepts, definitions, functions and methods of project management.









## Learning Outcomes



As a result of discipline study, the master must: Be able to:

a/ use project management methods in the design and implementation of design solution,
b/ apply modern models of project management in investment and construction activities,
c/ organize of research and design work,

d/ manage the project team,

e/ work with a computer as a means of managing project information,

f/ use information and computer technologies as a tool in design and scientific research, g/ work with information in global computer networks,

h/ develop a strategy for the actions of the creative team in specific market conditions, i/ monitor the project situation,

j/ use of methods of administrative and managerial and communication work,

k/ coordinate design and approval work,

1/ interact with related specialists, public and state organizations.

## Suggested Background knowledge

The discipline "Project Management for Architects" is based on the bachelor's competencies in mastering the disciplines "Architectural Design"- Level 6 of the NQF, and project practices related to the "primary" knowledge of the students in architecture.

# **Teaching Methods**

Teaching methods are chosen in alignment with this discipline objectives and students' needs. For this discipline is appropriate merging of student and teacher directed methods including the following elements: lecture showing by use of slide show presentations and other visible materials (videos, photos, documents, templates, etc.), worked examples, interactive lecture.

# **Teaching Methods**

Lectures will help students organize extensive readings. Lectures should be crafted so that students are intentionally active as much as it is reasonable. Lecture teaching should be mandatory combined with other teaching methods. Some topics of this discipline will require the online teaching by using videos for the modeling stage and discussion group.

# **Teaching Methods**

Worked examples will provide an opportunity to demonstrate the real problem, ways of their solving, way of impart information. Students will actually work their way through the examples in order to strengthen their knowledge obtained from the lecture. Interactive lecture assumes to use interactive techniques, particularly writing exercises, quick pairings or small group discussions, individual or collaborative problem solving, or drawing for understanding.



#### **Assessment Methods**



By the end of module learning the summative (final) assessment will be done. It is aimed at assessing the extent to which the most important outcomes at the end of the module teaching have been reached. At the final assessment, the student takes the exam, which is conducted with questionnaires that fully represent the course. The exam questionnaire as well as the knowledge assessment procedure are presented to the students at the beginning of the academic year.

#### **Assessment Methods**



The final grade of the student's knowledge is given based on the results of written answers to the questions included in the exam questionnaire, using the scale of the points given.



# **Content of Course**

# Chapter 1. Conception of Management in **Architectural Design** 1.1. Specificity of architectural design 1.2. Basic concepts and definitions 1.3. Life cycle of an architectural project 1.4. The project and its "environment" 1.5. Participants of an architectural project

Chapter 2. Pre-project preparation and development of an architectural project

2.1. Preparation of pre-project documentation

2.2. Basic requirements for the form and content of an architectural project

2.3. Fundamentals of Design Analysis

2.4. Environmental expertise of the project

Chapter 3. Basic functions of architectural project management



3.1. Management of target functions of an architectural project

3.2. Project quality management

3.3. Project Change Management

3.4. Project development time management

3.5. Project Risk Management

# Chapter 4. Organizational and methodological foundations of architectural project management

4.1. Control and regulation in project management
4.2. Normative base for project management
4.3. Automation of project management processes
4.4. Legal regulation in the field of architectural
design

4.5. Project team management

**4.6. Construction Management Project Management (Optional)** 

## **Required Texts and Reading**

- <sup>1</sup> Alharbi, M., Emmitt, S. and Demian, P. (2015a). Transferring architectural management into practice: A taxonomy framework. Frontiers of Architectural Research, 4(3), pp.237-247.
- <sup>2</sup> Alharbi, M., Emmitt, S. and Demian, P. (2015b). What is architectural management? Towards a pragmatic definition. Engineering, Construction and Architectural Management, 22(2), pp.151-168.
- Besteiro, É., Pinto, J. and Novaski, O. (2015). Success Factors in Project Management. Business Management Dynamics, [online] 4(9), pp.19-34. Available at: http://www.bmdynamics.com/. [Accessed 10 Jul. 2016].
- 4. Emmitt, S. (2014). Design Management for Architects, 2nd Edition. John Wiley & Sons.
- Kerzner, H. (2013). Project Management: A Systems Approach to Planning, Scheduling and Controlling, 11th Edition. Hoboken, New Jersey: John Wiley & Sons
- 6. Bielefeld, B., Rusch, L.-P., and others. (2013). Basics Project Management Architecture. Publisher: Birkhouser. ISBN 9783038214625. 376 pages.
- <sup>7.</sup> Этенко В.П. Менеджмент в архитектуре. Основы методики управления архитектурным проектом. -М.: Издательство «Ленанд», 2019. – 224 с.
- 8. Этенко В.П.Управление архитектурнум проектом: учебник для студентов высших учебных заведений. М.: Издательский центр «Академиа», 2008. 352 с.

