

SYLLABUS ¹

1. Information about the program

1.1 Higher education institution	POLITEHNICA University of Timisoara
1.2 Faculty ² / Department ³	Civil Engineering/CCI
1.3 Chair	—
1.4 Field of study (name/code ⁴)	Civil Engineering/80
1.5 Study cycle	bachelor
1.6 Study program (name/code/qualification)	Civil Engineering in English/10/Engineer

2. Information about the discipline

2.1 Name of discipline/ formative category ⁵	Technology 2 / DS						
2.2 Coordinator (holder) of course activities	s.l.dr.ing. LUTE Marina						
2.3 Coordinator (holder) of applied activities ⁶	s.l.dr.ing. LUTE Marina						
2.4 Year of study ⁷	IV	2.5 Semester	8	2.6 Type of evaluation	E	2.7 Type of discipline ⁸	DI

3. Total estimated time – hours / semester: direct teaching activities (fully assisted or partly assisted) and individual training activities (unassisted) ⁹

3.1 Number of fully assisted hours / week	3 of which:	3.2 course	2	3.3 seminar / laboratory / project	1
3.1* Total number of fully assisted hours / semester	42 of which:	3.2* course	28	3.3* seminar / laboratory / project	14
3.4 Number of hours partially assisted / week	of which:	3.5 training		3.6 hours for diploma project elaboration	
3.4* Total number of hours partially assisted / semester	of which:	3.5* training		3.6* hours for diploma project elaboration	
3.7 Number of hours of unassisted activities / week	1,5 of which:	additional documentary hours in the library, on the specialized electronic platforms and on the field			0,5
		hours of individual study after manual, course support, bibliography and notes			0,5
		training seminars / laboratories, homework and papers, portfolios and essays			0,5
3.7* Number of hours of unassisted activities / semester	21 of which:	additional documentary hours in the library, on the specialized electronic platforms and on the field			7
		hours of individual study after manual, course support, bibliography and notes			7
		training seminars / laboratories, homework and papers, portfolios and essays			7
3.8 Total hours / week ¹⁰	4,5				
3.8* Total hours /semester	63				
3.9 Number of credits	4				

4. Prerequisites (where applicable)

4.1 Curriculum	• • Materials, Foundations, Concrete 2, Buildings, Technology 1
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¹ The form corresponds to the Discipline File promoted by OMECTS 5703 / 18.12.2011 and to the requirements of the ARACIS Specific Standards valid from 01.10.2017.

² The name of the faculty which manages the educational curriculum to which the discipline belongs

³ The name of the department entrusted with the discipline, and to which the course coordinator/holder belongs.

⁴ The code provided in HG no.140 / 16.03.2017 or similar HGs updated annually shall be entered.

⁵ Discipline falls under the educational curriculum in one of the following formative disciplines: Basic Discipline (DF), Domain Discipline (DD), Specialist Discipline (DS) or Complementary Discipline (DC).

⁶ Application activities refer to: seminar (S) / laboratory (L) / project (P) / practice/training (Pr).

⁷ Year of studies in which the discipline is provided in the curriculum.

⁸ Discipline may have one of the following regimes: imposed discipline (DI), optional discipline (DO) or optional discipline (Df).

⁹ The number of hours in the headings 3.1 *, 3.2 *, ..., 3.8 * is obtained by multiplying by 14 (weeks) the number of hours in headings 3.1, 3.2, ..., 3.8. The information in sections 3.1, 3.4 and 3.7 is the verification keys used by ARACIS as: (3.1) + (3.4) ≥ 28 hours / wk. and (3.8) ≤ 40 hours / wk.

¹⁰ The total number of hours / week is obtained by summing up the number of hours in points 3.1, 3.4 and 3.7.

4.2 Competencies	<ul style="list-style-type: none"> • • The ability to identify the components of a structure
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5. Conditions (where applicable)

5.1 of the course	<ul style="list-style-type: none"> • • Support Materials: laptop, projector, projection screen
5.2 to conduct practical activities	<ul style="list-style-type: none"> • • The term for project submittal is set by the professor in consultation with students. There will be accepting postponement on no other grounds than objective reasons. Also late submittal will downgrade the project by 1 pt. /day of delay.

6. Specific competencies acquired through this discipline

Specific competencies	<ul style="list-style-type: none"> • Can achieve a logical sequence of processes leading to the correct execution of an item of superstructure
Professional competencies ascribed to the specific competencies	<ul style="list-style-type: none"> • Technological and economical design for the erection, operation and maintenance works in civil engineering, specific to graduated study programme
Transversal competencies ascribed to the specific competencies	<ul style="list-style-type: none"> • Documentation in Romanian and foreign language, in view of professional and personal development, via continuous learning and efficient adaptation to the new technical specifications

7. Objectives of the discipline (based on the grid of specific competencies acquired - pct.6)

7.1 The general objective of the discipline	<ul style="list-style-type: none"> • • Assimilation of knowledge about the basic principles of design and implementation of a succession of processes that compete logically the actual achievement of an item of superstructure
7.2 Specific objectives	<ul style="list-style-type: none"> • Technological and economic design works execution, operation and maintenance of civil engineering construction specifics to graduate studies program • Organization and management of process execution, operation and maintenance of civil, industrial and agricultural construction

8. Content¹¹

8.1 Course	Number of hours	Teaching methods ¹²
Formworks	10	LECTURE
Reinforcements	10	
Aggregates	10	
Reinforced Concrete Works	12	

¹¹ It details all the didactic activities foreseen in the curriculum (lectures and seminar themes, the list of laboratory works, the content of the stages of project preparation, the theme of each practice stage). The titles of the laboratory work carried out on the stands shall be accompanied by the notation "(*)".

¹² Presentation of the teaching methods will include the use of new technologies (e-mail, personalized web page, electronic resources etc.).

Bibliography ¹³ Lute Marina – Technology of Civil Works – Concrete Works, http://groups.yahoo.com/group/CCIA_THN/files/An%20IV%20ICE/, 2011
A.Trelea, ș.a.; Tehnologia construcțiilor ; Editura Dacia ; Cluj-Napoca, 1997
J.Domșa, V.Vescan, A.Moga; Tehnologia lucrărilor de construcții și tehnologii speciale; Editura Dacia, 1990

8.2 Applied activities ¹⁴	Number of hours	Teaching methods
Technology project for the superstructure at a residential building		LECTURE
Continuous foundations belts under the walls	2	DEBATE
Formworks design for diaphragms	3	SITE VISIT
Formworks design for slabs	3	
Concrete pouring and compaction in diaphragms and slabs	2	
Interaction site engineer – Inspectorate for Quality Check in Constructions	2	

Bibliography ¹⁵ Marina Lute - Tehnologia lucrărilor de construcții și instalații – ghid de proiectare –vol.I, Ed. Politehnica, 2008
C11-1974 – Instrucțiuni tehnice privind alacuirea și folosirea în construcții a panourilor din placaj pentru cofraje
C162-1973 – Normativ privind alacuirea, executarea și folosirea cofrajelor metalice plane pentru pereți din beton monolit la clădiri
C16-1984 – Normativ pentru realizarea pe timp friguros a lucrărilor de construcții și a instalațiilor aferente
ST009-2011 – Specificație tehnică privind produse din oțel utilizate ca armături: cerințe și criterii de performanță

9. Corroboration of the content of the discipline with the expectations of the main representatives of the epistemic community, professional associations and employers in the field afferent to the program

- In order to assess the practical results of the discipline in the site visits are organized discussions with construction managers / representatives of companies manufacturing for debates on applied technology.

10. Evaluation

Type of activity	10.1 Evaluation criteria ¹⁶	10.2 Evaluation methods	10.3 Share of the final grade
10.4 Course	technological knowledge of all components required for a civil superstructure construction	Exam – written paper - one question from each chapter	50%
10.5 Applied activities	S:		
	L:		
	P ¹⁷ : Technology development project execution for a given building superstructure	It contains two components: - test: design of a given technological process - project verbal expose	50%
	Pr:		

¹³ At least one title must belong to the discipline team and at least one title should refer to a reference work for discipline, national and international circulation, existing in the UPT library.

¹⁴ Types of application activities are those specified in footnote 5. If the discipline contains several types of applicative activities then they are sequentially in the lines of the table below. The type of activity will be in a distinct line as: "Seminar:", "Laboratory:", "Project:" and / or "Practice/training".

¹⁵ At least one title must belong to the discipline team.

¹⁶ Syllabus must contain the procedure for assessing the discipline, specifying the criteria, methods and forms of assessment, as well as specifying the weightings assigned to them in the final grade. The evaluation criteria shall be formulated separately for each activity foreseen in the curriculum (course, seminar, laboratory, project). They will also refer to the forms of verification (homework, papers, etc.)

¹⁷ In the case where the project is not a distinct discipline, this section also specifies how the outcome of the project evaluation makes the admission of the student conditional on the final assessment within the discipline.

10.6 Minimum performance standard (minimum amount of knowledge necessary to pass the discipline and the way in which this knowledge is verified ¹⁸)

- Course: Knowledge of schematic order for technological operations
- • Project: applying correctly technological process in a certain situation

Date of completion

26.01.2018

**Course coordinator
(signature)**

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**Coordinator of applied activities
(signature)**

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**Head of Department
(signature)**

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**Date of approval in the Faculty
Council ¹⁹**

12.02.2018

**Dean
(signature)**

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¹⁸ It will not explain how the promotion mark is awarded.

¹⁹ The endorsement is preceded by the discussion of the board's view of the study program on the discipline record.