

## SYLLABUS

### 1. Data about the program of study

1.1	Institution	The Technical University of Cluj-Napoca
1.2	Faculty	Faculty of Civil Engineering
1.3	Department	Constructii civile si management
1.4	Field of study	Civil Engineering
1.5	Cycle of study	Bachelor of Science
1.6	Program of study/Qualification	Civil, Industrial and Agricultural Buildings /Engineer (English language)
1.7	Form of education	Full time
1.8	Subject code	62.1

### 2. Data about the subject

2.1	Subject name				Tehnologia lucrarilor de intretinere, reparatii si consolidare						
2.2	Course responsible/lecturer				Sl.Dr.Ing. Roman-Pintican Maria-Nicoleta-Nicoleta.Roman@ccm.utcluj.ro						
2.3	Teachers in charge of seminars				Sl.Dr.Ec.Dr.Ing. Maier Dorin-Dorin.Maier@ccm.utcluj.ro						
2.4	Year of study	4	2.5	Semester	2	2.6	Assessment	E	2.7	Subject category	DS/DO

### 3. Estimated total time

3.1	Number of hours per week	3	3.2	of which, course:	2	3.3	applications:	
3.4	Total hours in the curriculum	42	3.5	of which, course:	28	3.6	applications:	
Individual study								hours
Manual, lecture material and notes, bibliography								26
Supplementary study in the library, online and in the field								20
Preparation for seminars/laboratory works, homework, reports, portfolios, essays								10
Tutoring								0
Exams and tests								2
Other activities								0
3.7	Total hours of individual study	58						
3.8	Total hours per semester	100						
3.9	Number of credit points	4						

### 4. Pre-requisites (where appropriate)

4.1	Curriculum	Curriculum
4.2	Competence	Competence

### 5. Requirements (where appropriate)

5.1	For the course	For the course
5.2	For the applications	For the applications

## 6. Specific competences

Professional competences	<p>C3.1 Description of technological processes for maintenance, repair and consolidation of the constructions.</p> <p>After completing the discipline students will know: the differences between maintenance, repair and consolidation for different types of buildings</p> <p>C3.3 Designing technological processes specific for different phases of civil, industrial and agricultural constructions.</p> <p>After completing the discipline students will be able to develop the technological process for:</p> <ul style="list-style-type: none"> <li>- different types of repair works;</li> <li>- technology for repair works of wooden constructions</li> <li>- technology for repair works of concrete constructions</li> <li>- technology for repair works of masonry constructions;</li> <li>- technology for consolidation works of wooden constructions</li> <li>- technology for consolidation works of concrete constructions</li> <li>- technology for consolidation works of masonry constructions;</li> </ul> <p>How to choose a consolidation method.</p> <p>C3.5 Translation of selected technologies into the technological project for civil, industrial and agricultural constructions.</p>
Cross competences	<p>CT1 Apply effective responsible, punctuality, seriousness and personal responsibility strategies based on the principles, norms and values of professional ethics. Drafting and presenting a technical report in accordance with specific technical regulations;</p> <p>CT2 Apply efficient teamwork techniques, on various hierarchical levels. Achieving a technological project in team with respect to the technical - scientific content.</p>

## 7. Discipline objectives (as results from the *key competences gained*)

7.1	General objective	General objective
7.2	Specific objectives	Specific objectives

## 8. Contents

8.1. Lecture (syllabus)	Teaching methods	Notes
1. Maintenance works for wooden constructions	-	-
2. Maintenance works for masonry constructions		
3. Maintenance works for concrete constructions		
4. Repair works for wooden constructions		
5. Repair works for masonry constructions		
6. Repair works for concrete constructions		
7. Technologies for consolidation of the wooden constructions		
8. Technologies for consolidation of the concrete constructions (I)		
9. Technologies for consolidation of the concrete constructions (II)		
10. Technologies for consolidation of the concrete constructions (III)		
11. Technologies for consolidation of the masonry constructions (I)		
12. Technologies for consolidation of the masonry constructions (II)		

13. Technologies for consolidation of the masonry constructions (III)		
14. Technologies for consolidation of the masonry constructions (IV)		
Bibliography Bibliography 1.Pericleanu M., Pericleanu B.D. - Reabilitarea și consolidarea construcțiilor,Ovidius University Press, Constanta, 978-973-614-852-1, 2015 2. Proca G.E., Iorga F.E. – Aspecte privind conservarea, reabilitarea si consolidarea constructiilor din fondul construit existent, Matrix Rom, Bucuresti,ISBN 978-606-25-0097-9, 2014 3. Miron F. C.- Solutii de consolidare a cladirilor degradate in timp din cauze diverse, Editura Politehnica, Timisoara, ISBN 978-606-554-833-6, 2214 4. <a href="http://193.226.5.59:8060/alipac/RCAIOISKKIUJMPPOHVQRG-00035/find-scan?SEQ=000165873">Teodorescu</a> M. - <a href="http://193.226.5.59:8060/alipac/RCAIOISKKIUJMPPOHVQRG-00029/find-scan?SEQ=000165870">Tehnologia lucrarilor de intretinere, reparatii si consolidari : fise tehnologice : pentru uz intern</a> ,Universitatea Tehnica de Constructii Bucuresti, Bucuresti, 1996		
8.2. Applications/Seminars	Teaching methods	Notes
1. Providing solutions for maintenance, repair or consolodation for wooden buildings		
2. Providing solutions for maintenance, repair or consolodation for concrete buildings (I)		
3. Providing solutions for maintenance, repair or consolodation for concrete buildings (II)		
4. Providing solutions for maintenance, repair or consolodation for masonry buildings (I)		
5. Providing solutions for maintenance, repair or consolodation for masonry buildings (II)		
6. Providing solutions for maintenance, repair or consolodation for masonry buildings (III)		
7. Delivery of the project.		
Bibliography 1.Pericleanu M., Pericleanu B.D. - Reabilitarea și consolidarea construcțiilor,Ovidius University Press, Constanta, 978-973-614-852-1, 2015 2. Proca G.E., Iorga F.E. – Aspecte privind conservarea, reabilitarea si consolidarea constructiilor din fondul construit existent, Matrix Rom, Bucuresti,ISBN 978-606-25-0097-9, 2014 3. Miron F. C.- Solutii de consolidare a cladirilor degradate in timp din cauze diverse, Editura Politehnica, Timisoara, ISBN 978-606-554-833-6, 2214 4. <a href="http://193.226.5.59:8060/alipac/RCAIOISKKIUJMPPOHVQRG-00035/find-scan?SEQ=000165873">Teodorescu</a> M. - <a href="http://193.226.5.59:8060/alipac/RCAIOISKKIUJMPPOHVQRG-00029/find-scan?SEQ=000165870">Tehnologia lucrarilor de intretinere, reparatii si consolidari : fise tehnologice : pentru uz intern</a> ,Universitatea Tehnica de Constructii Bucuresti, Bucuresti, 1996		

11. Technologies for consolidation of the masonry constructions (I)		
Bibliography		

**9. Bridging course contents with the expectations of the representatives of the community, professional associations and employers in the field**

The acquired competencies will serve for employees who operate in designing and execution companies (site, concrete plants).

**10. Evaluation**

Activity type	10.1 Assessment criteria	10.2 Assessment methods	10.3 Weight in the final grade
10.4 Course	Grid test.	Written test (theory)	Written test (theory) 70%
10.5 Applications	Delivery of the project.	Project evaluation	Project evaluation 30%
10.6 Minimum standard of performance			
-- Project evaluation: Minimum grade for project evaluation must be 5.			
-- Theory: Minimum grade for each of the two subjects must be 5.			

Date of filling in:		Title Surname Name	Signature
	Lecturer	Sl.Dr.Ing. Roman-Pintican Maria-Nicoleta	
	Teachers in charge of application	Sl.Dr.Ec.Dr.Ing. Maier Dorin	

Date of approval in the department .....	Head of department conf.dr.ing. Caludiu ACIU
20/06/2025	
Date of approval in the faculty .....	Dean prof.dr.ing Daniela MANEA
25/06/2025	